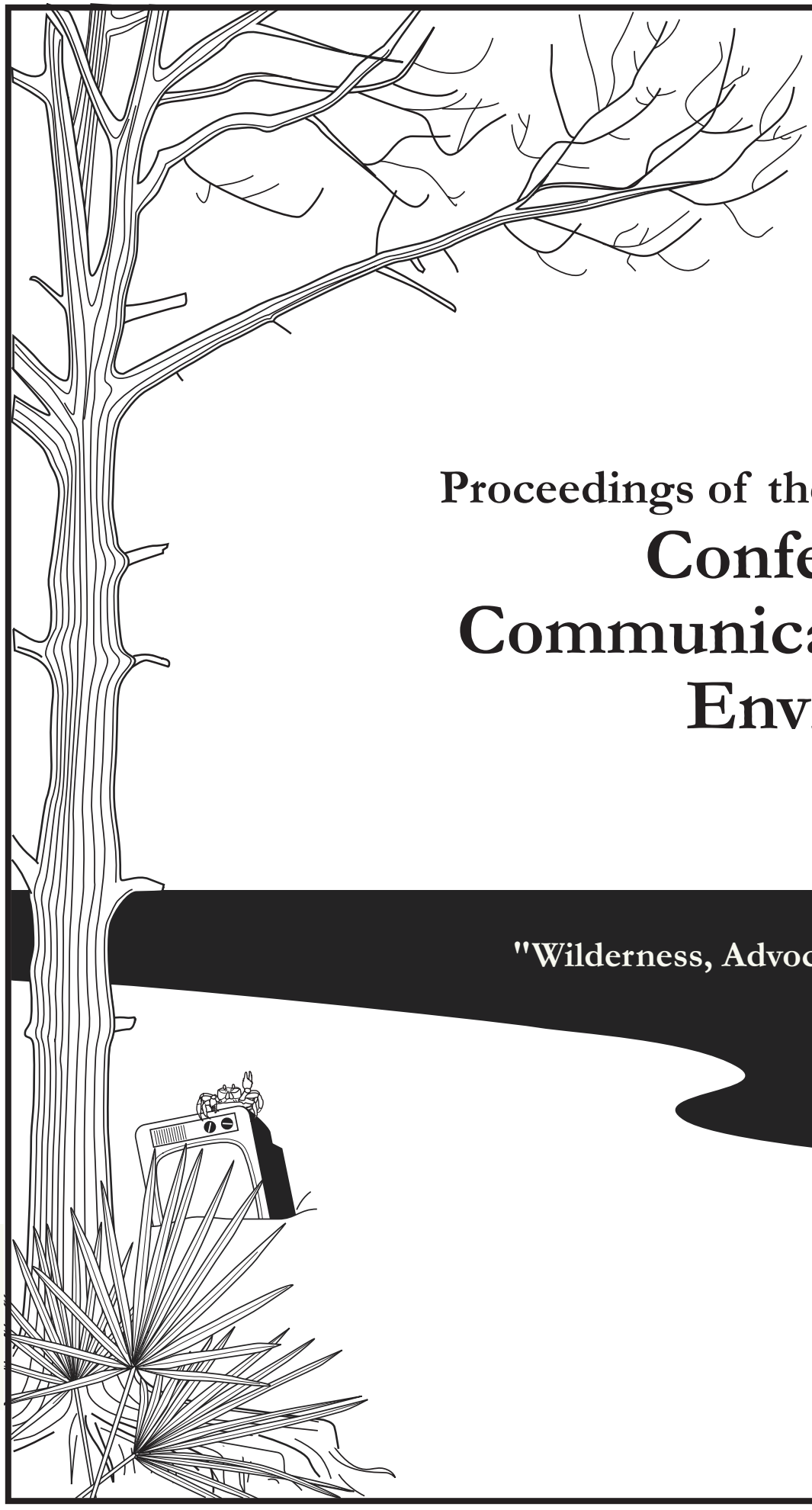

Proceedings of the 8th Biennial

Conference on Communication and Environment

"Wilderness, Advocacy, & the Media"

June 24-27, 2005

Jekyll Island, GA

Editors:
Lisa Slawter Volkening
Dylan Wolfe
Emily Plec
William Griswold
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Acknowledgements

Like Tibetan Mandala sand paintings, conferences are ephemeral events, beautiful creations that leave only traces, mediated reminders of what was. Consequently, then, the conference proceedings are not the conference, only a trace of a temporary manifestation of our intellectual community.

In this brief space, we want to acknowledge those who made the conference special. The conference was defined to a large extent by three impressive featured performances. On the opening night, Robbie Cox set the tone for the conference with his provocative address "Nature's 'Crisis Disciplines': Does Environmental Communication Have an Ethical Duty?" Robbie's manifesto both exalted and challenged the discipline of Environmental Communication. It is a challenge we will be grappling with for years.

At lunch the following day, Janisse Ray movingly evoked the spirit and ruin of the land of the South in her talk "How clearcut does it have to be?" As academics we are often itinerant travelers plying our wares in unfamiliar places. Janisse gave us a sense of the place we were occupying for the weekend and why we should care.

Finally, in his closing evening performance "Trail Mix: A Sojourn on the Muddy Divide Between Nature and Culture," Jonny Gray eloquently intertwined theoretical insights, ethical questions, and humor in an astonishing performance. Jonny's five acts forced us to see anew the nature/culture divide and reconsider our sedimented stances.

A unique aspect of the conference involved having the participants communally prepare and cook dinner two of the nights. The hopes behind the cooking included cultivating conviviality among the participants and promoting responsibility for our own consumption practices. The dinners were a great success. Jean Retzinger provided the inspiration, labor, and food that made the dinners possible. We owe her deep thanks.

At the University of Georgia, the Department of Speech Communication and the Center for the Humanities and Arts provided much-needed assistance. In particular, we thank Jerry Hale, Carole Wheeler, and Betty Jean Craige. We also thank the University of Georgia Press for their donation of copies of J. Baird Callicott and Michael P. Nelson's book, *The Great New Wilderness Debate*, to conference participants.

During the conference we were impressed by the minds and hearts of our colleagues. It was an honor to host you. Thank you.

Janisse Ray's *Ecology of a Cracker Childhood*, Edward O. Wilson, and How to Read Between the Lines

Nancy Levine
University of North Florida

Janisse Ray's well-known memoir, Ecology of a Cracker Childhood (1999) is written in alternating chapters of personal history and the history of the longleaf pine forests of the south. The book's integrated structure makes it an example of "literary biophilia." Many early reviewers read the text selectively, praising the family history, and recommending that readers "skim" the nature chapters, a problem that sheds light on how the public approaches other "nature writers." E. O. Wilson's "biophilia hypothesis" and Ray's "literary biophilia," seen as reflexively referenced, suggest a reading of the text that recognizes its holistic, integrative balance.

There is an odd little moment in Edward O. Wilson's conclusion to The Future of Life (2002) "Solutions." According to Wilson, the unexpected support the environmental movement has received from evangelical Christians is cause for "cautious optimism."

> In the evangelical culture God can still strike the wicked, even if only through the dire consequences of their own actions. Listen to the voice of Janisse Ray*, a young poet from southern Georgia,* who in her 1999 memoir Ecology of a Cracker Childhood decries the destruction of the region's longleaf pine forests. Her warning perfectly captures the cadence of an evangelical sermon: "If you clear a forest, you'd better pray continuously….God doesn't like a clearcut. It makes his heart turn cold, makes him wince and wonder what went wrong with his creation, and sets him to thinking about what spoils the child." (emphasis added, 158)

Wilson is quoting from Ray's "Clearcut" chapter, no doubt because he recognizes that she has an ear for the kind of warning a religious supporter of the environmental movement might come out with, one who belongs to an evangelical sect "prone to literal interpretations of the Bible" (p.158). Ray, who was brought up in the Apostolic Church, is steeped in the rhythms and the hardscrabble imagery of fundamentalist preachers. When she writes that "God doesn't like a clearcut. It makes his heart turn cold…" her *words* ring with conviction, although she no longer counts herself among the faithful. It's a touchy point. In fact, she states in the previous chapter, "Heaven on Earth," that it is not her intention "to reconcile Christianity with respect for nature, because that has been attempted many times. What I want to describe is that when I was growing up, the world about me was subverted by the world of the soul, the promise of a future after death" (p. 120).

I'm interested in what Wilson makes of Ray and what Ray apparently makes of Wilson's "biophilia hypothesis." She seems to be represented in The Future of Life primarily as spokesperson for the enlightened evangelical point of view. This is a "creative misreading," on my part, since Wilson would not have missed the ironic juxtaposition of the "Clearcut" chapter to the preceding chapter, which is entitled "Heaven on Earth." Ultimately, I'm interested in the problem of reading Ecology of a Cracker Childhood selectively, as if the chapters did not exist in holistic, integrative balance like the biota of a longleaf pine forest.

As her title suggests, Ray is both an ecologist and a memoirist. Like Harry Crews, whose celebrated book A Childhood: Biography of a Place (1995) is both a memoir and a history of life among the "grit" farmers of Depression-era Baker County, Georgia, Ray has used her personal and family history as an

emblem of a vanished way of life. But Ray's book is radically different, not a memoir with a message, but a true example of what Lawrence Buell calls "literary biophilia." If biophilia, to quote Wilson, is "the innately emotional affiliation of human beings to other living organisms," a hereditary pattern of complex behavior, an instinctive part of human nature (1993, p. 31), then "literary biophilia" must be the tendency in a writer to focus on and foster that emotional affiliation between the human and non-human worlds and to express that affiliation in the language and structure of the literary work.

There are a host of interesting points of connection between Wilson and Ray. Her Ecology was published three years before the publication of The Future of Life and six years after The Biophilia Hypothesis. The cheerful air of bonhomie of Wilson's letter to Thoreau in the "Prologue" of The Future of Life ("Henry! May I call you by your Christian name?" he writes) recalls the tone of the letter Ray imagines "penned in the great beyond" by John James Audubon to his good friend the Reverend Bachman, a man who could apparently appreciate a corny joke: here's how Audubon describes St. Francis's response to the passage of a massive flock of passenger pigeons overhead—"eyes a'twinkle [he said] he felt as if he'd died and gone to heaven" (p. 207). Imitation may be the sincerest form of flattery, but I think it much more likely that Wilson and Ray simply think and write from a common perspective.

It is not the purpose of this paper merely to point out connections between the work of Wilson and Ray, although I will comment on some of the striking parallels between Wilson's "biophilia hypothesis" and Ray's "literary biophilia." I *am* interested in recommending a reading strategy that doesn't separate the poet from the environmentalist, the memoir from the nature writing. Is there a problem? I think there is, and that the cause might help explain the way the public receives other works by "nature writers."

The first readers of Ecology showed more than a *tendency* to separate the poet and memoirist from the environmentalist. One editor to whom she sent the manuscript offered to publish it only if she removed the chapters devoted to the longleaf pine/wiregrass natural history. An editor at Milkweed had the foresight to recommend that she try alternating the chapters of family portraits with chapters on nature. Although giving Ray's recently published work an enthusiastic endorsement, New York Times reviewer Tony Horwitz complained in January 2000 that "Ray's insistence on alternating chapters—one on family, and the next on nature—dilutes the impact of her memoir and makes it as choppy as a clear-cut forest" (p.16). "If this book is social history," Library Journal reviewer Nancy Moeckel asks, "why does it also read like natural history?" (1999, p. 78). A surprising number of reviewers decided that Ecology was a "two-fer"—two books or stories, lightly disguised by the alternating chapters, all for the price of one (see: Steelman, 2000, p. 3D; Connors, 1999, p. B14; Roanoke Times, 2000, p.4). But here and there reviewers have commented on the appropriateness of the alternating chapters. As history professor James Tuten suggests in a review of Ecology published in the scholarly journal Environmental History (2003), the interconnectedness of the family and natural history chapters "reinforces the sense that humans are intertwined with the environment as she connects personal experience with changes in the landscape" (p. 693).

A dozen or so early book page reviewers have read the natural history chapters as if they were the roughage you had to get through on your way to the dessert of the family history chapters, or, as Women's Review writer Jan Z. Grover described the naturalist chapters, they are like a "like a thin filling surrounded by sumptuous bread" (2000, p. 9). It may be that book page reviewers have to be concerned with a public audience for whom any mention of the environment would seem like a betrayal of their right to easy entertainment. So what's the big deal? Does the obtuseness of a scattering of reviewers constitute evidence that the reading public is not getting "the message"? Probably not, but it does seem to demonstrate that reviewers are just as likely, for whatever reason, to share the biases and avoid unpleasant facts about the environment as their readers, whether they write for the New York Times or the St. Petersburg Times.

I wouldn't like to hazard a guess on such scanty evidence as our presence at this conference, but it may be that the academic community can usually be counted on to demonstrate a higher standard of concern for the environment and a greater appreciation for the complexity of Ecology's structure than book page reviewers. Dr. Jay Watson, Faulkner scholar, writing in the Mississippi Quarterly (2002), implicitly sees Ecology as an example of "literary biophilia" when he writes that "[t]he structure of her book, in which chapters of nature writing alternate with portraits of family members and friends, attest to her equal love for the human and the wild" (p. 508). Like historian James Tuten, he "gets" the book's structure. The problem is: Drs. Tuten and Watson are preaching to the choir. The audience that reads The Mississippi Quarterly and the journal Environmental History is considerably smaller than the audience that buys The New York Times. Professional bias might account for some differences of opinion about whether nature writing should be "gracefully meditative" or straightforward and rational. As Michael P. Cohen writes in his essay,

"Blues in the Green: Ecocriticism Under Critique," "Rhetorical strategy is important to the literary critic, while the rational structure of argument is likely to catch the attention of the historian" (2004). But in the academy, as in few other public arenas, when it comes to seeing the importance of preserving the environment for future generations, surely it's a case of "Nobody doesn't like Sarah Lee"?

Both Ray and Wilson have had the opportunity to instruct that other audience, the "public" that watches PBS and reads the daily papers, as most academics do not. Ecology has sold over half a million copies since 1999, and won five awards, including the Southern Book Critics Circle Award for Nonfiction. Wilson, who gave the world the terms "biodiversity" and "sociobiology," and who has written two Pulitzer Prize-winning books, recently appeared on PBS Think Tank with Ben Wattenberg to talk about his latest book, The Future of Life (4/14/2005, pbs.org, orig. aired 12/12/02). They each, by virtue of their success in merging nature writing and personal narrative, have a uniquely tolerable *gravitas* that adds to the urgency of their arguments on behalf of the environment. So it would seem natural to use the one to teach the other. And, at this stage in the environmental crisis, it seems important to use every device at our disposal to help students understand that crisis. At this point, I am going to demonstrate briefly why using the "biophilia hypothesis" might foreground Ecology of a Cracker Childhood's complex and brilliant structure in interesting ways.

In chapter one of The Biophilia Hypothesis, Wilson observes that human beings are hotwired to respond intuitively to positive and negative symbols. Fear of snakes, for example, is an evolutionary response, left over from a pre-historic ancestral flight mechanism. Those humanoid ancestors who responded reflexively to the danger represented by poisonous snakes survived; those who didn't, died. This reflex is easily activated even in city dwellers who rarely encounter snakes outside of a zoo environment. "The multiple strands of emotional response," Wilson writes, "are woven into symbols composing a large part of culture" (2002, p. 31). Ray comments on this reflexive reaction when she observes, in the chapter titled "Beulahland," that "[t]he land where I come from is crawling with snakes, yet the sight of one triggers a cold irrational panic" (1999, p.l18). The snakes her Grandmama Beulah found in her chicken coop were killed on sight. "If you came upon one sunning itself harmlessly in the woods, you shot it or beat it lifeless with a stick. If you discovered one in a pea patch, you chopped it to death with a hoe" (118). This vignette occurs in an otherwise elegiac portrait of Ray's maternal grandmother, in a chapter that also includes her recipes for buttermilk pie and biscuit pudding. But the snake vignette is resonant; recalling Wilson's phrase "the multiple strands of response," the negative and positive responses to snakes woven into the "nature chapter" that follows. More positive than negative, the nature chapter "Indigo Snake" begins with an account of finding a rare Indigo that is almost the mirror image of the "snake bashing" that takes place in "Beulahland," Let me pause here to note that the term "Beulahland" seems to refer to a gospel song by Edgar Stites, whose lyrics are inspired by Isaiah 62:4: "Thou shalt no more be termed Forsaken/ Neither shall thy land any more be termed Desolate;/ But thou shalt be called, My Delight is in her"—a rough translation for the Hebrew word Beulah would be "married to or possessed by delight"—the land which had been desolate will be renamed, and thereby possessed, so says the prophet. Ray's father tells her Beulahland means Heaven. Grandmama Beulah's land is crawling with snakes that must be hacked to pieces with a hoe. In Ray's "Indigo Snake" chapter she and her friend Milton race across a country road and down an embankment to catch and hold the rare, endangered and quite beautiful snake, the only wild indigo she might ever see because of the destruction of the habitat which supports the gopher tortoise, and hence the snake's accustomed refuge (the gopher tortoise's burrow is the snake's preferred retreat). Ray carries the indigo "draped…over my shoulders like a midnight blue scarf" (188). In this chapter, the crawling nightmare of the preceding chapter is translated briefly into the original meaning of Beulahland, or " land of "my delight."

Ray's delight is bought dearly. In an earlier chapter, "How the Heart Opens," Ray describes a brutal beating her father gave to his daughter and her two brothers, because they had looked on without intervening while an older boy smashed a snapping turtle to death with his boot. "They ain't no sense in killing things for pleasure" (136), he says to the stunned and weaping children after the beating, children, she states clearly that he would have given his own life to protect. It would be too simple to say that her father Franklin Ray taught Janisse to value all living things, because she vows after this experience never to hit a child of her own. And her father's fear of the forest (a reaction learned from his own father's abusive treatment of *his* children on a wilderness trip) makes him a problematic model for a budding ecologist. But she returns to the subject in "Keystone," a "nature" chapter, where, as an adult, she can make the horrible death of the snapping turtle right by stopping a fruit-stand owner from killing a gopher tortoise (its shell spray painted gold and silver for his amusement). This chapter isn't merely a gesture towards her father's

dictum, “They ain’t no sense in killing things for pleasure.” It provides satisfying closure to the beating and demonstrates “How the Heart Is Opened.”

Zaleski, Gediman, Abbott and Gold, in their Publisher’s Weekly review (1999), argue that the purpose of the naturalist chapters is to “evoke the calm of the landscape and give the readers a respite from the anger and pain that drive much of the family narrative” (1999, p. 64), an argument that turns Ray’s naturalist writing into the evocation of scenery. Wilson’s image of weaving is more apposite than the alleged calm and respite the landscape supposedly provides. There is no strand of narrative or imagery in any one part of this book which, if tugged, wouldn’t elicit a responsive trembling in every other part, so tightly woven together are these chapters. Tug on the “heart” referred to in “How the Heart Is Opened” and it will take you to the “nature” chapter, “Timber” and great-great grandfather’s saying, “*Don’t take more on your heart than you can shake off on your heels”* (103). Her response, “We have to nail our shoes to the floor and unload the burden of our hearts” (103), is the burden of the book. In “How the Heart Opens” the work of unburdening the heart is well underway—she attributes her “heart’s opening” to her discovery of “one clump of pitcher plants” (127), the carnivorous plants she discovered for a 4-H project; when she opens the pitcher plant for the judges, the “ripe stew of insect parts” leaves them unimpressed (128). But her father’s beating is part of the process of “opening her heart.” The image of the snapping turtle whose shell is crushed reaches back to the nature chapter containing the parable of the longleaf pines whose seed can only be forced open in the heat of forest fires. In the chapter following “Built by Fire,” Grandpa Charlie, trying to smoke out a coon, lights “a hollow tree streaked with heart pine” (45) the “heavy, resin-saturated heartwood” of aged longleaf; he inadvertently sets the woods afire, which we learned in the preceding “nature” chapter is how long leaf or heart pine forests regenerate themselves. Writing for the Chicago Tribune (1999), reviewer Donna Seaman astutely observes that Ray’s dramatization of “the longleaf’s astounding battle for survival” is intimately connected to the story of “her clannish, rough-and-tumble family,” who “like the longleaf, evolved in the heat of conflict.”

As E.M. Forster put it: “Only connect.” This turns out to be good advice, not only for “close readers” of the ecocritical persuasion, but a strategy for reading the book’s argument, an argument fueled by “the biophilia hypothesis”: we instinctively connect with the natural world and suffer when we shut ourselves off from it. As Ray puts it, her search for the pitcher plant was an attempt to find “a patch of ground that supported the survival of rare, precious, and endangered biota within my own heart” (128).

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Beyond Grief and Rage: Reinhabitory Discourse, Domesticity, and Wild[er]ness in the Work of Janisse Ray

Bart H. Welling
University of North Florida

The Baxley, Georgia-based author and activist Janisse Ray deserves attention not just for her literary talent but for the way in which she manages to build consensus and raise consciousness well beyond the environmentalist mainstream. In this paper I use the bioregionalist concept of "reinhabitation" to analyze some of the rhetorical strategies Ray uses to inspire diverse audiences and transform apparently worn-out, used-up discourses of the body, of family, of Christianity, and of wilderness. Ray provides a model for U.S. environmentalists attempting to reach their fellow citizens by employing (in Bonnie Costello's words) a vocabulary "beyond grief and rage."

In "The Trouble with Wilderness; or, Getting Back to the Wrong Nature," William Cronon argues (echoing Gary Snyder and many other environmental writers) that one of the biggest challenges facing American environmentalists and their fellow citizens involves learning to see the fundamental interconnections between nature and culture, wilderness and home. The process might begin with trying to honor the wildness of the tree in our back yard just as much as we revere trees in old-growth forests formally protected as wilderness areas. Such practices of gratitude and critical self-reflection would allow us to come to terms with the autonomy of all nonhuman living things, inspiring us to curb our vast appetites and find more sustainable means of "making a home in nature." This is a task, Cronon notes, that Wendell Berry has identified as "the forever unfinished lifework of our species" (89).

These are noble, timely, urgently needed thoughts. As the above-cited figures would all agree, however, sustainability is a tough sell in the Age of the Hummer and the Biggie Meal. It is a particularly tough sell in a region historically defined by poverty, white supremacy, and a host of other pathologies contingent on the near-total exploitation of forests and nonhuman animals. How do you bridge the categories "wilderness" and "home" and their physical referents when home is a junkyard and wilderness is a mostly absent forest you've been prevented from knowing by the acts of previous generations? How do you make a new home for yourself in a place that, growing up, you couldn't wait to leave? How do you wake your neighbors up not so much to a higher poetic consciousness as to the knowledge that their traditional life-ways are just as endangered, and just as worth preserving, as the longleaf pine forests that have helped make their culture what it is?

In this paper I bring Lawrence Buell's definitions of the bioregional concept of "reinhabitation" to bear on the rhetorical strategies Janisse Ray uses to negotiate these questions on the printed page. Instead of separating language acts and physical acts of homecoming, I view Ray's literal reinhabitation of her ancestral home of Baxley, Georgia as coterminous with her rhetorical reinhabitation and restoration of some of the seemingly worn-out, used-up traditional discourses that drove her from Baxley in the first place. In finding ways to make a home in a degraded wilderness and let wildness flourish within the historical boundaries of the human, Ray provides a model for U.S. environmentalists attempting to reach their fellow citizens by employing (to paraphrase Bonnie Costello) a vocabulary and range of feeling beyond grief and rage.

Leading ecocritic Lawrence Buell explores the bioregionalist concept of "reinhabitation" extensively both in *The Environmental Imagination* (1995) and in *Writing for an Endangered World* (2001). In the latter book he provides this useful overview of the idea:

> "Reinhabitation" is a resonant term used since the 1970s by place-committed writers of bioregionalist persuasion to express the goal of mutual renewal implicit in a dedication to ecocultural understanding and restoration. Advocates and practitioners of reinhabitation, whether or not they use the term, start from the premise that not only has the environment been abused, aspiring reinhabitors have themselves been wounded by displacement and ecological illiteracy so that they must (re)learn what it means to be "native" to a place. Moreover, the reorientation process cannot simply be a solitary quest but must also involve participation in community both with fellow inhabitants in the present and with past generations, through absorption of history and legend. In short, reinhabitation presupposes long-term reciprocal engagement with a place's human and nonhuman environments and welcomes the prospect of one's identity being molded by this encounter (84).

Buell's vocabulary of wounding and abuse consciously taps into Peter Berg and Ray Dasmann's influential definition of bioregionalism as "learning to live-in-place in an area that has been disrupted and injured through past exploitation" (quoted in *Writing* 297n.). His list of literary reinhabitors of abused places includes not just Wendell Berry and Gary Snyder, but Walt Whitman, James Joyce, Virginia Woolf, William Carlos Williams, and other urban writers who have sought to reimagine the modern city from the perspective of environmental consciousness.

Janisse Ray's work in and on behalf of south Georgia's endangered longleaf pine/wiregrass ecosystem and traditional cultures, along with her literary and political allegiance to figures like Berry, places her squarely within the bioregionalist genealogies traced by Buell, but with differences from other bioregionalists that point up not just the flexibility of the concept of reinhabitation but the power of Ray's unique contributions to contemporary efforts to redefine human culture along with wilderness. Ray's first memoir, *Ecology of a Cracker Childhood* (1999), contrapuntally interleaves chapters on her family's history and on natural history in a way that forcefully documents the interpenetrations of nature and culture in the formation of the human and biotic communities of south Georgia. The book simultaneously surveys her struggle for ecological literacy and self-definition as a woman and writer, culminating in her leaving Baxley in search, as she puts it, of "healing and survival" (*Ecology* 255). This departure most definitely does not represent an abandonment, however, as the book's deep immersion in its subjects proves. Ray's second memoir, *Wild Card Quilt* (2003), further cements her position as a bioregionalist. It functions quite literally as a work of literary reinhabitation, inasmuch as it details Ray's efforts to restore her grandmother Beulah's empty farmhouse and make a home for herself and her son in the town she had left behind seventeen years before, but also her fight to reinvigorate community traditions in Baxley, to defend remaining wild areas like the Altamaha River and the 3,500 acre Moody Forest, and to restore destroyed longleaf flatwoods. In essence, she *re*makes the site of her childhood and early womanhood in ecocultural as well as literary terms.

The differences between this paradigm of reinhabitation and a more established one like Gary Snyder's are instructive. Ray does not reinhabit an area that has been virtually abandoned by humans for many years, like the Sierra foothills ravaged by Gold Rush-era hydraulic mining where Snyder built his home, Kitkitdizze, in the early 1970s. In this sense Ray does not take up residence in an abused and neglected place in the name of a larger humanity, as this conception of reinhabitation implies (in etymology, at least, if not in practice, since plants and nonhuman animals have often begun to reinhabit a "zone of ecological recovery" like Snyder's Yuba watershed ["Kitkitdizze" 278] long before human residents reappear on the scene). Ray's type of reinhabitation requires living within a preexisting culture rather than bringing human culture back to a place long devoid of it. Unlike such bioregionalists as Snyder, Ray does not find her home after a long search with like-minded individuals, establishing a new "native" community based on an evolving syncretic combination of indigenous mythologies, extrinsic religious and philosophical ideas (imported from Zen Buddhism and other Asian traditions in Snyder's case), and dialogue with the place's nonhuman inhabitants (see Yamazato). There's no sidestepping Western culture in Baxley, Georgia. Rather, Ray mounts her critique of postindustrial, neo-imperialist, consumerist American life from within some of this culture's guiding discourses, reinhabiting those family and regional traditions that tend toward the flourishing of multiple forms of life but at the same time trying to reject the virulent outgrowths of binary dualism (racism, sexism, religious extremism, speciesism) that have so scarred the landscape of her birth.

In case you've noticed how closely the outward facts of Ray's reinhabitation of Appling County, Georgia parallel Wendell Berry's life/writing in his ancestral home of Henry County, Kentucky, and may be tempted to think of her as little more than a disciple of Berry, please consider the enormous risks involved in this kind of project for a religious nonconformist and (at that time) single mother moving back

into the orbit of parents whose brand of Christian fundamentalism is judged extreme even by the standards of south Georgia. Consider, too, the challenges inherent in Ray's trying to maintain her hold on a post-cultural-revolutionary sense of gender and sexual identity while physically occupying the domestic spaces of a traditional southern homemaker—the granddaughter who, in more ways than one, takes Beulah's place. The final paragraph of the introduction to *Wild Card Quilt* does a wonderful job of capturing the chanciness, the quixotism, and the highly contingent beauty of this enterprise:

> I am clinging to a shaking cobweb strung between a leaky house and a wind-torn barn. I am spinning like crazy to reconstruct it, conversing with the ghosts of the pine flatwoods to weave their old stories in with the new ones. Here and there across the web, others are working hard, laying thread on top of sticky thread, to catch and bind us anew. People are spinning night and day, adding the bright colors of their dreams. We may make a beautiful net yet (xii).

Much like another female reinhabitory author, Leslie Marmon Silko, Ray figures herself as a spider-woman working to reconnect and restore past and future, human culture and more-than-human wildness through daring acts of discursive and bodily reinhabitation. Ray invites readers to imagine ways not of finding and fetishizing wholeness in distant wilderness areas, but of creating wholeness where they live, even if they inhabit spaces overlooked, or just plain condemned, by environmentalists and culture critics of various stripes.

One of the goals enumerated by Ray in the introduction to *Wild Card Quilt*, in addition to those of "liv[ing] in a less fragmented, less broken, more meaningful way," and of having more of what she loves around her, is that of "say[ing] with my body, 'This is what matters'" (xi). In other words, Ray does not merely want to practice what she preaches, but wishes to use her body as a signifying medium, to body forth the ideas that animate her writing—or, more precisely, to create rhetorical spaces in which linguistic expression and bodily location and movement comprise a continuum of materiality and intentionality, rather than occupying antithetical positions on either side of the ontological abyss Western culture so frequently posits between deeds and words. Needless to say, the discourse of white southern female embodiment she inherited from her family and community had very different plans for her. It attempted to constitute the embodied woman not as a creature of wildness and outspokenness but, rather, as a living emblem of purity and modesty, of long-suffering, of deference to father and husband, and of silence, however much she had been enshrined in male rhetoric as (to quote W.J. Cash's bitterly ironic words) "the South's Palladium…the shield-bearing Athena gleaming whitely in the clouds…the lily-pure maid of Astolat and…the pitiful Mother of God" (*Mind* 86). Ray acknowledges her mother's success in living up to this model of saintly womanhood in the chapter "Mama" in *Ecology*, but ends the chapter with the words, "On these terms I did not want to be a saint" (204). Instead of rejecting this discourse entirely, however, Ray cleverly reinhabits it. For instance, she begins the first titled chapter of Ecology, "Child of Pine," with a deceptively straight-faced retelling of the "creation story" (7) her parents had concocted to avoid informing Janisse and her siblings of the messy biological facts of their origins. As Thomas McHaney has demonstrated, Ray's version of the story is shot through with echoes of the Christian nativity myth. To McHaney's account I would add the observation that Ray takes personal ownership of the story of Christ's birth and recasts it (i.e., reinhabits it) to offer a new and strangely compelling account of female embodiment.

In the story, Ray's parents leave the manger-like space of her father's workshop in search of a pregnant ewe that has gone missing. (Her parents had bought the sheep to keep the grass cropped short around the cars in the family junkyard). Ray signals the transition from an utterly prosaic place and time (February, 1962, in the junkyard) to mythic space and sacred history by identifying the day of the year as Candlemas, the holiday that traditionally commemorated the postpartum purification of the Virgin Mary or, sometimes, the presentation of the infant Christ in the Temple. As Ray's parents search for the ewe, they are attracted to a cluster of palmettos by a weird sheep-like crying. Discovering a human baby instead of a lamb lying on the pine needles, Ray's father reaches inside this arboreal womb to deliver his new daughter, Janisse. Janisse's mother has no part in the delivery; she stands off to the side. "I came into their lives," Ray writes, "easy as finding a dark-faced merino with legs yet too wobbly to stand." Before puncturing the mythopoetic tone of the story with the irreverent line, "If they'd said they'd found me in the trunk of a '52 Ford, it would have been more believable," Ray notes that "My sister had been found in a big cabbage in the garden; a year after me, my brother was discovered under the grapevine, and a year after that, my little brother appeared beside a huckleberry bush" (5-7).

What is Ray up to here? Elsewhere in *Ecology* she openly faults Christian anthropocentrism and patriarchy for preventing her from being "simply a young mammal roaming the woods" (121), but here she subverts and restores standard myths of male self-birthing, female sanctity, and human non-animality from within, rescuing essential truths from a modern-day virgin birth narrative that the majority of parents would view as dangerous nonsense. If human bodies have no part in the gestation and birth of human babies—if these reproductive functions are to be relegated to the lowlier sphere of farm animals—then, following the rules of this narrative to the letter, it only stands to reason that humans have a more autochthonous beginning than is generally ascribed to them. From an evolutionary vantage point, the story isn't entirely incorrect. We *are* young mammals, children of the trees, before we receive human names and identities. Ray's creation myth, with its echoes of ancient foundling and feral child stories along with the Christian New Testament, manages to recapture a sense of the inherent strangeness, the cosmic mystery of our births. Her revision also grants her parent's explanation a large measure of dignity. Simply deconstructing it would have been child's play; *re*constructing stories like it, to borrow a vexed historical term used consciously and carefully by Ray, takes more work, but the payoff can be marvelous. In the case of the Candlemas story, for example, this kind of reinhabitory work can help the reader glimpse untapped revolutionary possibilities in the story of the Lamb of God who, according to Christian typology, in his birth and death deliberately assumed the place of a nonhuman animal.

The boundary-expanding and –dissolving work Ray carries out using traditional discourses of the body lays the foundation for an ever-widening circle of reinhabitory projects. Ray literalizes the usual clichés about southern hospitality as she fixes up Beulah's house, hosting such guests as snakes, anoles, and ladybugs. Her chapter "In This House We Are Not Separate" in *Wild Card Quilt* moves subtly but irresistibly from the lament that "The house was abominably open to the world" (211) to the confession that "Although I declared these things, the truth was that I loved living with only a permeable screen between us and outdoors. In the openness of our house, I didn't feel separated from the rest of life. It was a fine habitat" (214). Her remarkable chapter "Clearcut" in *Ecology* reinhabits and revivifies one of the hoariest environmentalist genres of all, the jeremiad, replacing shrillness with deep awareness of the vicissitudes of working-class life, and resurrecting an Old Testament God not just of wrath but of curiosity, compassion, and sorrow.

These reinhabitory strategies are worth dwelling on because they can have a powerful impact on the ordinary people who live and work in "unreconstructed" discourses and fragmented, abused environments all around us. To put it bluntly, "wilderness" is a language most of our fellow Americans don't speak. As everyone from Cronon to Ramachandra Guha to Val Plumwood has argued, binaristic definitions of wilderness hinging on notions of absence, virginity, vastness, sublimity and so forth make little room for the everyday landscapes we tend to call "home." Even worse, such definitions have played a role in perpetuating the oppression of human groups—particularly people of the Third and Fourth World—that the vast majority of U.S. environmentalists would like to help flourish. Janisse Ray would certainly agree with Plumwood, though, that the concept of wilderness itself, however imperfect, should not be abandoned. Just as the unruliest junkyard can harbor viable pockets of wilderness, so too can the most overused and problematic of environmentalist discourses be made to bear new fruit—can, in a word, be reinhabited.

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Nature's "Crisis Disciplines": Does Environmental Communication Have an Ethical Duty?

J. Robert Cox
University of North Carolina at Chapel Hill

The idea of conservation biology as a mission-oriented or "crisis discipline," articulated largely by Michael Soulé in the 1980s, has begun to influence other disciplines in the social sciences, medicine, and humanities. Relatedly, this paper asks, Is the field of environmental communication a "crisis discipline"? More specifically, is our discipline premised on normative assumptions that lend urgency to our scholarship and professional service? The paper examines the empirical and normative postulates of conservation biology in order to identify the bases for an engaged scholarship and proposes that scholars and practitioners in environmental communication similarly have an ethical duty in scrutinizing the distortions and system pathologies of communication about the environment.

I want to thank Kevin and the planners for the 8th biennial Conference on Communication and the Environment for inviting me to speak at the beginning of our time this weekend. I confess, in the past decade, I've become more comfortable in combative moments—in campaigns and political critique—so, it is with some hesitancy that I want to turn to our own work, and to pose a question.

In his call for submission of papers for the 4th volume of the *Environmental Communication Yearbook*, Steve Depoe noted that next year will mark the 10th anniversary of the founding of the Environmental Communication Commission; the 15th anniversary of the first Conference on Communication and Environment; and the 25th anniversary of Christine Oravec's classic essay "John Muir, Yosemite, and the Rhetoric of the Sublime," a work, he noted, "that marks for many the beginning of the environmental communication field." Depoe invited scholars, teachers, and practitioners to submit papers that "assess the current health and future prospects of environmental communication within the broader communication discipline, as well as its significance across other academic disciplines and contexts."

Let me begin, then, by considering the question posed by the title of this address—"Does environmental communication have an ethical duty?"—in the context of one of those "other academic disciplines."

In his influential 1985 essay in *Bioscience*, Michael Soulé, founder of the Society for Conservation Biology, proclaimed that "*ethical norms* are a genuine part of conservation biology, as they are in all … crisis-oriented disciplines" (p. 727; emphases added). Soulé was simultaneously announcing the arrival of a new field, defined by crisis, and driven by an urgency—an injunction to protect what remained of the planet's biodiversity.

Conservation biology itself took notice of another crisis discipline, the synthetic field of cancer biology. It, in turn, drew on allied research in immunology, molecular biology, oncology, virology, and clinical practice to target research in the on-going fight against invasive cancers. Similarly, environmental sociology, toxicology, conservation medicine, and, more recently, conservation psychology, have emerged as crisis disciplines, drawing from allied fields to target environmental health crises, communities-at-risk, and in the case of conservation biology, the looming threat of ecological collapse. For Soulé, conservation biology is a crisis discipline precisely because it must offer recommendations for management or intervention to protect imperiled species, biological communities, or ecosystems, under conditions of urgency and often without theoretical or empirical guarantees.

I want, then, to pose a simple question for us to consider: Is the field of environmental communication a "crisis discipline"? More specifically, is our discipline premised on normative assumptions that lend urgency to our scholarship and professional service? I am not asking "what *is* environmental communication?" That is, what are the objects of our study—the role of the media, risk communication,

nature writing, public participation, or other worthy topics. Nor am I asking the question Depoe recently posed on-line: How can we assess the "health" of the various environmental communication research, teaching, and service activities that we engage in? Some of the responses took this to be asking: Do we publish enough peer-reviewed articles? Are we graduating new Ph.D.s in the field? Do we have adequate textbooks for our students?

I actually think this is a useful discussion. But it's not the question that I am posing. I want to come at this conversation in a little different way—to ask and propose an answer to the more general question, "What is the *purpose* of environmental communication as a field?" More specifically, should we consider our field to be a "crisis discipline"? If so, then what would this mean? Does it mean that environmental communication scholars and practitioners have an ethical duty? I raise these questions for two reasons:

(1) Why has a self-defined field or frame of "environmental communication" emerged as a supplement or a new discipline when there is already good work being done in public address scholarship, media studies, literature, and in allied areas of sociology, urban planning, political science, and environmental studies itself?

Article 2 of the charter of the Environmental Communication Commission declares that, "The purpose of the Commission is to promote scholarship, research, dialogue, teaching, consulting, service and awareness in the area of environmental communication." While a broad mandate, I am less sure that simply to "promote" our scholarship, and so on, and an "awareness in the area" is enough.

(2) If our field is *not* a happenstance, that is, if we are drawn to our work by a distinctive set of assumptions or problems, do we then assume an *ethical* premise to our work?

In the few minutes I have, I want to argue that the field of environmental communication arises at a moment of conjunctural crisis, defined principally by human-caused threats to both biological systems and human communities, and also by the continuing failure of societal institutions adequately to engage these threats. I believe further that implicated by the premises of much of our scholarship is a set of ethical postulates that we neither acknowledge openly nor engage consistently in our scholarship and other activities.

Let me return for a moment to conservation biology and suggest that a crisis discipline offers a provocative heuristic to the conversations that we are having or ought to be having in our own work.

Conservation Biology and the Crisis of Biodiversity

The idea of conservation biology as a crisis discipline was articulated largely by Michael Soulé in the 1980s, but it has continued to be refined at meetings of the Society of Conservation Biology and in the pages of the *Journal of Conservation Biology*. At the start, Soulé (1985) proclaimed the multi-disciplinary science would be premised explicitly on normative grounds: Conservation biology would be a mission-oriented or crisis discipline, dedicated to addressing the crisis of ecological collapse and mass extinction (Soulé and Wilcox, 1980). As Dwight Barry and Max Oelschaeger (1996) have explained, "In this context, the term 'conservation' is normative, connoting a commitment by humanity to the goal of protecting habitat and preserving biodiversity" (p. 906).

Considered as a mission-oriented or crisis discipline, the wildlife biologists, population ecologists, evolutionary biologists, stream ecologists, land managers and other scientists identifying as *conservation* biologists appear to share these commitments:

(1) A human-induced crisis exists: a rapid, ecological perturbation with irreversible effects on species, communities, and ecosystems (Soulé 1985), that the "biodiversity crisis that will reach a crescendo in the first half of the twenty-first century" (Soulé 1987, p. 4).

(2) It is not too late to do something about this crisis (Soulé 1987).

(3) Humans are responsible for averting the crisis through ecological intervention and management; as Soulé (1991) explains, this planetary crisis "is also a personal tragedy to those scientists who feel compelled to devote themselves to the rescue effort" (p. 255). And,

(4) Professionals in conservation biology can make a substantive contribution toward addressing this crisis through their research (Soulé, 1987).

Conservation biology, therefore, would be a synthetic, multi-disciplinary field, pursing its research in contexts of urgency, but also uncertainty. In fact, the hallmark of practicing a crisis discipline is the need to make decisions or recommendations with imperfect knowledge. Soulé (1986) points out that, "provisional validity," or selecting the best working hypothesis, is acceptable, because "the risks of non-action may be greater than the risks of inappropriate action" (p. 6). Field research, however, should still advance basic science, but it ultimately would be tested in its usefulness to management, that is, in preserving biodiversity (Soulé and Wilcox 1980; Soulé 1986).

Like environmental communication, conservation biology is still a relatively young field. In an effort to identify its distinguishing characteristics, Soulé (1985) proposed two sets of premises or postulates—one functional, and the other, ethical. The functional postulates were intended as hypotheses about the basic working of natural systems. These, in turn, provide a basis for the ethical norms for intervention or recommendations for managing natural systems. "They suggest the rules for action" (p. 729). Among these functional postulates are:

(1) "Many of the species that constitute natural communities are the products of co-evolutionary processes" (Soulé, 1985, p. 729). That is, many species are interdependent, part of each other's environment, and hence highly specialized within their biological communities. As a corollary, extinction of such keystone species causes significant, long-range consequences for their community.

(2) "Many, if not all, ecological processes have thresholds below and above which they become discontinuous, chaotic, or suspended" (p. 729). As a corollary, random disappearances of resources or habitats will have less impact on species in larger areas than in smaller ones.

Implicit in such basic postulates are values or attitudes about the outcomes of these ecological processes. Soulé (1985) describes these *normative* premises as, "value statements that make up the basis of an ethic of appropriate attitudes toward other forms of life" (p. 730). I want to list these, not simply to complete this tour of conservation biology, but to illustrate the ethical stances that a field's basic insights about functional processes might signal. Soulé identifies four such attitudes or values:

(1)"Diversity of organisms is good," and its corollary, "the untimely extinction of populations and species is bad" (p. 730). If accepted, such values would fuel an ethical imperative to conserve species diversity, the fundamental mission of the field of conservation biology.

(2) and (3) Both ecological complexity and evolution are "good" (p. 731), both as a basis of and paralleling the value of diversity. And,

(4) "Biotic diversity has intrinsic value, irrespective of its instrumental or utilitarian value" (p. 731). Such value, Soulé argues, is "neither conferred [by us] nor revocable, but spring[s]… from a species' long evolutionary heritage and potential" (p. 731).

Conservation biology certainly is not the only field that is driven by normative concerns. Yet, I believe it can be heuristic to consider such a stance in a field close to our own concerns. I say this because both conservation biologists and communication scholars believe that the stakes are high. In his new book, *Collapse: How Societies Choose to Fail or Succeed,* Jared Diamond (2005) argues that past and present civilizations have responded differently to environmental signals of decline— deforestation, salinity of water, climate change, and the over-hunting of species on which these societies depended. Some, such as the Polynesian society of Easter Island and the medieval Viking colony on Greenland "collapsed" in large

part due to failure to adapt or change their abuse of natural systems that sustained their worlds. In our own time, conservation biology has emerged in response to the heightened signals we are receiving from the natural world: a "recognition that humans are causing the death of life—the extinction of species and the disruption of evolution" (Barry & Oelschaeger, 1996, p. 906).

Does communication matter in such dramas? Interestingly, conservation biologists themselves believe that more engaged communication practices are now required of them and their colleagues—from going public with their findings to impassioned advocacy. Therefore, I want to return to my question: Is environmental communication a "crisis" discipline? And, if so, are we acting like one?

Crisis and Environmental Communication

The answer, I confess, is not nearly as clear-cut as I would like. Certainly, there are few, if any, government agencies or private organizations asking us for recommendations on ways to reform media practices, ensure accuracy in EPA reports, or design education campaigns on climate change. On the other hand, many at this conference have explicitly attuned their work and professional consultation to normative concerns: Sue Senecah's (2004) research and her frequent facilitation of collaborations by communities in conflict; Tarla and Markus Peterson's (2004, 2005) critique of consensus-based approaches to wildlife habitat planning; and Phaedra Pezzullo's (2003, 2004) work with "toxic tours" in poisoned communities are only a few examples.

Apart from these projects, I want to argue that there is a broader rationale for considering our purpose to be akin to crises disciplines. For related to crises of extinction, there are failures of human response and communication. Like perturbations in biological systems, distortions, ineptitudes, and system pathologies occur in our communication about the environment.

Consider these reports in the past 24 months:

• On August 23, 2003, EPA's Office of Inspector General reported that the White House had altered a health warning after the 9/11 attacks, assuring New York City residents that air quality was safe to return to their apartments near Ground Zero. The original version had warned the air might be too polluted for residents (Garrett, 2003, p. 1).

• On February 18, 2004, the Union of Concerned Scientists (2004), and 20 Nobel Prize winners released a report entitled, *Scientific Integrity in Policymaking: An Investigation into the Bush Administration's Misuse of Science.* The report criticized officials of engaging in "a well-established pattern of suppression and distortion of scientific findings" (p. 2). Referencing research on global warming, lead poisoning of children, endangered species, and mercury pollutants from power plants, the report found that "the scope and scale of the manipulation, suppression, and misrepresentation of science … is unprecedented" (p. 3).

• On October 17, 2004, Ron Suskind (2004) wrote in *The New York Times Magazine*" of the tongue-lashing he received from a senior adviser to President Bush for an unfavorable story about the White House. Suskind wrote that the advisor told him, that

> [G]uys like me were "in what we call the reality-based community," which he defined as people who "believe that solutions emerge from your judicious study of discernible reality." I nodded and murmured something about enlightenment principles and empiricism. He cut me off. "That's not the way the world really works anymore," he continued. "We're an empire now, and when we act, we create our own reality. And while you're studying that reality -- judiciously, as you will – we'll act again, creating other new realities, which you can study too" (p. 44 ff.).

(Lest you worry about this last report, I should assure you that senior aide to Vice President Cheney, Mary Matlin, has said that she was in the room during Suskind's interview, and that he was making up this story.) Nevertheless, some federal agencies seem less beholden to words and their "reality-based" meanings than others:

• On April 6, 2001, lobbyists from the National Mining Association met with EPA officials to argue for "a small wording change" to the regulations that prohibit dumping of soil and rocks from

mountaintops into valley streams, in a process of coal mining known as mountaintop removal (Warrick, 2004, p. A1). As a result of this lobbying, officials "simply reclassified the [mining] debris from objectionable 'waste' to legally acceptable 'fill'" (p. A1). This change in the definition of what is "waste" and what is acceptable "fill" "explicitly allows the dumping of mining debris into streambeds" (p. A6).

• And in March of this year, Alaska's Senator Lisa Murkowski assured opponents of oil drilling in Alaska's National Wildlife Refuge that there would be no need to build roads on the fragile tundra. "When we talk about the roadless areas …," she explained, "we mean it" (Barringer, 2005, p. 16A). Felicity Barringer (2005), writing in *The New York Times,* noted that the concept of "roadless" was, nevertheless, ""fungible," since gravel roads were already being built at nearby sites. Responding to concerns raised by some environmentalists, an Interior Department official explained that, "the term 'roadless' does not mean an absence of roads. Rather it indicates an attempt to minimize the construction of permanent roads" (p. 16A).

• In other cases, federal agencies have begun to limit public access under the Freedom of Information Act, exempt public comment and the requirement for environmental impact statements from certain uses of the National Environmental Policy Act, and scale back citizens' right of standing to appeal actions affecting the environment. In years since 9/11, the federal government has removed hundreds of thousands of public documents from its websites, while in other cases, access to material has been made more difficult. From maps of Africa used for relief operations to EPA databases that list chemical plants that violate pollution laws, scholars, activists, and reporters have been denied access to information informing public debate in this country (Parker, Johnson, & Locy, 2002).

The politicization of knowledge claims, suborning of science, limiting of guarantees for public participation, and the encroachment of what Tom Goodnight called the "technical sphere" on public sphere deliberations now threaten to undermine our capacity as a society to respond to environmental signals of distress or deterioration. So, I return to my question: should environmental communication be considered a crisis discipline?

Certainly, we share characteristics of other crisis disciplines. We tend to have an "eclectic multidisciplinary structure" (Soulé, 1985, p. 727), and we "take many of [our] questions, techniques, and methods from a broad range of fields" (p. 727), not just from the general field of communication. But, a question remains: Do we borrow from or build upon these fields to focus on specific problems or is our eclecticism happenstance? That is, are the articles, edited volumes, conferences, and caucuses of environmental communication a convenient space or structure for work we could as easily do in media studies, rhetorical criticism, conflict management, or political theory?

Part of the answer to this question, I would suggest, is implicit in the central tenets—what Soulé calls "functional postulates"—of our field. These are akin to broad agreements or working hypotheses of a field that is defined by the articulation of "environment" and "communication." From these, I want to suggest, that there are core values or ethical premises that follow and that invite us to align our work with other so-called crisis disciplines.

Let me start, first, with these broad agreements or tenets of a field of environmental communication. I'm not sure anyone has attempted to spell out what these may be, but I would propose these four—unauthorized, unapologetically my own— tenets. There are certainly others, but these give us a place to start.

(1) *"Environment" imbricates material and social/symbolic processes*.

This much we know. Our ideas, beliefs, attitudes, policies, and practices involving the natural world and environmental problems are mediated by systems of representation—by human communication. Indeed, this year's call for our conference builds upon what may be one of the core assumptions of our field, that: "the consideration of wilderness takes place with the understanding that the very idea of wilderness is mediated through various technologies (photograph, television, film, computers)," that is, that "wilderness" already, inescapably, is mediated.

Although at times, we may mistake tropes for real terrains or, in dismantling social constructions of the "pristine," forget that the loss of habitat has real consequences, our field is founded on this tension. Recently, Tarla Peterson, Markus Peterson and William Grant (2004) have attempted to model this relationship of biophysical processes and social practices. They turn to Niklas Luhman's theory of ecological communication, they explain, to recover a kind of "rhetorical realism": "an awareness that although rhetoric may structure our lived relation to the real, conditions of existence remain" (p. 16). This is surely is the cornerstone of our scholarship and, I'll suggest in a moment, the basis of an ethical duty.

(2) *Social/symbolic representations of environment reflect a political economy of interests*.

There is undoubtedly broad agreement that our symbolic mediations are interested. As Chris Oravec (2004) noted in her wonderful essay on Utah's Cedar Breaks National Monument, "environmental communication views the discourse of naming as more than a means of persuasion" (p. 3). It not only is a mode by which we socially construct and know the natural world, it indicates "an orientation" and thus "influences our interaction with it" (p. 3). When the Sea Shepard Conservation Society blew the whistle recently on Disney corporation's plans to serve shark fins on the menu at its new Hong Kong Disneyland theme park, the company quickly complained of "'cultural imperialism' and disrespect for Chinese traditions" (Bradsher, 2005, p. C7). Both the Society's denunciation of cruelty and Disney's defense of cultural sensibilities reflected a representation of the real and an interest. So did the comment of ninth-grader Sharon Chan who helped organize a boycott of Disney in Hong Kong: "If they keep on killing sharks for shark's fin soup, then sharks will become extinct and kind of die" (p. C7).

(3) *Socio-economic and ideological contexts both facilitate and inhibit the production of representations of "environment;" these productions occur in and through a range of institutional cultures and communication practices*.

The political economy of such sites not only help us to account for diverse representations of "environment," but they sometimes constrain or exclude, in material or bodily ways, certain voices and communities.

(4) *Dominant systems of representation influence societal responses to environmental signals, including signs of alteration and/or deterioration of human health, climate, and ecological systems*.

This is Diamond's (2005) thesis in *Collapse: How Societies Choose to Fail or Succeed*, that social/symbolic responses, more than natural biological changes, determine a civilization's course in the face of environmental decline. That dominant discourses factor in this choice of societal response should not be controversial. Indeed, I have tried, in listing these propositions, simply to capture agreed-on or general understandings in our field. There should be nothing new or startling here. I am suggesting, instead, that if we were to accept these, in some sense, as basic to our field, then we can begin to state more explicitly a set of normative assumptions underlying environmental communication.

Ethical Postulates of Environmental Communication

Indeed, such a stance may be inescapable in the language of our work and assumptions. As Neil Everndon (1992) has noted, the recognition of environmental crisis itself represents a point of view. "The extinction of species, for example, can be construed as a byproduct of progress, as human beings develop formerly underutilized natural resources to sustain the economic development of a constantly growing population. On the other hand, for those who value biodiversity, such progress is an abomination" (Barry & Oelschlaeger, 1996, p. 910).

For similar reasons, I believe we cannot escape the necessity of ethical choice, even if implicit, in much of our scholarship and teaching. Even in our sometimes cautious ways, as we propose that the objectives of our work are to "appreciate" the different constructions of wilderness, to help stakeholders to "understand" or to "participate in" processes that affect them, or to "translate" technical reports, we are straddling an ethical divide that implies choice. For example, why should residents living near a Superfund site "understand" technical materials? In order to object, if they perceive that their health is at risk? Or to

facilitate harried bureaucrats in gaining residents' compliance or acceptance of cleanup plans? Which is it? Is our purpose merely the perfection of a process of communication, or is it an ethic of democratic empowerment as a means of an environmentally just and sustainable society?

In a sense, "communication" itself is a normative term. Theories of human communication such as Habermas' communicative ethics and "dialogic" theory make explicit the commitment to open, reciprocal, and efficacious discourse in social relations. In the context of the functional premises that I just listed, these norms assume ethical specificity.

I am, admittedly, on much shakier grounds here, but I want to suggest that a number of ethical commitments are implicit in the nature of the projects we take on, and in the foregoing tenets of a field of environmental communication. These normative postulates are:

(1) *The study of environmental communication seeks to enhance the ability of society to respond appropriately to environmental signals relevant to the well-being of both human civilization and natural biological systems*.

Such a postulate seems self-evident from broader societal values related to survival, human health, and well-being, apart from the particulars of our work. But it also derives from the implicit ethical choices underlying the recognition that societal responses to environmental signals are themselves undetermined. That is, representations of "environment" and society's orientations are themselves contingent on a host of conditions and capacities for discursive productions. Hence, I suggest that, as corollaries to this first commitment, there are a number of individual and societal ethical postulates:

(2) On a personal level*, the capacity to engage, experience, reflect upon, and share one's relations to the natural world with others and to engage others' expressions is inherently good and should be nurtured.*

Such a corollary simply recognizes the social/epistemic conditions that are necessary to members of a community *qua* individuals, even as they also are members of other cultural and social-economic communities.

(3) On a societal level, *representations of "environment"—including governmental reports, information, and decision processes—should be transparent and accessible to members of the public. As a corollary, those affected by threats to environmental quality should have the full ability to participate in decisions affecting their communities, families, or individual health and well-being.*

Implicit in this norm, of course, are the prerequisites of a participatory democracy—the right to know, to comment, and to have standing to speak for or against the judgments of societal institutions. Such prescriptions are not limited to an official public sphere but increasingly recognized in private and other social relationships, particularly in recent calls for collaborative approaches to managing conflicts over environmental concerns. Indeed, both natural resources decisions—such as the Quincy Library collaboration in California—and the granting of permits to polluting industries in at-risk, communities of color have been criticized precisely for their exclusion of affected parties.

A consequence of these norms is a fourth postulate, what I would suggest is an ethical duty of a field of environmental communication:

(4) *Environmental communication scholars, teachers, and practitioners have a duty to scrutinize, educate, critique, or otherwise object when social/symbolic representations of "environment," knowledge claims, or other communication practices are constrained or suborned for harmful or unsustainable policies toward human communities and the natural world.* Alternatively, we have a responsibility through our work to identify and recommend practices that fulfill the first ethical postulate: *to enhance the ability of society to respond appropriately to environmental signals relevant to the well-being of both human civilization and natural biological systems*.

By this last statement, I don't mean to raise the controversy of whether scholars can or should speak outside their expertise or enter the public realm as partisan advocates. I do, however, agree with those conservation biologists and other scientists who believe that scholars have a duty to speak forcefully when

the results of their scholarship point to alarm. For example, William Schlesinger (2003), Dean of the Nicholas School of the Environment and Earth Sciences at Duke University, has argued that environmental scientists have a public responsibility "to speak out against a toxic impact to our environment, just as we would expect a physician to speak against a carcinogenic substance that might contaminate our food" (p. 23A). Such "advocacy," if we wish to use the term, is emboldened precisely because it is fueled by our findings.

Indeed, the point that I have tried to raise is that implicit in the premises of our scholarship itself is a set of values that orient our work, require of us its dissemination and implementation, and whose ethical orientation serve as the bases of our recommendations for reform—or abandonment—of harmful or dysfunctional practices.

Conclusion

Michael Soulé (1985) has said the goal of conservation biology scholarship is "to provide principles and tools for preserving biological diversity" (p. 727). For many in conservation biology, values of biodiversity and ecological complexity are integral to decisions about the design of conservation management. Do we have a similar goal? What would be required of us to identify principles and tools for the ends of environmental communication? If we, in fact, have an ethical duty, what would "crisis" scholarship look like in environmental communication?

I pose these questions to provoke conversation and further discussion of our purpose as a field, and, perhaps, revisions or rebuttal of the suggestions I've tried to make here. But the nature of our work, and what is now needed, obviously go beyond the scope—and the time—of this address. I would note only that some here have already begun such an this alignment in their own work. For example, Markus and Tarla Peterson (2004), in their recent essay in the *Journal of Wildlife Management,* document the conflicts over habitat plans for the endangered Florida "Toy Deer" and Houston toad. Their effort, however, was not simply to offer a chronicle of the failure of stakeholder collaboration, but a critique of a central assumption in the principle of consensus or an ideal, single solution, what Chantal Mouffe (2000) calls the "democratic paradox." By proposing a process of conservation management that centers around an idea of "bounded conflict," such research has value for state and federal officials, wildlife biologists, and community leaders who, daily, face challenges of design of communication processes as well as that of habitat management.

In their case for approving an Environmental Communication Commission, presented to the NCA Legislative Council in 1991, Sue Senecah and Michael Netzley argued in their final rationale that scholars working under its auspices would, "act as an identifiable source of theoretical and applied knowledge to public policy decision makers, communities, businesses, educators, and citizen groups" (n.p.). If we were to approach our work in light of ethical postulates that help to define a crisis discipline, then our task is more than the documentation of failure, distortion, or corruption in human communication. It is also a willingness to recommend alternatives, to enable "policy decision makers, communities, businesses, educators, and citizen groups" to respond to signals of environmental stress in ways that are appropriate to human and biological well-being.

Most of us may not yet, self-consciously, align our work with the ethical premises that define a crisis discipline, but perhaps we should.

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A Deleuzian Environmentalism?: Exploring the Possibilities of a Deleuzian Political Resistance

Lisa Slawter Volkening
University of Georgia

In this paper I explore both the possibilities and limitations of a Deleuzian political resistance in the context of environmentalism. Using the Sierra Club, the MTV television series Trippin*, and Wangari Maathai's Green Belt Movement (GBM) as points of departure, I examine the implications of Deleuze and Guattari's theories for evaluating, thinking about, conducting, challenging, and perhaps even improving environmental political resistance.*

Environmentalists must give up trees. Trees cause suffering. They are not beautiful or loving. Trees stifle desire and movement. They are not political.

A superficial read of Gilles Deleuze and Felix Guattari's (1987) recommendation to "stop believing in trees" presents an ostensible challenge to environmentalists, but I suggest that a closer reading reveals aspects of Deleuze and Guattari's philosophy that may be both extremely useful and also deeply problematic for those interested in taking environmental political action. In this paper I explore both the possibilities and limitations of a Deleuzian political resistance in the context of environmentalism. While Deleuze and Guattari are critical of communication, their theories have strong implications for communication scholars, specifically those interested in environmental communication. Current forms of environmental activism and environmental discourse are often less than successful, so this exploration of a "Deleuzian environmentalism" is an attempt to venture into new and more productive possibilities.

I begin with an examination of Deleuze and Guattari's theorization on trees and rhizomes, then shift to look at their theories more broadly before concluding with reflections on the values and limitations of their theories for environmentalism. Throughout the paper, I examine and refer to the Sierra Club, the MTV television series *Trippin*, and Wangari Maathai's Green Belt Movement (GBM) as points of departure for exploring the implications of Deleuze and Guattari's theories.

Trees and Rhizomes and Environmentalism

The trees that Deleuze and Guattari oppose are not the biological organisms, but rather "heirarchical systems with centers of significance and subjectification, central automata like organized memories" (Deleuze & Guattari, 1987, p. 16). That is, Deleuze and Guattari use discussions of trees and arborescent systems to talk about a type of social organization. In trees, pre-established paths constrain movement; information and ideas do not flow freely but are passed down from higher units or out from the center. There is both a beginning and an end, a place of origin from which the rest of the tree branches out. This arborescent model is formal, linear, hierarchical, and centralized. Macropolitics, molar unities, and axiomatics all have the constitution of trees.

In contrast to trees, Deleuze and Guattari seem to offer the rhizome as a "better" organizational schema. Unlike trees, rhizomes do not branch out from a single center; they are horizontal stems that send out roots and shoots from nodes, so there are only branches and lateral offshoots. Deleuze and Guattari (1987) suggest, "A rhizome has no beginning or end; it is always in the middle, between things, interbeing, *intermezzo*… the rhizome is alliance, uniquely alliance. The tree imposes the verb 'to be,' but the fabric of the rhizome is the conjunction, 'and…and…and...'" (p. 25). Rhizomes are nonhierarchical so any part "of a rhizome can be connected to anything other, and must be" (p. 7). These connections are a key

characteristic of the rhizome: "[a] rhizome ceaselessly establishes connections between semiotic chains, organizations of power, and circumstances relative to the arts, sciences, and social struggles" (p. 7). The rhizomatic form, then, emphasizes resonances between things, currents of mutual exchange, and multiple entryways, as well as chance encounters, continuous variation, and coincidental points of contact (Deleuze, 1990; Deleuze & Guattari, 1987). In contrast to the arboreal organization of macropolitics, micropolitics and molecular multiplicities are rhizomatic in nature.

The fundamental difference between the arboreal and the rhizomatic is in the way things are held together, constituted, and organized. The tree and the rhizome "are distinguished not by size, scale, or dimension but by the nature of the system of reference envisioned" (Deleuze & Guattari, 1987, p. 217). Although the above discussion emphasizes the opposition and differences between trees and rhizomes, Deleuze and Guattari do not actually advocate establishing such a rigid dualistic opposition. They acknowledge the possibility (and even necessity) of overlap between arboreal and rhizomatic systems. They suggest that "[t]here are knots of arborescence in rhizomes, and rhizomatic offshoots in roots…Trees have rhizome lines, and the rhizome points of arborescence" (Deleuze & Guattari, 1987, p. 20, 34). These two systems of reference are inverse, but also complementary; they coexist, intermingle, overlap, boost and cut into each other, transform themselves into one another, and cross over (Deleuze & Guattari, 1987). Because of this potential coexistence, I examine both the arboreal and rhizomatic nature of the Sierra Club, *Trippin*, and the GBM.

The Sierra Club, self-identified as "America's oldest, largest and most influential grassroots environmental organization," was formed in 1892 (Sierra Club, 2005a). In addition to the group's clear beginning, the activism, public education, lobbying, and litigation done by the Sierra Club also reflect an arboreal structure in the way that they branch out from the central organization. The over 750,000 members are organized into committees and sections which make up 390 groups and 63 chapters, which are in turn linked to the central Board of Directors (Sierra Club, 2005a). As a long-standing representative of more conventional environmental political resistance, it is perhaps not surprising that the organization of the Sierra Club is formal, hierarchical, and centralized, but arboreal elements may also be found in alternative forms of environmentalism.

In the spring of 2005, MTV launched a new environmental television series, *Trippin*. This weekly half-hour program and corresponding website featured actress Cameron Diaz and her friends traveling to various places around the world learning about environmental issues (MTV, 2005). Although this is a non-traditional form of environmentalism, the arboreal structure still permeates it in some ways. As a television series, *Trippin* had both a clear beginning and, after just ten episodes, an identifiable ending. Because *Trippin* was part of the larger hierarchical structure of MTV, the program was constrained and informed by a central authority. The contents of the website – including video clips and photos associated with the television program, interactive quizzes and environmental impact calculators, and links to numerous online sources of environmental information – all branch out from the central MTV website. The unscripted nature of *Trippin* conforms to the reality television format that has been formalized by its prevalence on MTV as well as other television stations. The formal and centralized structure of MTV thus envelopes *Trippin* into an arboreal organization.

While the Sierra Club and *Trippin* focus solely on environmental issues, the work of Wangari Maathai, Kenyan activist and founder of the GBM, integrates environmentalism with other progressive agendas. Maathai began the GBM in 1977 as a response to local poverty and land degradation in Kenya (Maathai, 2004). Since its inception, the GBM has functioned as a central coordinator for tree planting by receiving and providing funding and organizing massive tree planting campaigns. Tree planting is only one of a diversity of branches that originate from the GBM; other programs include civic and environmental education, advocacy, training workshops, Green Belt safaris, and capacity-building for women (The Green Belt Movement, 2005). Like the Sierra Club and *Trippin*, the GBM might be classified as strongly arboreal because of the way its members and programs branch out from the central organizational structure.

This brief examination of the Sierra Club, *Trippin*, and the GBM suggests that when considered individually, each of these organizations has a center and associated hierarchical structure. However, the seemingly arboreal nature of these organizations may also be read as "knots of arborescence in rhizomes." Taken as a whole, I suggest that environmentalism has no organizational center. The beginning of each environmental group may be read as a new line of flight working from the middle of environmentalism. The connections between the Sierra Club, *Trippin*, and the GBM as different rhizomatic branches illustrate the possibilities of multiple entryways into environmentalism. For example, a visitor to the *Trippin* website may click on a link to the Sierra Club website where they may then find links to websites about the GBM

or the online version of an issue of *Sierra* magazine featuring an interview with Maathai about her work with the GBM. While these links are arguably intentional points of convergence by the organizations, for website perusers they offer the possibility of chance encounters with different branches of environmentalism. These type of connections permeate today's mass-mediated society, and reading them through a rhizomatic lens highlights their resistive and creative potential.

Within these individual organizations, there are also rhizomatic possibilities for environmental political resistance. For example, the GBM's work for sustainable development unexpectedly resonated with issues of peace and democracy. I suggest that it was these rhizomatic connections that the Norwegian Nobel Committee identified and referred to as a "holistic approach" when they awarded Maathai the 2004 Nobel Peace Prize (The Norwegian Nobel Committee, 2004). The GBM's connections between science *and* social commitment *and* politics *and* human rights *and* . . . are rhizomatic; "AND is neither one thing nor the other, it's always in-between, between two things; it's the borderline, there's always a border, a line of flight or flow… it's along this line of flight that things come to pass, becomings evolve, revolutions take shape" (Deleuze, 1990, p. 45).

In addition to the connections embodied by the *and*, environmental organizations also function rhizomatically by working from the middle. For example, on its website the Sierra Club positions itself as working from already within the system of nature:

> This is not about getting back to nature. It is about understanding we've never left. We are deep in our nature every day. We're up to our ears in it. It's under our feet, it is in our lungs, it runs through our veins. We are not visitors here. We weren't set down to enjoy the view. We were born here and we're part of it—like any ant, fish, rock, or blade of grass. This connection is as personal as it is fundamental… Nature, vastly complex and infinitely subtle, is our perfect metaphor. Related to everything, signifying everything, it is the spring where we go to renew our spirit (Sierra Club, 2005b).

While the Sierra Club works from the middle of nature, Maathai's work with the GBM can be understood as working in the middle of political unrest in Kenya. Rather than looking for an outside or government-sponsored solution, Maathai began planting trees as a simple and immediate response to local environmental damage.

Despite their recognition of the coexistence and interrelation of arboreal and rhizomatic structures, Deleuze and Guattari privilege rhizomatic forms. For them, the rhizome is more productive. Rhizomes function in the middle, where everything unfolds and things pick up speed and movement (Deleuze, 1990; Deleuze & Guattari, 1987). Because elements are continuously varying and altering distance in relation to others, rhizomatic connections offer new possibilities that can lead in new directions and have unexpected convergences. While "[a] rhizome may be broken, shattered at a given spot… it will start up again on one of its old lines, or on new lines" (Deleuze & Guattari, 1987, p. 9). The rhizomatic nature of environmentalism means that when one of the branches breaks off (for instance, goes off the air like *Trippin* has) other branches of environmentalism will continue. While Deleuze and Guattari suggest that both kinds of systems (trees and rhizomes) have dangers, they describe, "a rhizomatic realm of possibility effecting the potentialization of the possible, as opposed to arborescent possibility, which marks a closure, an impotence" (Deleuze & Guattari, 1987, p. 190).

In privileging rhizomes, Deleuze and Guattari make blanket statements dismissing trees and arboreal systems; however, their rejection of trees is actually more nuanced. They recognize that even as organizations become more and more rhizomatic, arboreal aspects remain. For them it is not about wildly destratifying and abandoning all trees, but about using some remaining trees against the arborescent system. They suggest:

> [Y]ou have to keep small supplies of significance and subjectification, if only to turn them against their own systems when the circumstances demand it, when things, persons, even situations, force you to; and you have to keep small rations of subjectivity in sufficient quantity to enable you to respond to the dominant reality. (Deleuze & Guattari, 1987, p. 160-161)

Allowing some trees to remain or "[s]taying stratified—organized, signified, subjected – is not the worst that can happen; the worst that can happen is if you throw the strata into demented or suicidal collapse" (Deleuze & Guattari, 1987, p.161). This suggests that it is worse to just give up all trees, all macropolitics, than to continue using them in service of rhizomatic micropolitics.

Deleuze and Guattari's endorsement of the utilization of lingering trees does not undercut the importance that they place on the rhizome. They still advocate: "Make a rhizome." But they say "you don't know what you can make a rhizome with … So experiment." (Deleuze & Guattari, 1987, p. 251). They instruct:

> This is how it should be done: Lodge yourself on a stratum [a tree], experiment with opportunities it offers, find an advantageous place on it, find potential movements of deterritorialization, possible lines of flight, experience them, produce flow conjunctions here and there, try out continuums of intensities segment by segment, have a small plot of new land at all times" (Deleuze & Guattari, 1987, p.161).

Deleuze and Guattari thus encourage experimenting with rhizomatic offshoots of trees. This again highlights the potential for trees and rhizomes to coexist, and it also calls attention to the balance Deleuze and Guattari foresee between trees and rhizomes. The rhizome alone is not enough; the molecular movements of the rhizome are significant in light of how they return to the molar organization of the tree to reshuffle the rigid hierarchy. A brief discussion of micro- and macropolitics illustrates the necessary connections between rhizomes and trees.

Arboreal macropolitics are connected in crucial ways to rhizomatic micropolitics. Deleuze and Guattari write:

> [M]icropolitics is no less extensive or real than macropolitics. Politics on the grand scale can never administer its molar segments without also dealing with the micro-injections or infiltrations that work in its favor or present an obstacle to it; indeed, the larger the molar aggregates, the greater the molecularization of the agencies they put into play (Deleuze & Guattari, 1987, p. 204).

Micropolitics are significant then because "[p]olitical decision making necessarily descends into a world of microdeterminations, attractions, and desires" (Deleuze & Guattari, 1987, p. 221). This does not mean that micropolitics can or should replace the molar organization of macropolitics. The molecular movements of micropolitics "would be nothing if they did not return to the molar organizations to reshuffle their segments, their binary distributions of sexes, classes, and parties" (Deleuze & Guattari, 1987, p. 216-217). For Deleuze and Guattari, "every politics is simultaneously a *macropolitics*, and a *micropolitics*" (Deleuze & Guattari, 1987, p. 213).

The coexistence of arboreal macropolitics and rhizomatic micropolitics and the possibility for a rhizomatic experimentation that makes use of arboreal elements may seem to suggest that both trees and rhizomes are equally viable forms of political resistance. However, a broader examination of Deleuze and Guattari's philosophy rules out the allowance of certain arboreal aspects of environmentalism.

Ideology, Laws, & Communication

Examining the form and structure of environmentalism through the lens of trees and rhizomes offers new possibilities for exploring and critiquing the effectiveness of that resistance, but a wider examination of Deleuze and Guattari's project suggests a new ontology, not a prescription for incremental format improvements of political resistance and environmental discourse. It is this new ontology that I examine with respect to environmentalism in the second half of the paper. Not only is it important to ask what rhizomatic qualities of environmentalism should be further stressed and expanded upon, but in order to understand what this new ontology could mean for environmentalists and environmental communication scholars, it is necessary to examine those arboreal aspects of political resistance that Deleuze and Guattari reject, including ideology, laws, and communication.

Environmentalism, like other types of political action and resistance, is based on an ideology. Although environmentalists may vary considerably in their particular beliefs, they are all motivated by an ideology ultimately concerned with the health of the natural world. Trying to approach environmental political resistance from a Deleuzian perspective becomes problematic however, because Deleuze and Guattari dismiss concepts like ideology (Deleuze, 1990). The Sierra Club's mission to "promote the responsible use of the earth's ecosystems… protect and restore the quality of the natural and human environment," *Trippin*'s "quest to safeguard the environment," and the GBM's focus on "environmental conservation, community development and capacity building" function as the kind of ideology opposed by Deleuze and

Guattari because these mission statements rely on universal or transcendental norms that ultimately reify arboreal structures (MTV, 2005; Sierra Club, 2005a; The Green Belt Movement, 2005).

Instead of the universal, abstract, and transcendental, Deleuze and Guattari advocate the possibility of only relative and perspectival good/bad assessments. They suggest that "[a]ll concepts are connected to problems without which they would have no meaning and which can themselves only be isolated or understood as their solution emerges" (Deleuze & Guattari, 1994, p. 16). Their call for attention to relationships suggests that political activists could not know the ethics of a situation until the moment of that situation and would need to adopt a discourse that constantly responded to these relations. In some ways, environmentalists do make assessments based on the relations of a particular situation. The aforementioned mission statements leave the groups' standards somewhat ambiguous through the use of phrases such as "responsible use," "safeguard," and "environmental conservation," and this may allow them to respond to the details of particular situations. However, these mission statements still contain a universal "environment good" ideology.

Laws also reflect ideology and universals, so environmentalism based in law is similarly problematic. Many environmental groups engaged in political resistance rely on and push for environmental legislation. For example, the Sierra Club lobbies for environmental laws and regulations, files lawsuits when those laws are violated, and counts in their list of accomplishments the passage of laws such as the Clean Water Act and Endangered Species Act (Sierra Club, 2005b). Because laws reflect ideology and universals, they are not a Deleuzian form of politics. For Deleuze:

> [l]aw, whether moral or social, does not provide us with any knowledge; it makes nothing known… Law is always the transcendent instance that determines the opposition of values (Good-Evil), but knowledge is always the immanent power that determines the qualitative difference of modes of existence (good-bad) (Deleuze, 1988, p. 24-25).

Law is ideology enforced; its very nature solidifies and limits motion. Law functions transcendentally, rather than immanently, so resistance that relies on law is by nature arboreal, rather than rhizomatic. Just as rhizomatic resistance cannot be indebted to ideology, it also cannot use law to achieve its purpose. Deleuze might even celebrate the "loopholes" in laws that environmental groups advocate closing because these loopholes break the illusion and power of law as universal.

Without ideology and law, a Deleuzian environmentalism would seem to preclude any macrolevel politics—this presents a challenge to many contemporary environmental organizations. Although earlier I discussed how it is not necessary for the Deleuzian environmentalist to give up ALL aspects of arboreal systems, those lingering tree-like characteristics are to be used to challenge other trees. This would suggest that all macrolevel environmentalism based in ideology and laws should only be in response and in challenge to the surrounding macropolitical system. Maathai's initial work with the GBM did not use laws, and in fact was a reaction against laws. Rather than campaigning for environmental protection laws, Maathai began planting trees to address environmental degradation. The fact that today Maathai is a member of the Kenyan parliament and is the Kenyan Assistant Minister for Environment, Natural Resources, and Wildlife may reflect her personal re-entry into the hierarchical stratification of macropolitics, but since much of the rhizomatic work of the GBM continues, Maathai's formal government positions can also be read as a turning of the macropolitical system against itself. *Trippin* also did not rely on laws and macropolitics. The program and website strongly emphasized individual actions that could make a difference such as recycling, conserving water and electricity, and making other environmentally sustainable decisions. The focus on personal choices contributing to the health of the planet moves environmentalism away from universals and laws. The actions of the GBM and *Trippin* serve as examples of environmentalism not based in law.

Even though Deleuzian thought is not grounded in a macropolitics that facilitates the formation of political parties or the drafting of laws, it can still encourage a type of political action. According to Deleuze and Guattari, politics "proceeds by experimentation, groping in the dark, injection, withdrawal, advances, retreats" (Deleuze & Guattari, 1987, p. 461). The very act of creating concepts is political (Deleuze, 1990). A concept is a singularity:

> … acting on the flows of everyday thought… It's got nothing to do with ideology. A concept's full of a critical, political force of freedom. It's precisely their power as a system that brings out what's good or bad, what is or isn't new, what is or isn't alive in a group of concepts. Nothing's good in itself, it all depend on careful systematic use (Deleuze, 1990, p. 32).

Politics based on the creation of concepts emphasizes experimentation and the relations of rhizomatic lines of flight.

The creation of concepts, however, does not easily fit with existing notions of what is political. Deleuze recognizes the difficult nature of this definition of political when he suggests that creative activity "isn't very compatible with circuits of information and communication, ready-made circuits that are compromised from the outset" (Deleuze, 1990, p. 61). In faulting current communication practices for this lack of compatibility Deleuze and Guattari suggest that we have too much communication, but "[w]e lack creation…lack resistance to the present" (Deleuze & Guattari, 1994, p. 108). For them, communication is not political, creation is. Instead of communication, a Deleuzian political resistance is the creation of resonances, connections, and new productive lines of flight of the rhizome.

A successful Deleuzian political resistance, then, does not merely mimic the form of a rhizome in superficial or trivial ways. It must be a unique creative line of flight that connects and resonates throughout. Deleuze writes that "[a] discipline that set out to follow a creative movement coming from outside would itself relinquish any creative role. You'll get nowhere by latching onto some parallel movement, you have to make a move yourself" (Deleuze, 1990, p. 125). In his notes on *A Thousand Plateaus*, Michael Hardt (2005) writes, "Flight must be creative. It must not only be the refusal of the major usage, the refusal of the standard, the norm, the law, but a creation of an alternative. In other words, flight cannot be just flight -- that would be negative and empty. Flight must be positive and creative: constituent flight" (Volume 2, Section 2). For environmentalism to become Deleuzian political resistance, it must create new productive lines of flight.

Maathai's work with the GBM comes the closest out of the environmental examples considered in this paper to fulfilling this description of Deleuzian political action. One explanation for this might be that Maathai's work cannot be classified as solely environmental. The GBM works for sustainable development *and* economic empowerment *and* human rights *and* democracy *and* women's rights *and* peace *and*…. Rather than seeking out a macropolitical solution, Maathai created a line of flight based on relations and usage that empowered Kenyans to respond to the situation. As Maathai and the GBM have received national and international recognition, the rhizomatic nature of the work has perhaps decreased, but Deleuze and Guattari do not measure the success of political resistance in terms of longevity. Instead, they assert:

> [T]he success of a revolution resides only in itself, precisely in the vibrations, clinches, and openings it gave to men and women at the moment of its making and that composes in itself a monument that is always in the process of becoming, like those tumuli to which each new traveler adds a stone. The victory of a revolution is immanent and consists in the new bonds it installs between people, even if those bonds last no longer than the revolution's fused material and quickly give way to division and betrayal (Deleuze & Guattari, 1994, p. 177).

Conclusion: Possibilities and Limitations

In the beginning of this paper I suggested that a Deleuzian political resistance would not require environmentalists to stop believing in actual trees, but would require them to give up their arboreal organizational structures. After engaging the theories of Deleuze and Guattari on multiple levels, I conclude that in fact Deleuzian environmentalists must give up some of ALL their trees – the organizational structures *and* the biological organisms. Because they cannot maintain their environmental ideology as the tool of judgment and organization, environmentalists will have to recognize that trees are not always Good and environmental degradation is not always Evil – so abandoning some biological trees is inevitable.

Ultimately, Deleuze and Guattari provide a positive way to resist the present structure of the world. According to Foucault (1983), some of the main adversaries confronted by Deleuze and Guattari in *Anti-Oedipus* are "[t]he political ascetics, the sad militants, the terrorists of theory, those who would preserve the pure order of politics and political discourse. Bureaucrats of the revolution and civil servants of Truth" (Foucault, 1983, p. xiii). Rather than incremental change, Deleuze and Guattari offer a whole new ontology which reveals the political potential of different sorts of action. They acknowledge the existing arboreal forms of politics and organization and caution us against simply throwing out these systems, but they also assert that small amounts of rhizomatic micropolitics are not enough to make things better (Deleuze and Guattari, 1987).

Examining environmentalism through the lens of trees and rhizomes shifts attention away from judgments of Good/Evil and onto the structure of organization and relations. A Deleuzian political resistance must be based on relations, rather than laws and universals. This kind of resistance is more work; it forces individuals to constantly think, engage, create, and make connections. This seems to me a more productive, if not labor-intensive approach. However, this shift away from Good/Evil is also precisely what becomes problematic for environmentalists. It eliminates the option to defend a political position with environmental ideology and instead allows only for a reliance on relations. In today's world, filled with global income disparities, massive environmental degradation, and human rights abuses, it may be challenging for environmentalists to let go of a macropolitics based on law and ideology, to stop believing in trees. Even though that macropolitics may be ineffectual, its incremental progress is familiar and eventually yields tangible, if not limited, results.

In addition to the challenges already mentioned, I see two major stumbling blocks to utilizing Deleuze and Guattari's theories for environmental political resistance – both deal with a mismatch between their assumptions about reality and the assumptions embedded in today's society. The first stems from their conceptualization of relations and lines of flight. They work from the assumption that "there is no difference of nature between the human and the nonhuman, between the biological and the social… all life (mineral, animal, vegetable) functions along the same lines" (Hardt, 2005, Volume 2, Section 1). This suggests that a Deleuzian environmentalism would respond to relations that value all life equally, rather than anthropocentrically. However, in our mass-mediated, anthropocentric, consumerist society we understand and value human and nonhuman relations somewhat differently—not equally. Without a shift in our society's valuation of the nonhuman, environmentalism cannot be truly Deleuzian. Should environmentalists discard ideology and law without such a shift, they would most likely be unhappy with the resulting condition of the environment.

The second main obstacle to making use of Deleuze and Guattari's theories is their dismissal of communication. While their complaints about communication help me as a rhetorician look for entries into studying resistance other than speeches and writing—for instance, looking at the organization of environmental political resistance as I do in this paper—I am not willing to devalue communication. Communication is how the creation and relations that Deleuze and Guattari advocate will be made manifest in our society. I believe communication can function rhizomatically, as well as signify rhizomatic qualities. For example, phrases such as *holistic*, *systems approach*, *alliance*, the conjunction *and*, *in the middle*, and *ecosystem* all indicate rhizomatic elements. So just as Deleuze and Guattari see the value in maintaining some trees to use against the arboreal system, I argue we need to use communication to facilitate rhizomatic relations and creation.

Despite these challenges and limitations, I find Deleuze and Guattari's theories offer many possibilities for new ways of evaluating, thinking about, conducting, challenging and perhaps even improving environmental political resistance. As I suggested in the beginning of the paper, trying such new approaches is essential because current efforts of environmentalism are often unsuccessful. Deleuze and Guattari's emphasis on relations and rhizomatic experimentation may help to uncover alternative forms of environmental political resistance. Their theories certainly provide a productive tool with which to investigate the current practices of environmentalism.

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Becoming Hanford Downwinders: Producing Community and Challenging Discursive Containment

Jay Mullen
Southern Oregon University
William J. Kinsella
North Carolina State University

This essay examines the process through which an environmental stakeholder community self-organized to engage the federal government and develop a voice in public policy discourse. Following revelations in the mid-1980s about releases of radioactive materials into the environment surrounding the U.S. Department of Energy's Hanford reservation, regional residents and former residents forged connections through their shared self-identifications as "downwinders." Building on this identity, they developed rhetorical strategies that successfully connected them with downwinders from other regions, congressional decision-makers, and a broader public. In doing so, the Hanford downwinders first challenged Cold War conventions of secrecy, and then challenged a technocratic framework that served to contain public nuclear discourse. Grounding their claims in lived experience, local knowledge, and a humanistic ethos*, the downwinders have opened new possibilities for democratic dialog. By examining the personal narratives, shared positionalities, and rhetorical strategies of the Hanford downwinders, we seek to illuminate a network of linkages among materiality, discourse, identity, and community.*

Sixty years ago, within weeks of the bombings of Hiroshima and Nagasaki, the U.S. government took steps to explain and contain the realities of nuclear energy. At the direction of General Leslie Groves, Director of the Manhattan project, Princeton physicist H. D. Smyth had prepared a book-length report in advance of the bombings, for public distribution immediately afterward (Smyth, 1945). Smyth opened the book's preface with the declaration: "The ultimate responsibility for our nation's policy rests on its citizens," noting that "[t]hey can discharge such responsibilities wisely only if they are informed." At the report's conclusion he emphasized the need for public discourse, acknowledging that scientists had ushered in a new age that posed new questions to humankind and asserting that "[t]hese are not technical questions; they are political and social questions and the answers given to them may affect all mankind for generations." In a Jeffersonian-Lincolnian tenor he continued, "In a free country like ours such questions should be debated by the people and decisions must be made by the people through their representatives." The report concludes: "the people of the country must be informed if they are to discharge their responsibilities wisely."

The Smyth Report, titled *Atomic Energy for Military Purposes*, contains a foreword by General Groves who wrote, "All pertinent scientific information which can be released to the public at this time without violating the needs of national security is contained in this volume," and warned "No requests for additional information should be made to private persons or organizations associated directly or indirectly with the project. Persons disclosing or securing additional information by any means whatsoever without authorization are subject to severe penalties under the Espionage Act."

So the Atomic Age opened in paradox. Citizens must be informed participants in atomic matters while national security limits their access to information. Grove's caveat obstructed the acquisition of information about what the report termed "unpredictable hazards" and "really troublesome materials," particularly radioactive xenon and iodine. The report's "Waste Disposal" section concluded, "It must be established that the mixing of the radioactive gases with the atmosphere will not endanger the surrounding territory," and called for studies for the "determination of biological effects," including "effects of radiation

on living matter [and] metabolism." A concerned reader might wonder how the claim that a mushroom cloud's "radioactive products are carried upward in the ascending column of hot air and dispersed harmlessly over a wide area" squared with "concerns about predictable hazards" and observations regarding "radioactive gases in the atmosphere that might harm the community." How could a bomb's radioactive products be harmless if radioactivity in the atmosphere posed community hazards? Thus the Smyth report established some of the tensions and dynamics in the Atomic Age's democratic society. What would be the public's discursive role in the face of national security's informational constraints and the elasticity of science, particularly with respect to issues of public health?

These paradoxes presaged the public controversy that is the focus of our analysis, which emerged in the 1980s and 1990s and continues to unfold sixty years after Hiroshima and Nagasaki. Over time, nuclear officials have faced problems of increasing scope and complexity surrounding the containment of radioactive materials. In parallel, they have faced continuing problems surrounding their efforts to contain public discourse (Kinsella, 2001; Taylor, Kinsella, Depoe, & Metzler, 2005). Just as nuclear materials can be "unpredictable," and "really troublesome," so can be public discourse and the public itself. Our essay chronicles the emergence of a community linked by the principle of nuclear hazards, whose members have challenged and disrupted the containment of nuclear discourse. As self-identified "downwinders," the members of this community are not only linked *by* those hazards; in so naming themselves they have established a linkage *to* those hazards. Thus the downwinder community is a product of nuclear materialities, an unintended consequence of nuclear operations, as well as a product of self-organization through rhetorical action.

The downwinder community comprises a number of more specific communities whose members identify with particular sites of nuclear production and testing (cf. Ball, 1986; Taylor, 1997; Udall, 1994). These groups have forged a common identity; indeed, a slogan that circulates on websites, email messages, and bumper stickers proclaims that "we are all downwinders," stressing the ubiquity of nuclear fallout and stretching the range of identification. We focus here, however, on the downwinders who claim connections to the U. S. Department of Energy's Hanford Reservation in Washington, the site of plutonium production for the Trinity atomic test and the bomb dropped on Nagasaki. Plutonium production at Hanford continued through the end of the Cold War, raising troubling questions regarding toxic releases and containment of public discourse. By examining the personal narratives, shared positionalities, and rhetorical strategies of the Hanford downwinders, we seek to illuminate a network of linkages among materiality, discourse, identity, and community. Our approach acknowledges a range of published accounts of Hanford and its regional community (Dalton, Garb, Lovrich, Pierce, & Whiteley, 1999; D'Antonio, 1993; Gerber, 1992; Goldberg, 1998; Hales, 1997; Hein, 2003; Kinsella, 2001; Loeb, 1982; Ratliff, 1997). However, here we present a narrative that, while written in the third person, is grounded in the first author's experiences as a Hanford downwinder and a participant in the events we describe. Thus our narrative strives to be both anecdotal and academic, grounding its validity in the actions, experiences, and names of real people, thus mirroring the approach taken by the downwinders themselves. We present this narrative in sections corresponding to five moments in the development of the Hanford downwinder community: initial awareness, early self-organization, identification with a broader discursive and political community, engagement with the prevailing technocratic frames of public nuclear discourse, and the development of a public voice and policy influence.

From Containment to Questions: Material and Discursive Leakages

Playmates and classmates from Couer d'Alene, Idaho may have remembered Gertie Carder as much for her personal warmth as for her blonde attractiveness when they received class reunion announcements in the 1980s. Gertie Hanson, nee Carder, a homemaker, discerned a disturbing pattern in their replies. Too many said they would not attend reunions because of poor health. She began analyzing responses from graduates of the years 1951-1954. Out of 242 respondents 42% of the females reported thyroid problems that warranted medication. The incidence spiked to 52% for female respondents from the class of '53. Others reported cancers. To Gertie the numbers seemed inordinately high for people in their early fifties. Likewise, the newspaper's frequent obituaries of local classmates unsettled her. Sixty-three had died of cancer by 1988, three of those from leukemia between 1948 and 1950. These anomalies haunted her in her kitchen and in her car until she heard about radioactive iodine releases from the atomic facility at Hanford, less than half as distant as Mount St. Helens, which in 1980 had deposited wind-borne ash in her yard.

Like most nutrition-conscious mothers who buy iodized salt or include fish in their family diets, she knew that iodine deficiency could cause goiters, swollen thyroid glands. An activist group in nearby Spokane, Washington had used the federal Freedom of Information Act to pry documents out of Hanford that alerted Gertie to the dangers of radioactive iodine.

Latent nuclear apprehension combined with credibility and environmental concerns to breach the decades of secrecy that General Groves and the Cold War had imposed upon atomic operations. Watergate, Love Canal, Agent Orange, falsified Cambodia bombing reports, Iran-Contra, The Pentagon Papers, and the Church committee combined to undermine the unquestioning trust that some of the Depression generation had accorded the government. National security claims lost legitimacy with jaded Americans who raised environmental concerns only to be dismissed by officials who invoked secrecy. Health concerns in the 1960s had contributed to the enactment of an atmospheric test ban treaty. Protest by housewives at Greenham Commons in England (Couldry, 1999) and by Utah sheep ranchers (Hacker, 1998; Udall, 1994) intensified fallout apprehensions. On the heels of Three Mile Island a proposal to make Hanford a nuclear waste depository impelled the formation of the Hanford Education Action League (HEAL) by activists in Spokane concerned not just with a waste site, but with nuclear operations in general (Ratliff, 1997). On the basis of disclosures by a whistleblower a Seattle newspaper had reported an accidental radiation release at Hanford. In response a Unitarian clergyman in Spokane, Will Houff, capitalized upon public skepticism and apprehension and catalyzed HEAL's formation in 1984. Abetted by information derived from worldwide anti-nuclear critics and researchers, and particularly by the efforts of a local chemistry professor, Allen Benson, the organization began to scrutinize eastern Washington's atomic facility.

HEAL influenced the investigative journalism of Karen Dorn Steele of *The Spokane Spokesman Review*, which heightened public awareness of Hanford and intensified the pressure for more information about its secret operations. Assisted by a local farmer, Tom Baillie, Steele interviewed farm residents in the Hanford neighborhood about rumors of deformed livestock and discovered that like Gertie Hansen, Juanita Andrewjeski and Don Worsham had compiled their own morbid data on cancers and death. Augmented by Hanford documents acquired through Freedom of Information requests she wrote about local health apprehensions. At a subsequent public forum at Spokane's Ridpath Hotel Hanford's manager, Michael Lawrence, responded to popular concern with assurances that the Department of Energy (DOE) would provide a summary of Hanford's emissions. At a HEAL symposium that followed Lawrence expanded his previous declaration and pledged to make primary documents available to the public. On February 27, 1986 the DOE released a 19,000 page trove of previously classified Hanford documents. HEAL researchers Tim Connor and Jim Thomas sifted meticulously through those documents, tracing a skein of releases and cover-ups which, when reported by Steele in the *Spokesman Review*, confirmed the fears of Andrewjeski and Worsham and amplified public concern. When the wire services relayed the information Gertie Hansen connected the dots in the pattern of her own suspicions about her classmates' cancers.

The documentary record revealed not only accidental releases, but also deliberate ones. Releases in December, 1944 and early 1945 could be attributed to wartime urgency and an absence of air filters, but the documents revealed that in 1949, a year after filters had been installed, they had been deliberately bypassed for experimental releases that spewed nearly 8,000 curies of radioactive iodine into the atmosphere over a two-day period. Three Mile Island, by comparison, would later discharge 15 to 20 curies. The Smyth report's declared concern " to leave not the slightest probability of danger to the health of the community" had obviously been disregarded.

Steele's reporting of the "Green Run," as these experimental releases were dubbed, intensified public awareness and concern. In turn, public officials reacted. Oregon's and Washington's governors appointed a committee to review and assess the environmental significance of the releases. A few months later the federal Centers for Disease Control (CDC) addressed the need for health effects studies. The Colville Indian tribe filed a lawsuit and the Department of Energy (DOE) responded by initiating an emissions survey. The governors' committee recommended a similar "dose" study. The DOE merged the latter two studies into a single one, the Hanford Environmental Dose Reconstruction (HEDR), to be conducted by the Batelle Corporation's Pacific Northwest National Laboratory, a contractor housed adjacent to the Hanford site. A technical steering panel (TSP) of outside experts would monitor the study. Congress, meanwhile, acted with uncharacteristic alacrity and funded the Hanford Thyroid Disease Study (HTDS) through the CDC.

Making Connections: Inferences, Identifications, and Self-Organization

Inquiries from self-identified downwinders now inundated HEAL, which responded by sponsoring a 1988 informational conference. With more than 500 downwinders added to its mailing list, HEAL then acquired foundation support for a second conference in Spokane in May, 1989. From Oregon, Washington, Montana, California, and Idaho they came. While downtown Spokane bustled with preparations for its Lilac Festival, over a hundred downwinders assembled in a campus lecture hall to be welcomed by HEAL's executive director, Lindy Cater, and to hear fellow downwinder Judith Jurji, the keynote speaker.

Fueled with fervor, this pale Seattle community college art teacher recounted her health history—fatigue, infertility, loss of skin pigment and sometimes even memory—which had caused her to wonder how, with so little strength and vigor, she could have descended from ancestors who crossed the plains. A student who grew up near Hanford posed an explanation to her after one of their classes. Millie Smith had thyroid cancer and suggested Jurji see a physician to have her gland checked. The diagnosis: hypothyroidism. Additional checks confirmed the same condition in five members of her immediate family, though it did not occur among relatives who had not lived near Hanford. The heads of an inordinate number of listeners in the lecture hall nodded understandingly when she recounted this story. Many of them bore the surgical scar of thyroid removal, a downwinder identity badge that they, in grim humor, came to call "the Hanford necklace." Jurji's screed, "The rage I feel is unfathomable," resonated among many listeners who sat waiting for confirmation of their suffering from Dr. James Ruttenbur, the physician charged with initiating the CDC thyroid study. Some, however, harbored skepticism about Ruttenbur and his study.

Downwinders knew they had suffered. They knew thyroid disease, cancers, and leukemia, still births, fibromyalgia, birth defects, menstrual difficulties, and sterility. Of course these afflictions were not unique to downwinders. Some would have occurred had Hanford never existed. However, once apprised of the possible source of their misery, many assumed that the government that had benevolently succored their families during the Great Depression, that had protected them from fascism and communism, that facilitated their home mortgages, secured their bank accounts, and guaranteed their retirements would recognize their suffering and fashion a protective agenda to spare others the horrors they had endured. Their suffering at the hands of their beneficent government must have been a grievous mistake, a colossal error. Yet their misery could serve a noble purpose: knowledge derived from their experience could provide insights and information about atomic effects that could help protect future generations.

When they heard about the government's intention to study radiation effects they offered themselves as prime examples; inadvertent guinea pigs, as it were, whose medical records would repay their humane government for its Depression generosity. So amid visions of stethoscopes, x-rays, and blood tests they penned poignant letters volunteering as subjects for the CDC's studies. In turn they received impersonal, almost dismissive don't-call-us-we'll-call-you form letters, closed with reproductions of James Ruttenbur's signature. Some seethed when he strode down the aisle to address the downwinder gathering.

Ruttenbur, of course, had no notion of their resentment. Trained as a physician, steeped in the health sciences paradigm, he endeavored to explain the rudiments of epidemiology. Data from a pilot study would determine if a larger study was warranted, he said. Hearing that, some listeners groaned, convinced that their health horrors alone provided sufficient warrant. Ruttenbur averred, logically, that surveying pre-selected people would invalidate any epidemiology. He intended to weigh probabilities before postulating Hanford's effect on regional health. Downwinders, meanwhile, assumed that since the government had acknowledged that radiation effected health, effects were what should be studied. Their scars and medical bills evidenced Hanford's effects. Ruttenbur seemed to be discounting the obvious. His measured, logical, factual presentation intensified their resentment about the impersonal form letter sent to them with his reproduced signature. He, and by extension, the government, apparently had no sensitivity to their suffering.

How, they anguished, could their government have come to this? An explanation for such callousness gradually occurred to them during the next agenda item: litigation. If the government acknowledged damaging people's health then lawsuits might exact financial compensation, they reasoned. Now the government that had buffered them from the Depression and protected them from communism was shielding its treasury at their expense by discounting, perhaps even denying, their misery. However, the attorneys participating in the gathering's program explained, although the government could not be sued perhaps its contractors could be. So the villainy shifted from the government onto corporations who had co-opted it, particularly its DOE, which appeared to be trying to shield the villains.

The contrast between Ruttenbur's plodding logic and the downwinders' emotionalism anticipated the two rhetorical strategies that would clash as the downwinders engaged the nuclear establishment. Grief, confusion, perplexity, anger, sympathy, resentment, tears, resignation, and resolve rang through the afternoon group and plenary discussions. At adjournment a coterie reconvened over cocktails, then dinner, determined to formalize an organization. If Ruttenbur inadvertently induced the downwinder community's birth, then HEAL served as both midwife and stepparent. "We can facilitate your organizing, but HEAL's not a downwinder organization," executive director Cater cautioned. So a new organization was born, initially dysfunctional but determined. Newly acquainted individuals found it difficult to focus on organizing and mission definition, but clarity and direction began to emerge as June Stark Casey described her appearance, three months earlier, with Fernald, Ohio downwinders before a congressional committee in Washington.

Congresspersons had listened as she spoke of her total hair loss (like that of 127 Ukrainian children in a town 230 miles downwind from Chernobyl), her thyroid deficiency and nodules, her skin cancer, breast surgery, and her miscarriage in 1970. For a month she had carried a fetus she knew to be dead because her physician feared that induced labor would kill her. "You have no hair?" asked another downwinder. A tear rolled down her cheek as she fixed him with a grateful smile for not recognizing that she wore a wig. Then another acknowledged that she too had been totally bald during part of her primary school years, making her a playground freak, although her hair eventually returned. The evening was replete with such emotional disclosures.

HEAL's researcher, Jim Thomas, and Jurji's student, Millie Smith, also had appeared with Casey before the congressional committee. In a soft voice, all the softer because a vocal chord was paralyzed after her thyroid removal, Smith, attractive and frail, had told the nation's legislators, "Due to my health problems I've lived in poverty most of my life…There have been times when all I had to eat was rice and popcorn for months…I was homeless…no one would rent to me as I didn't have a job." She described feeding her daughter by relying on food pantries and the Salvation Army and spoke of Andrewjeski's "death mile" where, she said, "Twenty four of twenty eight families have been afflicted with cancer, thyroid problems, and serious birth defects such as no eyes, no skull, no hips." She then produced a letter from the Hanford Operations Office that stated:

> We have found nothing to indicate that your illness was caused by the negligent or wrongful act or omission of any employee of the United States while acting within the scope of his or her office or employment as required before a FTCA claim can be allowed. Your claim therefore is denied.

Such anguished anecdotes circulated around an oval dinner table as virtual strangers, bound together only by their Hanford connection, forged an organization. It was no simple accomplishment since discussion shunted again and again into painful personal memories and speculations about conspiracies and cover ups, with recollections of mysterious men in moon suits waving what looked like wands to monitor their playgrounds; of livestock surreptitiously plucked from pastures at night by helicopters; of disemboweled animal carcasses left rotting in the fields, their purloined organs snatched for research; even of human organs spirited away from funeral parlors into laboratories for examination. Such dubious digressions notwithstanding, they decided to incorporate the state of Washington with satellite chapters to follow as needed in other states. Non-profit status would be sought to enable solicitation of tax-deductible contributions. Support from charitable foundations would gush forth, they naively believed, once the public realized their earnestness, their tragic past, and their good intentions.

Those intentions were not defined easily. Some wanted to campaign for compensation while others believed that the issue of personal money would dilute appeals for medical monitoring. Some believed that their foremost goal should be witnessing, stressing their personal miseries in hopes of forestalling future tragedies. Others simply wanted the truth about the whole sordid matter. Still others wanted an apology from the government and from those responsible for their misery and for withholding vital information. Consensus came slowly. Finally they affirmed Millie Smith's entreaty before Congress three months earlier when she had pleaded for "justice for all downwinders" and said:

> We are as abused children, victims of our own country…[hoping] action will be taken to prevent further contamination and that we will be helped. Not only does the DOE refuse to acknowledge us and take responsibility for their actions or compensate us, the DOE ignores us …. Many still do not know of the releases. We…want recognition as the Hanford Habashka [sic], atomic bomb survivors as are the Japanese. We also want an apology from our government.

Smith had called for the right to sue (to be achieved by repealing the Warner amendment that precluded nuclear facility lawsuits), for medical care and monitoring "as they have in Japan," and for "a toll free number where downwinders can get accurate information." We want the "full truth," she said. That frail woman's emotional congressional appearance personified the ethos of the Hanford Downwinder Coalition (HDC) as it organized itself. Her assertion that "[t]wo years ago I was fighting for my life. Today I'm fighting for the life of all of us and for the life of our land," emerged as the community's credo.

Expanding Identifications

After their organizational dinner, and a short night's sleep by many on the sofas and carpets of Elva Salt's home, they scattered, to reappear when and wherever they could to participate in the emerging nuclear discourse. In the court of public opinion downwinders sought to convince the jury, the citizenry, that Hanford operations not only had victimized them but also posed a continuing threat to everyone's health. Hanford's defenders, in turn, sought to dismiss downwinder concerns as hysterical fear-mongering, scientifically and technically unsound, pandering to the public's latent, irrational nuclear apprehensions. Hanford's errors had been acknowledged, but no conclusive evidence demonstrated that its operations had adversely affected anyone's health, said the facility's supporters. Excessive radiation *could* have, perhaps, but there was no proof that it *did*. Hanford's advocates invoked science; downwinders invoked emotion and experience. Neither alluded to the ultimate possibility: litigation. If the downwinders' public appeal prevailed then the nuclear industry might have to confront damage payments which, like asbestos or tobacco settlements, could be enormous, even bankrupting. And by extension, commercial nuclear power could be discredited, with all that would imply for the investors of Westinghouse and General Electric. The contest was joined.

Although financially deficient, downwinders were not without intangible resources as they confronted the atomic establishment. They already enjoyed a measure of support within the government. Three months before they organized, Ohio Congressman Thomas Luken had publicly deplored "the 35 year secret chemical warfare which the Department of Energy has waged against workers and nearby residents of the 17 nuclear plants around the country," citing "a battle plan against Americans," including a 65 page document filed in federal court acknowledging that DOE "had systematically ignored, under funded, and lied about its controls or lack of controls" at Ohio's Fernald site. Within a month the FBI, at the behest of the EPA, had seized the DOE's Rocky Flats nuclear facility in Colorado to stop operations that belied management's health and safety assurances there. Before summer's end Congress also held hearings on the Radiation Victims' Fair Treatment Act (S. 982) which inspired Massachusetts' Ed Markey to forward to Energy Secretary John Herrington a staff report entitled *American Guinea Pigs: Three Decades of Radiation Experiments on U.S. Citizens*. "They raise one major horrifying question," the Congressman wrote the Secretary. "Did the intense desire to know the consequences of radioactive exposure after the dawn of the atomic age lead American scientists to mimic the kind of demented human experiments conducted by the Nazis?" Downwinders were encouraged that Markey urged the Secretary "to make every practicable effort to identify the persons who served as experimental subjects, to examine the long term histories of subjects for an increased incidence of radiation-associated diseases, and to compensate these unfortunate victims for suspected damages." Since the Defense Department was pursuing such a program for military personnel, "to determine their exposures, to identify incidences of death or illness, and to assist veterans in claims for compensation," downwinders hoped for as much for themselves.

They lacked technical expertise, had scant political clout, and had no resources to campaign for their agenda, yet individually, in pairs, and in small groups, sustained by their zeal and convictions, boosted by significant public skepticism, discomfiture, and even fear of nuclear operations, they plunged into the public dialog. Once engaged, they harbored few illusions about their antagonists and unerringly realized that success lay in winning the hearts and minds of the public, with whom they endeavored to develop empathy, sympathy, and identification. They forged rapport and informal alliances with other stakeholders who augmented their strengths and offset their deficiencies. They proved to be tenacious and significant participants in the expanding nuclear discourse.

Confronting Technocratic Conventions

Congressional responses and the events at Rocky Flats heartened downwinders in 1989, but they realized that unlike atomic workers and veterans, they possessed no formal status beyond their incorporation. They were self-identified victims without official recognition, whose claims to legitimacy hinged largely upon the results of the HEDR survey and the thyroid study. If either concluded that radiation exposure from Hanford was indeterminate or insufficient to cause widespread health effects, then their downwinder status would be discredited, if not destroyed. Not surprisingly they focused passionately on the HEDR and HTDS projects, although not until a schism had opened between those who were anxious to function as credible monitors and critics and those whose concerns extended to Karen Silkwood conspiracies, nocturnal helicopters, suspicious surveillances, purloined animal body parts, and even space aliens.

DOE had conceived the HEDR project in controversy when it commissioned Battelle to conduct the study. As Hanford's immunity from public accountability diminished, DOE and Battelle appeared to be conjugal dissemblers. In 1964 the DOE's predecessor, the Atomic Energy Commission, had hired Thomas Mancuso to survey cancers at Hanford, presuming that he would affirm atomic worker safety. When it appeared that he would conclude otherwise his project officer suggested ending his research. When he and his colleague Alice Stewart reported a death risk ten to twenty times higher than the prevailing assumptions he was fired. The officer who initially recommended his termination, meanwhile, left the AEC to work for Battelle and was awarded Mancuso's lapsed contract. In 1978 a congressional committee concluded that the reasons for firing Mancuso were "not supported" and that transferring his study to Battelle was of "highly questionable legality." A health physicist from the Nuclear Regulatory Commission said Mancuso's effort was "a preposterous distortion of the scientific method" while a New York scientist told Congress that "big science" suppresses facts about low-level radiation and rewards researchers who reach favorable conclusions. From the Mancuso affair downwinders concluded that the logic of science is disputable, not immutable, a useful argument when appealing to the public, and that Battelle warranted close scrutiny.

Downwinders themselves did not presume to contest the establishment's scientists, but in public forums they enthusiastically broadcast the conclusions of other scientists who did. A key opportunity to do so came when Physicians for Social Responsibility published *Dead Reckoning: A Critical Review of the Department of Energy's Epidemiological Research* (Geiger & Rush, 1992), which could have been titled "Mancuso Vindicated," asserting that "there is evidence extending over many decades of intermittent administrative attempts…to suppress evidence suggesting health risks, to intimidate some epidemiologists and environmental investigators, and to highlight reassuring findings while downplaying or denying risks," and concluding that the "epidemiology program is seriously flawed." To promote their legitimacy, then, downwinders researched the contradictions of science and attempted to discredit Battelle's scientific impartiality by emphasizing its dubious practices to the public. For instance, in 1975 a Battelle scientist declared that radioactivity in the Columbia River was "barely detectable," yet within two weeks the local newspaper reported that geese were laying radioactive eggs. Battelle's William Rickard said that the egg contamination came from distant atomic tests. Later, when Greenpeace collected river water samples for analysis by an independent laboratory, Battelle's environmental surveillance supervisor, Keith Price, dismissed the test results as trivial. A 1985 Battelle study reported that springs were draining radioactive tritium, uranium, and nitrates into the Columbia. Two years later Battelle scientist Steve Stein declared that radioactive water from leaking tanks had not migrated into the ground water. "Don't they read each other's reports at Battelle?" downwinders at public meetings would ask, feigning incredulity intended to discredit Battelle scientists. Citing such absurdities resonated with a public not inured to scientific presentations. Such tactics promoted downwinders' legitimacy as both knowledgeable critics and atomic victims.

Yet at incorporation the HDC proceeded with the aplomb of Dorothy's entourage on the Yellow Brick Road. They confronted a steep learning curve. With non-profit status they naively expected financial support from foundations and sympathetic donors, but none came forth. Their most quixotic strategy presumed that interested Japanese supporters might contribute in an effort to establish a liaison with American *hibakusha*. Not surprisingly, none did. Throughout the organization's existence it maintained a barren treasury. A newsletter, *The Monitor*, expired after a few issues. Thereafter individuals absorbed postage and telephone expenses necessary to maintain communication. Seattle members organized a photographic exhibit for display in a local art gallery, presuming that its starkness would shock an unaware public to activism. Even with favorable press reviews it generated no discernable response. Overhead

costs would have smothered them, had not a downwinder penned a thousand dollar check at Portland's Oyster Bar prior to the October, 1989 HEDR public meeting. He assumed that reimbursement would flow from the expected future plentitude of the group's coffers, but their financial condition never changed. However, at that public meeting their activist savvy and resolve did. Thereafter the HEDR project and its Technical Steering Panel emerged as a lightning rod that drew the HDC's coalesced energies.

John Till, a retired naval officer, chaired the Technical Steering Panel charged with oversight of Battelle. At the first scheduled public TSP meeting in a Battelle building near Hanford, the corporation's officials had informed Till that it would be impossible to process all the security clearances necessary for public access to the building. When Lindy Cater of HEAL learned that the public would be excluded she loosed a tirade at Till that he acknowledged matched any he had heard during his career in the Navy. Such an attempt to ban the public appeared to be another example of perfidious Battelle avoiding critical oversight and a confirmation of Battelle-HEDR collusion. No skeptic was more cynical than Lois Camp of Lacrosse, Washington, the informal leader of the HDC's conspiratorialist-black helicopter-Silkwood faction. Camp penned a request that a downwinder be added to the TSP. Since the government budgeted for the panel's travel and lodging expenses as it met peripatetically throughout the Northwest, adding a downwinder would ensure the consistent presence of a concerned stakeholder critic. Otherwise downwinder attendance and monitoring would be irregular, dependant upon geography and personal finances. Till replied that a provision existed for a "public member," but not for one specifically designated as a downwinder. Some downwinders interpreted his response as mere insensitivity, while others discerned a litigation strategy. Formally accepting (or even acknowledging) downwinder participation might imply legal status. So after caucusing at Portland's Oyster Bar they repaired to the Red Lion Inn at Jantzen Beach to take for themselves the measure of the HEDR staff and its TSP at a public meeting.

TSP members were selected for professional acumen, not interpersonal skills, and Till later acknowledged that the course of their project taught them much about public relations. In October, 1989 they needed to learn. The tension at the Jantzen Beach meeting was palpable. Till opened the meeting with a welcome to the public and an assurance that the TSP valued its participation, yet individual members bristled at participants whose questions impugned the project's integrity. For instance, a substantial segment of the HEDR study depended upon access to Hanford documents, yet Hanford officials could invoke national security to withhold records from public scrutiny. A simple question about the physical location and public access to documents affronted one panelist, who assumed that it implied a cover-up. And although they reflected genuine public concern, questions about topics such as Nevada weapons tests, sick uranium miners, or Hiroshima exposures likewise exasperated the panel, for they had no direct relevance to the HEDR study. Yet as the government heretofore had seemed inaccessible for public discussion of nuclear issues, concerned citizens seized this occasion to address what appeared to be accessible nuclear spokespersons. Meanwhile, references to dosimetry, ions, isotopes, rads, and picocuries confused some listeners and convinced others that the panel was invoking scientific obscurantism to discredit those who presumed to challenge it. When a frail, grey haired woman began posing a question about her atomic worker husband's death Till brusquely dismissed her by declaring that such matters were beyond the study's purview. The tear on the widow's cheek confirmed to the downwinders that they should not look to HEDR personnel and their study for humane support.

Finding a Voice: Engagement, Legitimacy, and Influence

Downwinders might be unequipped to challenge the assertions of scientists, but they could mobilize public concerns, particularly concerns about the atomic community's credibility. In speaking for and to the public they could affect nuclear discourse, and even nuclear policy. So the downwinder community, initially inchoate and directionless, developed a strategy of engagement as human, and humane, participants in the atomic dialog. Then a second strategy evolved. Although excluded from the HEDR study, downwinders infiltrated various other public advisory organizations for government programs. Participation in the Hanford Health Effects Subcommittee (HHES), the Hanford Health Information Network (HHIN) advisory boards, the Hanford Health Information Archives (HHIA) boards, and the Agency for Toxic Substances and Disease (AFTSD) provided them not only with platforms, but with opportunities to travel at government expense over the vast distances that separated them to attend meetings where they could network, share mutual support, and strategize. Meanwhile, appreciating the limitations of

dialogue, they opted for yet a third strategy, invoking the institution available to the aggrieved: the judicial system.

Strategically they appeared to be mere snipers ambushing government programs, nuclear spokespersons, and atomic operations with their criticism. Like guerillas they showed up unexpectedly at various forums to join other nuclear watchdogs such as HEAL, Greenpeace, Physicians for Social Responsibility, the National Academy of Science, and/or individual scientific critics like physicist Rudy Nussbaum. Usually they left the task of contesting scientific assertions to these allies while they, themselves, with their ethos as victims, sought to generate sympathy, to raise public awareness, and to chip away at the legitimacy of the atomic community. Their presence would inform or remind the public of the Green Run's implications, supplemented by reminders of Chernobyl, Three Mile Island, and "nuclear guinea pig studies." They proved to be vivid anecdotalists not only at public meetings but for news media ravenous for reportorial color. For instance, since the HEDR study utilized Hanford documents Lois Camp acquired and circulated copies of one that mocked the scientific method ("Iodine-131 deposition," 1946). Troops stationed at Hanford, it revealed, bounded around pastures north of the reservation in jeeps, cornering cows so they could assess thyroid exposures with Geiger counters pressed to the animals' throats. "This is the vaunted scientific method?" downwinders would ask derisively. Mesa, Washington farmer Tom Baillie, dubbed "Mr. Downwinder" by Judith Jurji's husband, proved to be the downwinder raconteur *par excellence*. After helping Steele gather information for her *Spokesman Review* articles, he penned his own op-ed for the *New York Times*, then appeared like a knight errant, speaking wherever he could find an audience, from radio programs to the National Association of Radiation Survivors meeting in San Antonio, Texas. In a NOVA television program entitled "The Bomb's Lethal Legacy" he placed his booted foot on a mechanical harvester, tipped back the brim of his cowboy hat, and with Will Rogers folksiness described "the death mile" for a nationwide audience. In the cab of his pickup truck he recounted for NOVA's camera the catalogue of illness in 21 of 23 families while he drove along that mile across the river from Hanford. Generally he did not criticize Hanford with scientific evidence, but with colorful, emotional, and convincing personal testimony. Like Baillie, other downwinders excoriated Hanford operations whenever and wherever they could secure a rostrum. Sometimes their vigilance augmented *pathos* with *logos* in the form of empirical insights, methodological critiques, and local knowledge.

Ida Hawkins, a homemaker and downwinder from Ellensburg, Washington, sifted through the turgid pages of the HTDS protocol and saw that CDC epidemiologists proposed comparing the radiated neighborhood around Hanford with the purportedly non-radiated community of Ellensburg, fifty miles to the northwest. Although prevailing winds usually blew from west to east, diffusing fallout in that direction, Hawkins knew that they sometimes shifted, so that Ellensburg too was exposed. Conclusions about exposure, then, would compare two exposed areas, not one exposed and an unexposed control. Downwinders were as skeptical about the integrity of the government-funded thyroid study as they were about the government-funded HEDR, so alerted by Hawkins, available downwinders in Oregon converged upon an HTDS public meeting in the basement of Portland's First Presbyterian Church, joining other watchdog groups including Columbia River United, which was concerned about radioactivity in the river. At the meeting's outset the epidemiologists declared that they intended to answer any and all questions, even if it took all night. After downwinders registered their concerns over the selection of Ellensburg and while others were expressing their anxieties about the contamination of the Columbia, which was not within the purview of the HTDS, panel members began sneaking glances at their wristwatches. When pressed, they admitted that they had to catch a scheduled plane flight. Attendees groaned at the realization that the epidemiologists had never intended, as they had declared, to stay all night if necessary to answer questions. A reminder of their stated commitment annoyed them while adding another drip to the stalactite of public doubts about government sincerity, and by extension the integrity of their commitment to the public, even though they had acknowledged the validity of Ida Hawkins's concern.

As the downwinders' visibility and strategic sophistication grew, so did their influence in the halls of the nation's capitol. Senator Mark Hatfield of Oregon and Representative Thomas Foley of Washington shared the concerns of their eastern colleagues Luken and Markey about nuclear operations and the possible consequences for constituents. The *Congressional Record* does not reflect the byzantine machinations or cloakroom and lobby negotiations that inserted Section 3138 into the National Defense Authorization Act for Fiscal Year 1991 (Public Law 101-510). That brief proviso appropriated three million dollars for "programs for persons who may have been exposed to radiation released from Hanford nuclear reservation," joining sections 3139-3141 which called for "payments for injuries believed to arise out of atomic weapons testing," patterned after the Radiation-Exposed Veterans Compensation Act. The

state health departments of Washington, Oregon, and Idaho, which monitored the resulting programs, stated to Congress that "honesty, openness to differing points of view, and willingness to answer questions" would be "operating principles," that "accurate information will be produced that acknowledges emotional as well as physical health effects," and that "persons who may have been exposed to radiation released from Hanford" would be involved "in a voting capacity on all project advisory boards." State health officials appointed downwinder activists Gertie Hanson of Idaho, Judith Jurji of Washington, and Carol Baker of Oregon to their boards. Within two years downwinders had evolved from unorganized inchoates, to snipers, to congressionally acknowledged stakeholders.

In her 1989 *cri de coeur* to the Congressional Hazardous Materials Subcommittee, which was the basis for the Hanford Downwinder Coalition's activist agenda, Millie Smith had called for more public knowledge about Hanford radiation. In putting that issue on the national agenda, and in their subsequent influence on the programs that resulted, downwinders have helped impart that knowledge. She had also pled for more "accurate information" and even a toll free number. Downwinder activity assisted in realizing these goals. Smith had also asked for an apology from the government and, while that has not been forthcoming, President Clinton's apology for the Tuskeegee syphilis experiments suggests that it may be attainable. Her call for health care, compensation, and a repeal of the Warner amendment to enable litigation are, as yet, unrealized, but downwinders remain active on those issues. Always skeptical of both the DOE and the HEDR study, at their organization's earliest stages they had weighed the prospects of litigation. So did Seattle attorney Tom Foulds, a World War II combat veteran who suspected his deceased wife had been a Hanford victim. He, too, doubted the integrity of the HEDR study. After a series of negotiations, mostly with Judith Jurji acting as the HDC spokesperson, he and the downwinders agreed to collaborate on their own parallel study, the R-11 survey, sponsored by downwinders but largely funded by Foulds. Representing over 5000 litigants, in 1990 Foulds and a consortium of attorneys filed lawsuits, *In re Berg* and *Lumpkin et al v DuPont et al*, against the Hanford contractors who did not enjoy Warner amendment immunity from litigation (even though the government pays those contractors' legal expenses). Meanwhile, downwinder and California attorney Tricia Pritikin filed her own suit. Pritikin, a member of the Hanford Health Effects Subcommittee advisory board and chair of the Hanford Health Information Archives advisory board, is the daughter of a Hanford engineer who died of cancer. Like Judith Jurji, she believes radiation exposure damaged her thyroid and caused the loss of skin pigmentation.

The gears of litigation grind slowly. The U.S. Supreme Court finally disallowed Pritikin's case. However, despite a judge's delay to await the publication of the HTDS conclusions and the removal of numerous litigants, followed by motion upon motion and then a dismissal, the Ninth Court of Appeals reinstated a consolidation of the *Berg* and *Lumpkin* cases (*In re Hanford nuclear reservation litigation*). The trial opened on April 25, 2005, sixteen years and eleven months after the downwinders first convened in Spokane. A Spokane federal jury began weighing reams of studies and hours of expert testimony, as well as the testimony of six "bellweathers," three of them with cancers, from among 2300 downwinder plaintiffs. In pre-trail maneuvering previously classified documents revealed that the Department of Energy and the Justice Department had set up the $27 million HEDR study not to ascertain truth but to provide for "litigation defense." That revelation, by extension, cast doubt upon the HTDS study that utilized its conclusions. The downwinders' persistent skepticism of those studies was validated.

After three weeks the jury awarded over $500,000 to two of the three cancer victims, while concluding that no causal link had been demonstrated for the third cancer sufferer and the three bellweathers with autoimmune diseases. Nonetheless, a citizen jury concluded what officials had spent almost two decades denying: Hanford operations had, in fact, damaged public health. The federal government had spent over a hundred million public dollars defending two Hanford contractors, Dupont and General Electric, while the downwinders had invested their hopes for truth and justice.

Like abolitionists, suffrage workers, prohibitionists, and civil rights activists, a small and determined group, the Hanford Downwinder Coalition, has engaged and transformed public discourse. The downwinders' activism has infused color and intensity into the public nuclear dialog, has challenged and expanded its rhetorical conventions, and has influenced policy. Meanwhile, Hanford downwinders Gertie Hansen, Lois Camp, and Carol Baker, who contributed so much of their time and energy to these transformations, have died of cancer. Their voices live on as the dialogue continues.

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A Passion for Place: Marjory Stoneman Douglas and the Florida Everglades

Diane S. Hope
William A. Kern Professor in Communications
Rochester Institute of Technology

The paper is part of a project that explores rhetorical agency through the autobiographical voices of women environmentalists. Marjory Stoneman Douglas advocated for the Everglades for over fifty years. Her autobiography, Voice of the River*, provides a frame for connecting her personal life to the enlargement of her rhetorical agency as she moved from conservationist to aggressive advocate for Everglades restoration. The autobiography articulates the diverse social and cultural contradictions of gender embedded in the discourse of place and the ways in which Stoneman Douglas's rhetorical agency developed in connection to the specific exigencies of south Florida.*

It was almost as if the Everglades had waited for me.
It was a cool subject, to which I could apply my passion.

Marjory Stoneman Douglas, *Voice of the River,* 1987

Introduction and Background

This paper is part of a project that explores the rhetoric of women environmental advocates through the lens of their published autobiographies. The research emerges from the intersection of my interests in environmental discourse and the rhetoric of autobiography, especially as articulated by women whose advocacy participates in the discourse of place. The long-term project seeks to compare the autobiographical narratives of about a dozen women, focusing on the relationship between their rhetorical agency as environmental advocates, their connection to place, and their construction of self in life stories.[i] In part, it is stubborn adherence to theories of second-wave feminism that compels me to probe the connections between the personal and the political in the rhetoric of social change. Additionally, examination of the autobiographical rhetoric of individual women engages directly problematic issues of *essentialism* generated by some Ecofeminist theory. Specifically, I read the autobiographies of environmental advocates as a genre of rhetoric that articulates the diverse social and cultural contradictions of gender embedded in the discourse of place while rejecting claims that female connections to nature differ "essentially" from that of men.

In review of Stoneman Douglas's legacy as an advocate for the Everglades wilderness, this paper probe's the complexities of her rhetorical agency using a theoretical approach offered by Karlyn Kohrs Campbell (2005). Campbell's propositions about the meaning of rhetorical agency engage issues of identity, community, authorship, form and ambiguity. The complex of Campbell's ideas are especially provocative as a way to discover the meaning of rhetorical agency constructed in the autobiographies of women who advocate for the environment. In Campbell's first proposition and the major focus of this abbreviated paper, Campbell proposes that "agency (1) is communal, and participatory, hence both constituted and constrained by externals that are material and symbolic.[ii] This paper focuses on place and gender as the interconnected "externals" that both constituted and constrained the rhetorical agency of Marjory Stoneman Douglas.

Campbell reminds us of the power of community to effect agency by the conferral of identities "relating to gender, race, class, and the like" that determine "what is considered to be 'true,' [and] also who can speak and with what force" (p.3**).** Yet, a focus on Stoneman Douglas as a *woman* rather than as an *environmentalist* is vulnerable to the charge of essentialism, a conundrum that participates in the dilemma posed by the study of marginalized groups, as groups, or by the study of individuals as members of marginalized group.

Like gender identity, place-based identities are conferred by communities, and are assumed, exploited celebrated, or resisted.[iii]. Place can operate as an external constraint on agency, or conversely may motivate assumptions of power. The relationship of place to identity has emerged in the literature across disciplines; for example in environmental public policy (Cantrill, 2004; Cantrill and Senecah, 2001), psychology (Bragg, 1996), and geography.(Steele, 1981). One thread in the literature considers the significance of gender in relationship to place. (Davies, 2003, Domash and Seager, 2001, Massey, 1994; McDowell, 1999 Miller, 2001). An extensive body of literature demonstrates that "gender is an important interpretive lens that influences human relationships to and perceptions of both built and natural environments"(Domash and Seager, 2001, p xxi).

The relationship between identity and place is of special significance for women who enact rhetorical agency in environmentalism. As an early south Florida regionalist, then as a progressive conservationist and finally as a formidable ecological activist in her later years, Stoneman Douglas enacted a "serial" relationship to place that parallels her shifting identity as a woman[iv].

Marjory Stoneman Douglas advocated for protection and restoration of the Everglades wilderness for more than 50 years. She published *Everglades, River of Grass* in 1947 and 20 years later founded and lead the grassroots organization, Friends of the Everglades (FOE) enlarging[v] and even reversing her earlier arguments. Thirty-five years after the *River of Grass* made her famous as the celebrated "lady" conservationist of Florida, she said, "You can't conserve what you haven't got" and through FOE began a bold fight for the restoration of the Everglades (Davis, 2003a, p. 65).

Environmental historian, Jack E. Davis, finds in Stoneman Douglas's public life, "an ideal case study for American environmentalism and its rise as a movement out of the traditions of progressive conservation. By studying Douglas one encounters the linkages between the modern environmental movement and early conservation impulses," he writes. (2003a, p. 54). Stoneman Douglas's autobiography provides a frame for connecting her personal life to the enlargement of her rhetorical agency as she moved from conservationist to aggressive advocate for Everglades restoration. In the later decades of her life, her "extraordinary resurrection…as public activist," incorporated contemporary environmental themes: "The deployment of grass-roots activism, the lessons of ecological science, the rise of environmental justice, the admixture of anthropocentrism and biophilia, and the socialized sensibilities of womanhood." (Davies, 2003a, p.54). Through frames of her own invention, the autobiography chronicles the historical sweep of her advocacy as a woman, the significant changes in her arguments for environmental protections, and the intensification of her powers as an agent for social change. Attachment to place emerges as a major framing structure for her narrative.

Born in Minnesota in 1890, 30 years before women won suffrage, she was raised in Massachusetts and moved to south Florida in 1915, where she lived until her death in 1998. She was 108 years old. Her identification with the Everglades intensified with age, as did her rhetorical prowess. Virtually blind, partly deaf, and still an activist in her tenth decade, Marjory Stoneman Douglas recorded 200 hours worth of conversational memoir with John Rothchild, who collaborated with her to edit the tapes into the autobiography, *Voice of the River,* published in 1987 (Stoneman Douglas with Rothchild). The title of her autobiography is instructive. In presenting herself as the river's *voice,* Stoneman Douglas constructs her life as an agent for the Everglades and invites a reading of her autobiography in which place both contains her identity and is motive for her agency. The text serves as an exposition of shifting identities, a rhetorical exposé of self that reveals connections among discourses of identity, place, and agency in the life of a woman whose activism bridged the major movements of environmental discourse in the 20th century, as well as the first and second waves of feminism.

As Davis points out, "Although Aldo Leopold's 1949 *A Sand County Almanac* is credited with shifting the gaze of the conservation community to ecological concepts, *River of Grass* appeared nearly two years earlier. The two books prompted readers to look at nature through new lenses, with Leopold advocating a revised land ethic and Douglas offering a redefinition of the Everglades" (Davis 2003b, pp. 61-62). *River of Grass* (1947), and its urgent message that the 'useless swamp' was a significant wetland habitat accurately predicted wide ecological crisis from misuse of water, fifteen years before Rachel Carson's

warned of the consequences of chemical misuse in *Silent Spring* (1962). In the 1980's, through FOE, Stoneman Douglas initiated the fight for state and federal legislation to restore the Everglades in an attempt to undo the damage wrought by the drainage canals built by the Army Corps of Engineers. The work of FOE finally resulted in the unprecedented and controversial Comprehensive Everglades Restoration Plan (CERP) passed by the U.S. Congress in December 2000, two years after her death, and projected in 2005 to cost $ 11 billion dollars over 30 years (Spangler, 2004).

When President Bill Clinton awarded her the Presidential Medal of Freedom in 1993, he said in part, "Beyond Florida, Marjory Stoneman Douglas is a mentor for all who desire to preserve…'a sense of place' " (Clinton, 1993, p. 2480). Countless others, in memoirs, obituaries and tributes recognized her contributions.[vi] Yet, in spite of her extensive presence, the vitality of her thinking, her ethics of place, and her effective rhetorical strategies, Stoneman Douglas's writings and actions have received only scant attention in the scholarly literature of environmental discourse[vii.] Excepting Rachel Carson, women conservationists and environmentalists have been slow to emerge in the academic pantheon. In addition to the general omission of women's contributions, for much of the 20th century the ecology of the Everglades was disdained as a swamp and ignored as a wilderness, a monumental error that may have contributed to the oversight of Stoneman Douglas's significance as an environmental advocate, activist and theorist of place-based ethics[viii].

Gender and place emerge as the dominant themes in Stoneman Douglas's narrative of her life as a rhetorical agent. She presents these themes in interplay, as the "material and symbolic elements" that constitute and constrain her agency as a public advocate for the Everglades (Campbell, p-3-5). While male environmentalists have enjoyed the privilege of unexamined gender status, Stoneman Douglas narrates her life as a place-based environmentalist with profound awareness of herself as a woman---both politically and personally. The relationship between Stoneman Douglas's identity as a woman and as a environmental activist creates a prevailing tension throughout the narrative.

She is, sometimes, unambiguous about explicating the connections between her attachment to place as liberation from the constraints of her gender, and especially from the expectations of a domestic identity. At other times, she exploits community expectations of gender, age, and disability to gain adherence to her arguments. To make sense out of such "shifting" identities, to discover how gender and place constituted and constrained her rhetorical agency, Stoneman Douglas's life as subject of her own story must be situated in cultural historic context.

Marjory Stoneman Douglas was born 30 years before women gained suffrage and raised in a Victorian "female society" where spheres of influence were sharply divided by gender (Voice, p. 55). Her girlhood was traumatic, marked by loss. She was an only child whose mother, Lillian Trefethen Stoneman began to have psychotic episodes when Marjory was four years old, and in 1896 left her husband to bring the six-year-old girl to Taunton, Massachusetts, where mother and daughter joined the household of Marjory's maternal grandparents. Her mother, Lillian, was frequently institutionalized and Marjory was raised by her grandmother and single aunt. Although she believed her father tried to reconcile, the Trefethen family blamed Frank Stoneman for Lillian's mental disorders and Marjory's father disappeared from her life for twenty years. The unhappy family was dominated by the sudden violent tempers of Florence Trefethen, Marjory's grandmother, and her single Aunt, Fanny Trefethen. Both believed in suffrage, but above all, valued "respectability," tolerating neither public display nor recognition of mental illness. From early childhood, Marjory Stoneman was made aware that as a girl, she was part of a collective denied specific rights and powers because of her sex. Resentment about existent gender inequalities was palpable in the household. She escaped through reading, fantasy, and education.

Just months after Marjory Stoneman graduated from Wellesley College in 1912, her mother died from cancer. Grieving, innocent, guilty, and lonely, Marjory Stoneman drifted for about a year, and finally took a job in New Jersey, where she met and married Kenneth Douglas. About this time, she wrote, "I don't think anybody can imagine how ignorant, how innocent girls of my kind were in those days, in the winters of 1913 and 1914**.** The word sex was not spoken in respectable families" (p. 72). Douglas, who was 30 years older than she, was the first man who had ever paid attention to her and she did not know him. He turned out to be an alcoholic and petty check forger who was jailed for six months, soon after the marriage. She spent most of the married year in boarding houses reading and regularly visited Douglas in jail. Her behavior still frightened her many years later, and she wrote, her fears motivated her independence.

> It was as if I'd given up all my mental processes to a person who wasn't capable of thinking at all. …It alarmed me. …In my marriage I was completely dominated. Since then I've never wanted to give

> myself over to the control or even the slightest possible domination of anybody, particularly a man. I know I'm one of those women who's susceptible to giving up. It's antithetical: I'm so independent a person, basically, but I drifted through this queer limbo of life in Kenneth's tow….(Voice, p. 89)

When Kenneth Douglas tried to forge bank notes made out in the name of Marjory's father, Frank Stoneman instructed his brother Ned to intervene. Ned Stoneman persuaded Marjory Stoneman Douglas to go to Florida where she could get a divorce and live with the father she hadn't seen since she was six years old. She moved to Florida in 1915, "without a single regret." Her enthusiasm for a reunion with her father is highlighted by a "sense of release, excitement and anticipation" as she headed south (Voice, p. 95). The autobiography is sharply divided by place, life before and after Florida.

She has one recollection of Florida as a small child and uses it as a symbol of her discovery of Florida as the place she had "missed" since she was she was four years old. Before her parents separated they took a steamship down the Mississippi to Tampa on their way to Cuba, she recalls: "The marvelous light, this wonderful white tropic light, I saw it and was thrilled by it. I never forgot the quality of the tropic light as if I had been looking for it all the years of gray Northern Light; as I came back many years later I recognized it as something I had loved and missed and longed for all my life, one of the things that made me so happy about being in Florida" (Voice, 31).

As an immigrant to Florida in 1915, Marjory Stoneman Douglas began to experience the region in the ways she would write about for years. She responded exuberantly to the heat, the light, the beaches, the bird life, and the plant life of south Florida. For example, she writes about renting a beach house with a group of friends:

> We spent our evenings in the moonlight--there was seagrape and sea lavender on the ridge, untouched and really enchanting. We'd swim and light fires, cook on the beach then get up early the next morning to swim again. The water was full of phosphorous. The beach opened up what I've always felt was the true Florida world. I realized then I was a saltwater person who would never be happy living inland. Of course it was the perfect setting in which to fall in love, and I fell in love with Andy. Andy seemed to fall in love with me. We were overtaken by the moonlight and the ocean and it was romantic. . . .(Voice, p. 111).

The romance was interrupted by World War I when both Marjory and "Andy" served in Europe, she as a reporter for the Red Cross and Andy as a pilot. Sometime after 1920, when they had each returned to Miami, the relationship began to wither away. In her telling, she explicitly positions the end of the relationship as a rejection of traditional womanhood, and the simultaneous embrace of herself as a writer in a special relationship to south Florida.

> I was beginning to realize that I was not the marrying kind. In my secret heart, I didn't want to get married again. I never wanted children. I wanted books. I couldn't see why every woman had to have children. It wasn't necessary. I didn't want a normal family life, I wanted my own life in my own way. I was too interested in writing editorials and in writing my column. It was in the column that I started to talk about Florida as landscape and as geography, to investigate it and to explore it. To me, this was more important than getting tied up with a man." (Voice, pp. 127-128)

From 1920-1923, her column, "The Galley", appeared daily in the *Miami Herald,* the paper edited by her father, Frank Stoneman. She used the column to explore an emerging sense of place and to promote regionalism for south Florida. She addressed directly those fellow citizens who loved the place they lived in and her disdain for "promoters" who "had not yet learned to care for any place they could not exploit" established her tone and ethics throughout her rhetorical career (River, 341). The tenets of regionalism led her directly to the Everglades, the major geographic feature of south Florida, and she soon joined a committee to establish Everglades National Park, headed by botanist Ernest Coe[ix] (Voice, 135).

Through the committee Stoneman Douglas began to know the Everglades: "Let me say right away that knowing the Everglades does not necessarily mean spending long periods of time walking around out there. Unlike other wilderness areas, where the naturalist is a hiker, camper, and explorer, the naturalist in the Everglades must usually appreciate it from a distance" (p. 135). The scenes of the Everglades she recalls from the early 1920's, when the Tamiami Trail was "being cut right through the heart of it" (p.135) reflect her early fascination with the place she would later call a "central force in my existence" (p. 224). "When I first visited the Everglades, the two-lane road was finished out as far as the Dade County line. A group of

us would get up before daybreak and drive to the end, build a fire in the middle of the road, cook our breakfast, and watch the sun rise. There was the Everglades beyond us, completely untouched. The grass and the islands of hardwoods stood alone in the light and the beautiful air" (Voice, pp. 135-136). Another time she saw the striking nuptial display of the white ibis, "a great wheel of white birds" leaping into the air. (136). In her column she urged the protection of habitats, the regulation of hunting, and the prosecution of looters who stripped the Everglades of exotic species, including birds, alligators, panthers, snails, and plants, especially orchids[x].

One experience made a lasting impression and linked her conservationist sensibilities with her feminism. As part of the effort to gain support for an Everglades National Park, in 1930, the group took a congressional delegation on a boat tour of the Shark River in the lower Everglades. They were alerted that a band of plume hunters had set up camp in an Egret rookery and sent a delegation to urge the poachers to desist. A few days later they learned that most of the nesting Egrets had been killed, leaving the young birds to die, as well. Eventually the practice of killing breeding birds in order to take the feathers at their showiest, depleted the bird population by 90%. Stoneman Douglas found the slaughtering of birds to feed the demands of ladies high fashion especially egregious, and throughout her career used plume hunting to illustrate the history of "stupidity" and "profiteering" in the Everglades.

After leaving the Miami Herald in 1923, Stoneman Douglas worked as a free-lance writer. Her interest and appreciation of the sub-tropical species inhabiting the region was manifest in articles, brochures and nature studies she wrote for state parks, for educational curricula, and as Florida promotional materials. Stoneman Douglas solidified a national reputation as a Florida writer by publishing short stories in mass circulation magazines, many in the *Saturday Evening Post*.[xi] Florida was setting and central figure in her stories. She incorporated Florida's landscapes, hurricanes, exotic attractions, smuggling economies, and infamous characters. She fictionalized important events in Florida's history, including, for example, the 1905 murder of Guy Bradley, hired by the Audubon Society to guard a rookery of American and snowy egrets from plume hunters in her story *Plumes* (Fichtner, 1980).[xii] Her stories and articles were popular and sold well.[xiii]

Most famously, Stoneman Douglas brought national attention to the Everglades and to herself with her book, *Everglades: A River of Grass.* Taking five years to research and write as a free-lance project for Rinehart and Company's *Rivers of America* series, *River of Grass* was published in 1947, the year President Truman announced the establishment of Everglades National Park. The book was an immediate best seller.[xiv] *Reader's Digest* bought and excerpted the first chapter in its high circulation magazine. Twelve editions of *River of Grass* have been published to date, with 10,000 copies of the book continuing to sell each year. *River of Grass* provided the first popular understanding of the "distinctive hydrology" of the Everglades. Before her book, the Everglades was generally perceived to be a large tract of *land,* too wet to be useful, the view promoted throughout Florida's history by various politicians, development and agricultural interest groups, including the State of Florida itself. Stoneman Douglas was the first to more accurately describe the Everglades as a slowly moving *body of water*, a 'sheet flow' of shallow water over a vast area of diverse habitats in south Florida. The difference in definitions is crucial and remains at the center of Florida's environmental crisis. In increasing layers of complexity, the ecologies of Florida have historically turned on conflicted meanings of place--especially the place called Everglades.

The opening lines of the first and last chapters of the book capsulated exactly the crisis that would worsen dramatically for another 40 years. "There are no other Everglades in the world" famously opens the first chapter of natural history (p. 5) and "The Everglades were dying" (p. 349) begins the last. Her beautifully detailed descriptions of the interdependence of water, sawgrass, sunlight, rain, and species are most frequently cited in references to her work. Almost any paragraph in the first chapter yields descriptions of unrestrained lyricism. She describes the scope of her subject:

> It reaches one hundred miles from Lake Okeechobee to the Gulf of Mexico, fifty, sixty, even seventy miles wide….Down that almost invisible slope the water moves. The grass stands. Where the grass and the water are there is the heart, the current, the meaning of the Everglades. The grass and the water together make the river as simple as it is unique. There is no other river like it. Yet within that simplicity, enclosed within the river and bordering and intruding on it from each side, there is subtlety and diversity, a crowd of changing forms, of thrusting teeming life. And all that becomes the region of the Everglades. (River, p. 10).

Although the text became popularly known for the nature writing, the book is devoted to the ecological history of human culture in the wetlands. The body of the text stresses the historic consequences of ignorance, profiteering and neglect of wilderness ecology by human misadventures. Stoneman Douglas discussed the meanings of archeological sties and artifacts, wrote of the destruction of Indian cultures, retold battles of Seminole and Civil Wars, and detailed the history of plume hunting responsible for the extinction of many species.[xv] Her research of the ecological history of the Everglades wilderness enlivened conservation debate and *The River of Grass w*as a subject of serious review in the New York *Herald Tribune* and *Atlanta Journal,* among other publications (Davis 2003 a, p. 61). She moved readers to blunt considerations of future crisis.

River of Grass detailed the mindless drainage schemes of south Florida's history and what was at stake when the water dries up. The fantasies and realities of wetland drainage emerge as the destructive force that led to "The Eleventh Hour," the final chapter of prophetic warning. She pointed a finger at many, including Governor Napoleon Bonaparte Broward, the populist politician who promised to drain the Everglades and give "everyman" title to "rich black soil in a hot-house climate" (Broward, 1910, p. 1). Broward's promise to build an "Empire of the Sun" ignited the first of many land booms in Florida's history and the beginning of the end of the Everglades (River, Chapt. 13, Drainage and the Frontier, pp. 295). She urged that "scientific" knowledge, rather than the demands of growing population, be used to control the periodic flooding. Finally, Stoneman Douglas reported the spreading cycles of dryness, species destruction, fire, and salt water incursion into south Florida's wells:

> The whole Everglades were burning. What had been a river of grass and sweet water that had given meaning and life and uniqueness to this whole enormous geography through centuries in which man had no place here was made, in one chaotic gesture of greed and ignorance and folly, a river of fire. Then, all the people of the cities who had not paid much attention to the Everglades were startled by another thing. The sweet water the rock had held was gone or had shrunk down far into its strange holes and cleavages. …The salt water invaded the land," (River, p. 375).

River of Grass earned Stoneman Douglas an international reputation. Her status as a celebrated author and conservationist made her an influential presence in Florida conservation, literary and political circles. I did very well from all that," Stoneman Douglas wrote in the understated style of her autobiography (Voice, p. 193).

Yet, although her environmental rhetoric and public influence is most famously associated with *River of Grass,* her advocacy as founder and president of Friends of the Everglades (FOE) is in many ways more significant for environmental policy. "Back in the 1920's a few of us sensed that water was the key to the health of the Everglades,…I'd written about the plight of the birds and other animals…and occasionally had lobbied in their behalf. I'd served on the committee to establish the national park. But these were the sporadic and disjointed conservation efforts of a full time freelance writer," she wrote in her autobiography (Voice, 223). In 1967, at 78 years old, she remerged as an environmental activist "challenging a vision of the Everglades that she had helped propagate" (Davis 2003 b, p. 164).

> The Everglades were always a topic, but now they promised to become more than that. They promised to become a reason for things, a central force in my existence at the beginning of my 80th year. Perhaps it had taken me that long to figure out exactly what I was able to contribute, and for me to marshall [sic] my forces.
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> Perhaps at my age, the aims should have been clear for some time. Or perhaps it merely took all the building up of resources waiting for the opportunity. In my case, I was always a writer, but had not turned inward. I wrote from emotion but not with that inner absorption that characterizes the novelists. That same love and emotion, I think, which was held somewhat in abeyance in my earlier periods of journalistic voyeurism, was ready to be channeled to the Everglades. It was almost as if the Everglades had waited for me. It was a cool subject, to which I could apply my passion" (Voice, 224).

Stoneman Douglas founded FOE as a grass-roots organization organized initially to stop the building of an oil refinery in the lower glades. The young organization's first success launched Stoneman Douglas into an intense campaign to prevent the building of a jetport in the Everglades. Although the proposed jetport was halted, similar proposals are periodically resurrected.[xvi] The Flood Control System designed and built by the Army Corps of Engineers crisscrossed the Everglades with straight line canals, draining fresh water

from the slow moving system and dumping in into the Atlantic and the Gulf. Earlier in her life, Stoneman Douglas had praised the plan for flood control, believing that the Army Corps would use science and advanced technology to "get the water right." As president of FOE she reversed herself, convinced that the drainage canals were serving special interests and killing the Everglades. She began a life of public speaking, lobbying, and media appearances to argue passionately for the protection of the Everglades from continuing threat, and finally for the dismantling of the canals and restoration, a career of bold public advocacy that would last for another 30 years. Davis demonstrates that "The grassroots organization that Douglas founded would prove to be exceptional by turning a local issue into one of national importance" (2003 a, p. 63).

Stoneman Douglas was known for her outspoken condemnation of those who would profit from the Everglades without heed for ecological consequences. She used ecological science to demonstrate the interconnectedness of the Everglades with south Florida's rainfall and fresh water supply, and painted realistic pictures of an overdeveloped south Florida in continual ecological crisis. Speaking out when others remained silent, she exposed political and developmental schemes that continued exploitation of the water system for profit. For example, Stoneman Douglas exposed the political power of the "Big Sugar" interests. Phosphorous-rich runoff from the sugar cane fields was back-pumped into Lake Okeechobee, and the Water Management District was under the corporate influence of the agribusiness lobby.

In public testimony, in televised debate and in innumerable speeches, Stoneman Douglas confronted the Sugar Corporations. She accused them of polluting the water and air, excessive water use and drainage of the lakes and rivers, avoidance of payment for cleanup, mistreatment of immigrant workers, and flagrantly controlling the Water Management District. Nathaniel Reed, Former Assistant Secretary of the Interior, under Presidents Nixon and Ford recalls, "At the time, I felt that Marjory had gone too far. But years later, having served 14 years on the South Florida Water Management District, I am convinced that Marjory was right. Sugar production in Florida has made for incredible wealth among a small group of investors, and, in my opinion, is the cause of political influence that is being misused" (Reed, 1998, p. 2)

Stoneman Douglas traveled all over the state speaking on behalf of the Everglades, strengthened by the new movements for environmentalism, her increasing knowledge of ecological science and spirited by her anger at what she called the "interrelated stupidity" of development, drainage, pollution and engineering that had brought the Everglades to near extinction (Voice, p. 229). Adopting a militant stance that conservation was no longer an adequate strategy, FOE called for "repair" of the Everglades: "Conservation is now a dead word" she declared in 1982 (Davis, 2003 a, p. 65).

She spoke to whoever would have her, at garden clubs, town meetings, school functions and university lecture series, and was a relentless witness at any public hearing that even remotely impacted the Everglades, "railing against its enemies--land hungry developers, the sugar corporations, the Army Corps of Engineers, and compromising politicians" (Levin, 2003, p. 212). At each appearance she recruited 15 or 20 new members for FOE, adding 500 the first year and reaching 3,000 members by 1987 (Voice, p. 226). Because she was nearly blind, and "could not read from notes," few transcripts of her speeches exist (Burt, 1984, p. 26). But many witnesses describe the power of her arguments, and most who heard her attest that she spoke "off the top of her head with an eloquent spontaneity" (Mclaughin, 1996, p. 2). Stoneman Douglas's advocacy through FOE is best summarized by the belief she shared with Joe Browder, then the head of the Audubon Society in Miami, "The Everglades is a test. If we pass it, we get to keep the planet." (Piene, 13; Devell, 1998).

Campbell's reminder that "texts have agency" (p. 7) is particularly germane to the rhetorical history of Marjory Stoneman Douglas. The continuing influence of *Everglades, River of Grass* is testimony to "the power of form" (Campbell, p.2). The lyric writing style, and the popularization of the title metaphor, exist apart and distanced from Stoneman Douglas' radical history as a grassroots lobbyist, ecologist and public speaker. Her habit of speaking extemporaneously, coupled with her blindness, relegate the agency of her late decades to the memory of aging audiences. While few transcripts of her speeches exist, the book continues on it's own, reinforcing her arguments as a conservationist and neglecting her reversals. "Form is the foundation of all communication, but it is also a type of agency that has a power to separate a text from its nominal author and from its originary moment of performance, which is of particular note in regard to historical texts."(Campbell, p. 7). That Stoneman Douglas was aware of the consequences of the 1947 *River of Grass* as a rhetorical text, is evidenced by the afterward, "Forty More Years of Crisis," she added to the 1987 edition, and to the additional chapter she authorized for the fiftieth year anniversary edition in 1997.

It is to the chagrin of some Florida environmentalists, that the River of Grass lives on as the "bible" of Florida ecology. David McCally, in his text, *The Everglades: An Environmental History* (1999), is particularly troubled by the continued agency of the *River of Grass* metaphor:

> Marjory Stoneman Douglas's seminal book*, Everglades: River of Grass*, is the standard against which all other studies of the region are measured. From the first, …this popular book's images powerfully affected the way Americans, and the world, think about south Florida. But one image, that of the river of grass itself, so dominated all the others that it became the metaphor for the highly diverse environmental system that was, and to a much lesser extent still is, the Everglades. The dominance of this metaphor is unfortunate and hinders restoration of the complex wetlands system it so imperfectly describes. (McCally, 1999, p. 179)

Although McCally is careful to acknowledge Stoneman Douglas's "appreciation for the complexity of the environmental system that she described," he is wary of the rhetorical impact of the text, distinct from her authorship. "This is in no way intended as a criticism of Douglas or her book….But the popularity of her work has indelibly imprinted the inaccurate metaphor "river of grass" on the American collective psyche, with the result that a literary expression has been assigned a physical reality that never truly existed" (p. 179).

McCally's critique is rare. More typical are honorific tributes to *Everglades: River of Grass* as historical and environmental touchstone. For example, Susan Cerulean (2002), in the edited collection, *The Book of the Everglades,* introduces each of the book's five sections with a passage from *River of Grass*. Of the thirty or so obituaries of Marjory Stoneman Douglas, read for this paper, all cited passages from *River of Grass* and most quotations were from the first chapter on natural history.

In conclusion, Stoneman Douglas's combative advocacy for responsibility of place and her intimate knowledge of south Florida made her a formidable opponent of those who exploited the Everglades. Mary Joy Breton (1998) provides brief biographies of the lives of "pioneer" women environmentalists and asks, "What motivates such women? How do they persevere against the odds? What qualities or characteristics do they share?" (p. 1). This study concludes that in the narrative of her life, Marjory Stoneman Douglas, like Lois Gibbs and Sandra Steingraber (Hope, 2004), negotiated questions of identity and agency through the double frames of gender and place.

Stoneman Douglas writes herself as woman transformed from a dominated young wife, to an ecologist whose "center" was a place. The bleak portrait of herself in 1913 is in sharp contrast to the self whose passionate identification with the Everglades helped reverse Florida's environmental wilderness policy. Although celebrated in the popular press, Stoneman Douglas's age and gender earned spurious media labels such as *The Lady of the Glades*, *The Grandmother of the Glades*, and *The Grande Dame of the Everglades* (Weeks, 1979), mythologizing her as the little old lady with the floppy hats. She was most frequently described as "feisty," (Klien, 1981; Weeks), her prose, "lyrical." Dismissing any disadvantages in the stereotypes, she said, "I take advantage of everything I can--age, hair, disability--because my cause is just." In turn, she exploited the role of the "little old lady," at the same time as she denounced the 'stupidity" of Florida's power structure and created an ever larger audience of activists ready to join her crusade. "They call me a nice old woman" she said, but I'm not" At another time she said, "I'm just a tough old woman. They can't be rude to me. I have all this white hair." (Wellesley College, Person of the Week, p. 2).

Scores of anecdotal accounts, including some of her own, report the force of Marjory Stoneman Douglas's arguments and her blunt, frequently humorous style. A Florida celebrity, she had a following of admirers[xvii] and detractors, who heckled her with shouts of "Go home Grandma!" and "Go back to Russia!" (Burt, 1984, p. 26). She used humor, argument and ecological science to outwit them. For example, she wrote:

> I remember a hearing on the [proposal to drain the] East Everglades, where I was the only speaker for the opposition. I got up and explained why the land shouldn't be drained, and the people booed me. I said, "Can't you boo any louder than that?'' and they booed some more. "That isn't loud enough,' I said, "Come on, boo me LOUDER," Everybody started laughing. They're all good souls—it's just that they shouldn't be out there. In spite of 500 of them arguing against me, the Dade County Commission ended up supporting my position (Voice, p. 233).

Stephen W. Byers, writing a tribute titled "Don't Mess with Her Everglades," for the *New York Times Magazine* after her death, was more accurate than others in his description of her as "militant," her

advocacy as "fierce" (1999, p. 46). Stoneman Douglas said of herself, "I know I've got my enemies, and I feel fine about it, thank you. The developers don't like me. The farmers don't like me. But I'm a dedicated environmentalist and I want everyone to become aware of what is going on because that's the only way we'll stop all this terrible destruction" (Peine, 2002, p. 47-48). Although near total blindness and partial deafness decreased some of her activities in the last decade of her life, she used secretaries, tape recorders, and friends to continue her work as an activist and writer continued until her death in 1998. Her autobiography is dedicated "To Massachusetts."

Notes

[i] Other texts under study include Sally Carrighar (*Home to the Wilderness*); Susanne Antonetta, (*Body Toxic: An Environmental Memoir)*; Terry Tempest Williams, (*Refuge: An Unnatural History of Family and Place)*; Helen Caldicott, (*A Desperate Passion)*; Irene Diamond, (*Fertile Ground)* ; T .Louise Freeman-Toole (*Standing Up to the Rock*); Julia "Butterfly" Hill (*The Legacy of Luna : The Story of a Tree, a Woman, and the Struggle to Save the Redwoods*); Margaret E. Murie, (Two in the Far North) and Janisse Ray (*Ecology of a Cracker Childhood* and *Wild Card Quilt: Taking a Chance on Home).* An essay comparing Lois Gibbs, (*Love Canal: My Story*) and Sandra Steingraber (*Living Downstream: An Ecologist Looks at Cancer and the Environment* appeared in Volume I of Environmental Communication Yearbook (2004).

[ii] Campbell elaborates four additional propositions: A*gency* is 'invented' by authors who are points of articulation; emerges in artistry or craft; is effected through form; and is perverse, that is, inherently, protean, ambiguous, open to reversal." (Campbell, 2005, p. 2).

[iii] In the United States, place based segregation enforced in "white only" drinking fountains, bathrooms, lunch counters and positions "on the bus" was the blatant manifestation of racial oppression for nearly three centuries. Women too, were restricted from places of power, including most notably, the public platform, well into the 19th century. See Campbell (1993) for a detailed history.

[iv] Campbell cites Iris Young's 1994 discussion of "seriality," "as a way to think about gender that avoids essentialism by positing that, rather than an identity or an attribute, gender is constituted for women by their relationships to externals—to laws, institutions, norms, and the ways in which categories such as race and class are constructed and enforced" (p. 4).

[v] I borrow and use liberally the term "enlargement" from Thomas W. Benson (1974) who developed it in an analysis of the changes articulated by Malcolm X in his autobiography.

[vi] Institutions representing both environment and women's rights recognize Stoneman Douglas's influence. In 1981, Florida's Department of Environmental Protection named their main building in Tallahassee after her. A number of water protection bills, and a university research chair in wetlands ecology also carry her name. *MS*. magazine named her a Woman of the Year in 1988. In 2000 she was posthumously inducted into The National Wildlife Federation Conservation Hall of Fame and The Women's Hall of Fame.

[vii] The scholarship of Jack Davis (2003a; 2003b) is one exception to scholarly neglect and his work informs this paper.

[viii] Davis points out that Florida history and women's history have "both suffered from marginalization." See his introduction to Davis and Frederickson (Eds), *Making Waves: Female Activists in Twentieth-Century Florida* . pp. 1-17.

[ix] Other committee members were prominent Florida conservationists and naturalists including *National Geographic'*s John Oliver LaGorce and David Fairchild, botanist and founder of Fairchild Gardens, who became a life-long friend and a colleague.

[x] See Susan Orlean's *The Orchid Thief: A true Story of Beauty and Obsession,* for a history of orchid looting and species destruction in the Everglades.

[xi] The money she made caused her to describe her house in Coconut Grove, now a museum, as "the house that *Pos*t built" (Voice, 171-173).

[xii] "Plumes" appeared in the *Saturday Evening Post* on June 14, 1930. In 1931 she published "Wings," a non-fiction history of plume hunting, that praised the "efforts to stop the poaching" by the Audubon Society's Director, Gilbert Pearson (Davis, 2003 b, p. 162.).

[xiii] Some of the stories have been reprinted in two collections edited by Kevin M. McCarthy: *Nine Florida Stories by Marjory Stoneman Douglas* includes, "Pineland", "A Bird Dog in the Hand," "He Man." "Twenty Minutes Late for Dinner," "Plumes," "By Violence." "Bees in the Mango Bloom," "September-Remember," and "The Road to the Horizon." *A River in Flood and Other Florida Stories by Marjory Stoneman Douglas* includes "At Home on the Marcel Waves," "Solid Mahogany," "Goodness Gracious, Agnes," "A River in Flood," "The Mayor of Flamingo," "Stepmother," "You Got to Go, But You Don't Have to Come Back," "High-Goal Man," and "Wind Before Morning."

[xiv] Rinehart printed 7500 copies in November 1947, which sold out by Christmas. Immediately, an additional 5000 copies were printed. Rinehart published 7 editions, the last in 1962. A 50th year anniversary edition updating the status of the wetlands was issued by the Pineapple Press in 1997.

[xv] The feathers brought the same price as gold per ounce. She wrote, "The killing of plume birds had continued to scandalous proportions. In New York, one millinery wholesaler alone bought two hundred thousand dollar's worth of plumes. It was not only the egrets. Bright-colored birds of every kind were trapped and sent in cages to Havana or New York. Women even wore dead mockingbirds on their overloaded hats." (p. 310.)

[xvi] See Grunwald's in the Washington Post (2002) for a political analysis of a proposal to build a commercial airport after Hurricane Andrew damaged Homestead Airfield. Grunwald writes: "In a presidential race decided by 537 votes in Florida and one in the Supreme Court, there were plenty of tipping points. But the refusal of Democratic candidate Gore to denounce an airport proposed at the edge of he Everglades -- and his subsequent loss of local support to Green Party candidate Ralph Nader -- was certainly one of the bigger ones…. Four days before the Clinton administration left office, the Air Force rejected the airport plan as 'inappropriate' President Bush let the decision stand". The analysis is one of a series on the Everglades restoration plan.

[xvii] The publication of the edited tapes as an autobiography may be attributed as much to Rothchild's vision of Stoneman Douglas as a celebrated Florida *legend* as well as to any intents of her own. Rothchild first heard Stoneman Douglas speak in 1973 at a public hearing debating a proposal to build a suburb just outside of Everglades National Park, in Flamingo where Rothchild lived. At that time, Marjory Stoneman Douglas was 83 years old. Like most of his neighbors, Rothchild was against the proposal to allow the Army Corp of Engineers a permit to build a necessary bridge. Notwithstanding his implicit paternalism, Rothchild is effusive: "We townspeople …were delighted when Mrs. Douglas appeared in her famous floppy hat. We'd heard that this powerful woman, old enough to be prehistoric by Florida standards, would not allow any suburbs in the Everglades. In fact, it was rumored that she'd more or less created the Everglades and was a fiercely protective as a parent for a child. I imagined her to be some sort of cross between Mother Teresa, Clare Boothe Luce, Rachel Carson, Athena, and Golda Meir." The request for a permit was denied. "This was no surprise to those of us who'd heard her speak," Rothchild concludes. (14).

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The Frame Game:
Exploring Hegemony in the Newspaper Framing of Climate Change

Jennifer Good
Brock University

Environmental disasters have historically been easily divided into two categories: "natural" (hurricanes, floods, etc.) and "human-made" (toxic spills, power plant accidents, etc.). With the arrival of climate change, this easy dichotomy has been challenged. The pumping of huge quantities of climate changing gases into the atmosphere has a human source, as does the decreasing carbon sinks (i.e. deforestation), but the manifestations of climate change are "natural" – flooding, drought, ice melting, "naturally occurring fires," etc. Given that climate change gases come largely from the burning of fossil fuels, and the burning of fossil fuels represent the foundation of the Western, if not global, economy and way of life, how stories about climate change, are told – or not told – is not only interesting, but also extremely important. In this paper, I explore the possible hegemonic implications for how climate change is being framed and I carry out an initial exploration of how the major newspapers around the world are framing the story of climate change. My findings seem to indicate that while the associations between climate change and extreme weather are increasing, the stories steer clear of solutions such as alternative energy and energy conservation, and instead focus on the science, politics and economics of the issue generally, and of the Kyoto protocol in particular.

Introduction

When Todd Gitlin wrote *The whole world is watching: Mass media in the making and unmaking of the new left* (1980), his interest was in exploring the relationship between the 1960s group Students for a Democratic Society and the mass mediated news coverage of that group. He drew on two key concepts to aid him in his exploration: hegemony and framing.

Gitlin proposed that early on in the student movement, the news media drew on frames, such as trivialization, polarization, internal dissention and marginalization, at the exclusion of other frames, to tell a less-than-positive story. These frames evolved over time, but in general they served to destabilize the movement. What reliance on these kinds of stories facilitated was the telling of a "newsworthy" story in a way that maintained existing power structures – the status quo – intact.

Student movements are obvious examples of ways in which challenges to the established order explicitly occur. But sometimes challenges occur in much more implicit, yet no less potentially destabilizing, ways. It is possible to see climate change as perhaps the quintessential challenge to not only North American, but also the global status quo. What climate change proposes, that the continued level of the burning of fossil fuels will have a catastrophic impact on the earth's climate, undermines the foundations of the current global social order.

As such, it is reasonable to make a case that climate change offers a parallel example to Gitlin's student movement and that framing, in the service of the maintenance of hegemony, will be present. In what follows, therefore, I will draw on Gitlin's analysis in order to think about hegemony and framing in the reporting of climate change.

Hegemony

Karl Marx believed that the inequities inherent in the capitalist system (i.e. the few controlling the means of production and gaining disproportionately from the labor of the many) would lead to the demise of that system. The workers would rise up. But the workers did not rise up. Antonio Gramsci (1971) proposed that this lack of dissent was due to the creation of consent of those being subjugated – the "uniting [of] persuasion from above with consent from below" (Gitlin, p. 10). How is this done? Gitlin articulates Gramsci's conception thusly, "[T]hose who rule the dominant institutions secure their power in large measure directly *and indirectly*, by impressing their definitions of the situations upon those they rule and, if not usurping the whole of ideological space, still significantly limiting what is thought throughout the society" (italics in the original, p. 10).

How are common definitions created and ideological space occupied? Gitlin notes that schools play a role but he, and other scholars interested in the hegemonic process such as Stuart Hall (1977), hold the mass media up as key to the creation of a common ideology. And it is this common ideology which is key to hegemony. Gitlin writes, "Hegemonic ideology enters into everything people do and think is 'natural' – making a living, loving, playing, believing, knowing, even rebelling. In every sphere of activity, it meshes with the 'common sense' through which people make the world seem intelligible; it tries to *become* common sense" (p. 10).

Framing

It is possible to understand the world, and our experiences of the world, as potentially infinite. At any given moment there are such an immense number of events taking place around us, and around the world, and such an immense number of ways in which we could process these events, that while perhaps not truly infinite, practically this is the case. When journalists cover events, therefore, by necessity they are including some elements and excluding many others from the stories that they tell. Gitlin offers the following on frames:

> *Media* frames, largely unspoken and unacknowledged, organize the world both for journalists who report it and, in some important degree, for us who rely on their reports. *Media frames are persistent patterns of cognition, interpretation, and presentation, of selection, emphasis, and exclusion, by which symbol-handlers routinely organize discourse, whether verbal or visual.* Frames enable journalists to process large amounts of information quickly and routinely: to recognize it as information, to assign it to cognitive categories, and to package it for efficient relay to their audiences (Gitlin, 1980, p. 7, italics in the original).

Frames, therefore, let in information that fits the worldview of the person (or people) creating the story and leave out, or downplay, information that does not fit. The power of the person creating the frame is clearly not absolute; individuals encountering information are able to interpret that information in any way they wish. However, when information is being presented about which the receiver has no direct experience, a reinterpretation of what is presented is next to impossible. As Gitlin notes, "[T]he extent that media agree on a frame, and to the extent that the issue lies outside the direct experience of the audience, the media keep the power to push forward their frames as the salient ones, the ones that condition and limit public discussion. The power of the media frame to identify the issue in the first place preserves for the framers an important power over the very terms of public life" (p. 142).

Hegemony and framing can, therefore, be understood as functioning together in the creation of a particular notion of "common sense." Media frames present to us what Gitlin terms "tacit theories" which tell us about "what exists, what happens and what matters" (p. 7). These frames serve the interests of the status quo because these are the interests shared by journalists and, perhaps more importantly, those by whom they are employed.

The story of climate change, El Nino and extreme weather

As has already been pointed out, stories hold almost infinite potential for ways in which they can be told – and this is certainly true of the story of climate change. At perhaps its most fundamental level, and

least threatening to the status quo, the story of climate change is a story of science. A story of numbers. A story of computer models with wide-ranging potential outcomes. This line of research asks, What, if anything, happens when humans burn huge quantities of fossil fuels and the by-products are released into the atmosphere? And, as Weingart, Engels and Pansgrau (2000) point out, "Communications about climate change have abounded in mutual accusations of downplaying or exaggerating risk, of sensationalism, 'bad' science, inciting public hysteria, and even conspiracy" (p. 261).

Even after the United Nations Intergovernmental Panel on Climate Change was established to study the science, and approximately 1,500 scientists from 60 countries arrived at a consensus that human activity is having a discernable impact on the global climate (Trumbo & Shanahan, 2000), debates about the "reality" of climate change have continued to rage, although somewhat abated from the past. Therefore, once the science around the existence of climate change was largely established, the debate could shift to what the implications of climate change might be. "Many methodological problems and open questions are inherent in the issue of climate change," Weingart et al. (2000) point out, "producing a systematic, scientific assessment of its global scope, as well as of its internal dynamics and global impacts, is highly problematic and must be met with more research" (p. 265). As Trumbo and Shanahan (2000) point out, however, "While the degree and speed of such [climate] change is uncertain, the consensus remains that the climate will change in ways that influence both the ecological and human social systems" (p. 199).

Thus one story about climate change, and a commonly told one, is the science of the phenomenon and the contested terrain of that science – and while science is framed as the story, the human dimensions can be somewhat overlooked. As Wilkins (1993) points out, "Scientific explanations of the problem [of climate change] tend to frame the issues in 'science'-driven terms, rather than suggestion that political policy and human choices are the base of the physical phenomenon" (p. 73). There is another way in which stories about climate change can be framed to avoid discussion of human activity: talk about "mother nature." So while the broad consensus may be at this point that climate change has anthropocentric roots, what "symptoms" we can attribute to climate change is much less clear. Let me offer the example of El Nino by way of an explanation.

El Nino is considered a "natural phenomenon" that was "discovered" by Peruvian fishers several hundred years ago (although it is considered that it existed long before this). El Nino (meaning "child Jesus") refers to the phenomenon of warm tropical western Pacific water being trapped by trade winds in a confined area for years at a time. When the trade winds die down, the warm water spreads along the equator and sets in motion a huge array of complex feedbacks such as new cycles of air circulation. The El Nino weather patterns are much different than would usually be expected such as rain in places where there would usually be draught and vice versa (see Coles, 1999; Zimmer, 1999; Beers, 1998).

Therefore, at a surface level, while climate change has its roots in human activity (i.e. we know what is causing climate change)," El Nino is a "naturally occurring" phenomenon and thus, there is nothing that "causes" it – or can "stop" it. The reality, however, is that many scientists are making links between climate change and El Nino. "Ken Trenberth, now at the National Center for Atmospheric Research in the United States, was the first to pinpoint the four to seven-year cycle of El Ninos. He therefore sees the sharp change in pattern of El Ninos since the mid-1970s as evidence that a switch in climate has begun to take place… he believes the change in behaviour of the Pacific Ocean to be a consequence of global warming" (Galtie, 1999). Acharya (1995) also proposed that, "The trend toward more frequent El Nino events since the late 1970s raises major questions about climate change. Some scientists see it as a manifestation of the global warming associated with increases in greenhouse gases in the atmosphere" (p. 6). Added to this picture is the thinking that climate change will be associated with more frequent extreme weather events generally (i.e. during an El Nino or not).

Framing blame

Within the discussion of framing and hegemony, the relationship between the "natural" phenomenon of El Nino and the "human made" phenomenon of climate change is interesting. Anything that is "natural" and beyond our control poses no threat to the status quo. Climate change, however, with its roots in the burning of fossil fuels, fundamentally challenges the status quo (i.e. to make things "better" we would have to stop burning so many, or perhaps *any* fossil fuels). One would think, therefore, that in the framing of news stories about climate change, or extreme weather generally, the interest would be in attributing blame to that which is beyond our control (i.e. blame El Nino and mother nature and, therefore, that which does

not disrupt the status quo) and avoiding blaming that which is entirely within our control (i.e. climate change).

Wilkins (1993) did a content analysis of climate change stories between 1987 and 1990 and found that "innocence" was one of the news frames. "An innocent can acquire facts; to shape them, and to take responsibility for the choices that produce them, requires knowledge and experience, something that the totality of greenhouse coverage only hinted at. Very few greenhouse stories emphasized the value choices that have accelerated global warming" (Wilkins, 1993). A content analysis of the New York Times during 1982/83 and 1997/98 found that blame and cause-based words related to El Nino increased over the time of the two samples but decreased for blame and cause-based words related to climate change (Good, 2005). Additionally, articles that discussed the links between climate change and El Ninos were virtually non-existent. It was felt that this might be an indication of "movement away from blaming human-based climate change for causing extreme weather and a movement toward blaming El Nino for causing such disruptions" (Good, 2005).

The current paper continues this analysis by exploring the framing of recent stories about climate change, El Nino, Kyoto and extreme weather.

Given the state of essential consensus, mid-way into the first decade of the twenty-first century, that human activity is related to global climate changes and those climatic changes will be related to extreme weather events (Wilson, 2002), one research question is, How is the story of climate change being framed? Other questions include, Do the links between climate change and human activity seem to be getting made, or is the science of climate change continuing to be held up as a road block to action? Are climate change and extreme weather events being placed in the same frame? What about possible links between climate change and El Nino, are these being discussed? Related to this, if human activity is highlighted by an article as being to blame for changes in the global climate, and perhaps for extreme weather, then what kinds of solutions, if any, are offered in these articles?

Methods and results

A Lexis Nexis search was done of the general news, major newspapers (approximately 50 of the largest circulation newspapers from around the world, see Appendix A for titles) for the period of October 1, 2004 – March 15, 2005). The following keyword searches were done on the titles and lead paragraphs:

Table 1. Key words and number of articles (October 1, 2004 – March 15, 2005)

Key words used (title, lead paragraphs and terms)	Number of articles
"climate change"	2,612
"climate change" and "scien*"	994
"climate change" and "Kyoto"	730
"climate change" and "econo*"	626
"climate change" and "politic*"	426
"climate change" and "fossil fuel"	245
"climate change" and "automobile" or "car"	170
"climate change" and "blam*"	68
"climate change" and "energy conserv*"	8
"climate change" and "alternative energy"	5
"extreme weather"	89
"extreme weather" and "climate change"	28
"extreme weather" and "blam*"	4
"el nino"	180
"el nino" and "climate change"	40

"el nino" and "blam*"	3
"Kyoto"	1123
"Kyoto" and "econo*"	319
"Kyoto" and "scien*"	205
"Kyoto" and "politic*"	179
"Kyoto" & "fossil fuel*"	90
"Kyoto" and "alternative energy"	5
"Kyoto" and "energy conserv"	2

The analysis presented above gives a general overview of how frequently climate change news stories, and related stories on Kyoto, extreme weather and El Nino, are covered by some of the world's major newspapers. By searching key words that appear in the title and lead paragraphs, the main themes and a sense of the frames can be ascertained.

The most common key words that accompany "climate change" (of the key words tested) were "science-related" words (searched for using the "scien" base). In 38 percent of the climate change articles, a science-related word appears in the title and/or lead paragraphs along with climate change. The next most common key word that accompanied climate change was "Kyoto" with twenty-eight percent of the climate change articles having key words related to Kyoto. Twenty-four percent of the climate change articles were related to "econo-root" words. The articles related to climate change and "politic-root" words made up 16 percent. "Fossil fuel" as a theme framed with climate change was nine percent, articles related to "cars" or "automobiles" were seven percent of the climate change stories with articles that have anything to do with blame ("blam-based" words) came in at less than three percent. Climate change articles framed with either energy conservation ("energy conserv*") or "alternative energy" accounted for less than .001 of the articles.

Articles related to extreme weather were explored next. Over the six month period there were 89 articles that had "extreme weather" in the title or first few paragraphs. Of these, 32 percent also had "climate change" in the title and/or first few paragraphs. Four of the extreme weather articles – five percent – related to "blam-based" words and extreme weather. The final set of searches were related to "El Nino." There were 180 El Nino-related papers in the six month period with 22 percent of those related to "climate change" and two percent having some association with "blam-based" words.

A decision was made to further break down the "Kyoto" category. Kyoto stories appeared 1,123 times from October 1, 2004 – March 15, 2005. Twenty-eight percent of the Kyoto stories were related to "econo-based" words, 18 percent were related to "science-based" words, "politic-based words" accounted for 16 percent, eight percent were related to "fossil fuel," less than one percent of the stories were related to "alternative energy" and less than half of a percent of the Kyoto stories were related to "energy conservation."

Discussion

When Gitlin (1980) explored the way in which the news media covered the student uprisings of the mid-1960s, he came to the conclusion that the news media's framing of the stories was key to understanding what happened as a result of the protests – that by including certain frames, and excluding others, the status quo and, therefore, existing power structures, remained intact. I would propose that through a similar analysis of the kinds of frames present within the news media's discussion of climate change, we can see how a phenomenon that inherently calls for revolutionary change (i.e. the cutting back on, if not the elimination of, the burning of fossil fuels) is in fact being framed in ways that diverts our attention from taking action.

In a previous paper, I explored the possibility that one way our attention was being diverted from taking action was through the seeming inability of the news media to link "naturally occurring" extreme weather (including El Ninos) with the anthropogenic phenomenon of climate change (Good, 2005). In that study, I found that in two time-periods associated with extremely strong El Ninos – 1982/1983 and 1997/1998 – not one article in either the *New York Times* or *Washington Post* had reference to both El Nino and climate change in the title and/or lead paragraphs. Such a finding could be an example of what Murphy (2004)

highlights, in the context of sociology, as our inability to "transcend the nature/culture divide." How could the "naturally occurring" El Nino be related to human-caused climate change?

In the years since that initial study, there do seem to have been shifts in how we understand this nature/culture divide. In the late 1990s, the connection between El Ninos and climate change were highlighted (Galtie, 1999; Zimmer, 1999), including a joint statement between then vice-president Al Gore and the National Oceanic and Atmospheric Administration that read: "The 1997/1998 El Nino [was] one of the most significant climatic events of the century, [and] produced extreme weather worldwide. El Ninos have become more frequent and progressively warmer over the past century, and new data and analysis suggest that global warming is exacerbating the effects of El Nino" (NOAA, 2000). And the results presented here suggest that news frames have shifted. Twenty-two percent of the El Nino stories have climate change in the title and/or lead paragraphs while just over thirty percent of the extreme weather stories are also framed with climate change. Clearly the nature/culture divide may still have a fair distance before it is fully traversed, but change is taking place.

The idea that the "natural" phenomena of extreme weather/El Nino would be more likely to have "blame frames" does not seem to be borne out by the data. None of the articles, for the natural phenomena of extreme weather/El Nino, or for the human-made phenomenon of climate change, have more than five percent associated with blame. One interpretation of these two findings, that an increase in association between "nature/culture" and such limited interest in framing any stories in terms of blame, would be that as it become clearer that a global infrastructure based on the burning of fossil fuels is fundamentally – and frighteningly – unsustainable, and that a total dismantling of the status quo would be necessarily to address these realities, a "blame frame" of any kind is not very desirable (especially to those with a vested interest in the status quo). So, the question becomes: how *is* climate change being framed?

Wilson (2002) states that, "U.S. news reporting on global climate change peaked in 1988 (Trumbo, 1995), declined in the early 1990s, and then resurfaced on most news agendas in 1997" (p. 250). It is clear from the above analysis, that climate change news stories have indeed resurfaced and continue to be printed in newspapers around the world. Of the key words analyzed, "science"-based words were the most frequent to accompany climate change in the title and lead paragraphs. In an age when, according to Wilson (2002), some aspects of the climate change debate are considered "scientific certainties" (i.e. the greenhouse effect theory) and other aspects have achieved "scientific consensus" (i.e. that the warming over the last fifty or so years is probably due to human activity), it is interesting that science continues to play such a large role in the discussion of climate change. Various studies (Wilson, 2000; McComas & Shanahan, 1999) have looked at the relationship between journalistic practices (such as "objectivity" being created out of telling "both sides" of a story, even if one side is much weaker in evidence than the other) and the maintenance of uncertainty about the science of climate change. Clearly print discussions about the science of climate change are continuing and we have every reason to believe that such discussions help to sustain uncertainty.

In one of the "climate change" and "blame" articles, from *The Observer*, the author quotes the director of the Science Media Centre as pointing out that, "The problem lies with the media's obsession with entertaining us with a good bust-up between two warring sides" and the implication for this, the author suggests, is that "the public is led, incorrectly, to believe there is an even split between gainsayers and climatologists. There isn't. There are only a few of the former, while there are thousands of the latter: scientists whose life's work has convinced them that our planet is not in grave danger from climate change" (McKie & Townsend, 2005). In another "climate change" and "blame" article, this time from *The San Francisco Chronicle*, an expert from the University of California's Scripp's Institution of Oceanography is quoted as saying, "The debate is over, at least for rational people. And for those who insist that the uncertainties remain too great, their argument is no longer tenable. We've nailed it." In this article, the rebuttal comes, not surprisingly from a Bush administration spokesperson who says, "Our position has been the same for a long time…the science of global climate change is uncertain" (Perlman, 2005).

The counter-climate change voices that appear in print need not come from high up the governmental ladder, however. For example, a recent column in Canada's largest national newspaper, *The Globe and Mail*, offered the following: "In a nutshell, Mr. McIntyre [a mining consultant turned "curious citizen" interested in climate change] says one of the biggest claims made for climate change is wrong. The claim is that we are now experiencing a warming unprecedented in the past thousand years… Yes the world is getting warming. But this warming spell is nothing special" (Wente, Globe and Mail, 2005, p. A 19). The columnist ignored the fact that in the most recent assessment of the Intergovernmental Panel on Climate Change, in 2001, over a thousand scientists had come together to create three working papers over a

thousand pages each (Wilson, 2002) and instead, the columnist created a critique of climate change science based on random hearsay. In no other scientific context would a "person on the street" be called upon to offer "counter-evidence," but it would seem that the stakes are so huge with climate change, the changes required so daunting, that there is always editorial space for the sensationalism offered by naysayers. As Gitlin (1980) points out, "News involves the novel event, not the underlying, enduring condition; the person, not the group; the visible not the deep consensus; the fact that 'advances the story,' not the one the explains or enlarges it" (p. 263).

The next most common key word (of those tested) associated with climate change was "Kyoto." In a study done on the New York Times and Washington Post between 1997 and 1998, of 226 articles about climate change (appearing in the headline and lead paragraphs) only nine, or four percent, also highlighted Kyoto (Good, 2005). In the six months looked at here (October 1, 2004 – March 15, 2005), 28 percent of the climate change articles are framed with Kyoto. This apparent shift to framing the climate change story as a story about Kyoto makes sense for a variety of reasons including that Russia ratified the Kyoto Protocol in November 2004, the 10th "conference of the parties" (or COP10) took place in Buenos Aires in early November 2004 and the protocol came into effect on February 16, 2005. But what is the Kyoto and climate change news story *about*? And when the news frames climate change as a story about Kyoto, what other ways of framing climate change are not being used? At the surface, it would seem that the Kyoto Protocol is the tool that will allow the world to change its practices and address the issue of climate change. And certainly the United States' refusal to sign on gives the agreement a certain degree of clout (i.e. if the agreement were not about change, the United States would not be afraid of signing on to it). Perhaps, however, the tendency of news organizations to frame the story of climate change as being a story about the Kyoto Protocol could also be understood as an example of hegemony.

"The work of hegemony," Gitlin (1980) offers, "…consists of imposing standardized assumptions over events and conditions that must be 'covered' by the dictates of the prevailing news standards… The correspondent identifies the problem; there is a rising curve of narrative which establishes the situation, identifies the protagonists, and sets them against one another whatever complication from this conflict then dissolves as the correspondent wraps up the package as neatly as possible" (p. 264). Kyoto is this kind of story, is it not?

When the climate change story is framed as Kyoto, the problem becomes not one of an industrial society – actually, an industrial planet – where the very economic and structural foundations threaten massive and chaotic changes, but rather a problem of very human-focused wranglings over emission levels, carbon sinks, "developed" versus "under-developed" countries, getting the United States on board, etc. Is an agreement like Kyoto necessary to coordinate a global initiative to shift a planet's economic and structural foundations? Perhaps. Is a focus on the Kyoto story by the news media a way of moving the planet's population to a place of better understanding climate change and the need for significant changes? Probably not. In the following passage, Gitlin (1980) is writing about the student protests of the 1960s, but he could just as easily be writing about the news coverage of climate change:

> "The news routines are skewed toward representing demands, individuals, and frames which do not fundamentally contradict the dominant hegemonic principles: the legitimacy of private control of commodity production; the legitimacy of the national security state; the legitimacy of the technocratic experts; the right and ability of authorized agencies to manage conflict and make the necessary reforms; the legitimacy of the social order secured and defined by the dominant elites; and the value of individualism as the measure of social existence. The news routines do not easily represent demands, movements, and frames which are inchoate, subtle, and most deeply subversive of these core principles… These assumptions divert coverage away from critical treatment of the institutional, systemic, and everyday workings of property and the State" (Gitlin, 1980, p. 271, italics in the original).

The Kyoto frame for climate change can be seen as allowing the maintenance of the hegemonic principles that Gitlin highlights; the Kyoto process has been about political wrangling that might be understood as the avoidance of that which is subversive of the system's "core principles," for example, the shifting of the global economy from one based on fossil fuels to one based on alternative energy and energy conservation. For example, the research presented here clearly indicates that while the Kyoto story is commonly framed with econo-based themes (28 percent of the Kyoto stories are also related to economics), science-based themes (19 percent of the Kyoto stories are also related to science) and politic-based themes (25 percent of the Kyoto stories are also related to politics), the Kyoto story rarely includes the theme of

fossil fuels (eight percent), alternative energy (less than one percent) or energy conservation (less than half a percent). The Kyoto Protocol frame for climate change, it could, therefore, be argued, maintains the status quo while giving the impression of working towards something different. Kyoto provides a place for established powers to exert their power while avoiding the entrenched unsustainable practices. This point is mirrored, and thus further highlighted, in the other words that were tested.

The "econo"-themed (24 percent of the climate change articles) and "politic"-themed (16 percent of the climate change articles) articles were the next most frequent (of the words tested) to appear with climate change in the title and lead paragraphs. Of course the reality is that climate change is fundamentally related to economics and politics, and in depth discussions of economics and politics will be essential to reducing the global output of carbon dioxide, but context is everything. If the economics and politics are related to how countries can continue with business as usual, while giving the impression of grappling with climate change, then the framing could be said to be hegemonic. If the framing of economics and politics includes alternative energy and energy conservation, for example, then the frame might be seen as counter-hegemonic. However, the search results indicate that the closer the climate change articles move towards the core of actually addressing what *causes* climate change, and how the status quo would have to be altered, the smaller the percentage of total climate change articles: climate change articles that are framed as having to do with fossil fuels accounted for nine percent of the total; climate change article that are framed as having to do with the automobile or car accounted for seven perfect of the total; climate change articles that had anything to with blame accounted for three percent of the articles; and finally, the articles that one could propose are at the heart of truly addressing climate change, namely energy conservation and alternative energy, each accounted for less than one percent of the climate change stories.

These findings are bolstered by a recent content analysis done by Gibson (2005) on articles about the Kyoto Protocol that included Canada's two national newspapers, *The Globe and Mail and the National Post*, for August 4, 2002, to December 29, 2004. In his analysis, Gibson (2005) found that over half (53 percent) of the articles in the *Globe and Mail* could be found in the paper's Business section while 39 percent of the *National Post's* coverage appeared in the Business section. Main sources (defined as the first four sources used) for the Kyoto Protocol articles in the *National Post* were members of the government 76 percent followed by business/industry 17 percent of the time and, in the *Globe and Mail*, members of the government 69 percent of the time followed by business/industry 30 percent of the time; environmentalists never appeared as main sources in any of the Kyoto Protocol stories in either paper (Gibson, 2005).

These results certainly give the impression that the news frames that put climate change together with politics/economics may very well be associated with the diverting of attention that Gitlin is talking about. If the story can be framed as one of dueling scientists and dueling politicians, then, to borrow from Gitlin (1980), the "news routines [have been successfully] skewed toward representing demands, individuals, and frames which do not fundamentally contradict *the dominant hegemonic principles."* (p. 271, italics in the original).

Limitations

This is an initial and somewhat cursory exploration of the current framing of climate change in the print news media. As this paper develops, I would want to explore in greater detail the keywords used and what the various articles highlighted by the search actually say about climate change and the details of the themes with which climate change is framed. It makes sense that those with a vested interest in the status quo would be extremely threatened by climate change and it is reasonable to assume that this threat would be manifest in the telling of the story of climate change. There are some hints of how the major newspapers from around the world are perhaps skirting around the real fundamentals of what would be needed to address climate change, but a more thorough content analysis would add a great deal of detail to the picture.

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Appendix A. Newspapers in the Lexis Nexis "major newspaper" database

Atlanta Journal and Constitution, The
Baltimore Sun, The
Boston Globe, The
Boston Herald, The
Buffalo News, The
Chicago Sun-Times
Christian Science Monitor, The
Columbus Dispatch, The
Daily News (New York)
Daily Telegraph (London), The
Daily Yomiuri (Tokyo), The
Denver Post, The
Dominion (Wellington), The
Dominion Post (Wellington, New Zealand), The
Evening Post (Wellington), The
Financial Times (London)
Gazeta Mercantil Online
Guardian (London), The
Hartford Courant, The
Herald (Glasgow), The
Houston Chronicle, The
Independent, The
Irish Times, The
Jerusalem Post, The
Journal of Commerce
Los Angeles Times
Miami Herald
New Straits Times (Malaysia)
New York Times, The
New Zealand Herald, The
Newsday (New York)
Observer, The

Omaha World Herald
Pittsburgh Post-Gazette
Plain Dealer, The
Press (Christchurch, New Zealand), The
San Diego Union-Tribune
San Francisco Chronicle, The
Scotsman, The
Seattle Times, The
South China Morning Post
St. Louis Post-Dispatch
St. Petersburg Times
Star Tribune (Minneapolis MN)
Straits Times (Singapore), The
Tampa Tribune, The
Times (London), The
Times-Picayune, The
Toronto Star, The
USA Today
Washington Post, The

Flash Activism: New Media and Environmental Rhetoric

Dylan Wolfe
University of Georgia

This essay explores the computer animation The Meatrix *to show how cultural reference utilizes resonance, counters the norms of a dominant public, and becomes the center text for a distinct counterpublic. Specific elements within the animation itself show how cultural norms are challenged without repulsing the viewer, at once attracting and contesting*. The Meatrix *makes use of the culturally pervasive* Matrix *narrative, imagery and characters to attract and challenge an audience. The unique qualities of computer animation, discussed as "viral flash activism," make a multiple public through rhizomatic production. A rhizomatic dissemination functions by engaging our highly visual culture on a counterpublic screen.* The Meatrix *is thus discussed in terms of its distribution pattern, public creation, use of what I will call resonant reversal, and function as a counterpublic.*

Introduction:

> Neo: The Matrix?
>
> Morpheus: Do you want to know what IT IS? The Matrix is everywhere. It is all around us, even now in this very room. You can see it when you look out your window or when you turn on your television. You can feel it when you go to work, when you go to church, when you pay your taxes. It is the world that has been pulled over your eyes to blind you from the truth.
>
> Neo: What truth?
>
> Morpheus: That you are a slave, Neo. Like everyone else you were born into bondage, born into a prison that you cannot smell or taste or touch. A prison for your mind. Unfortunately, no one can be told what the Matrix is. You have to see it for yourself. This is your last chance. After this there is no turning back. You take the blue pill, the story ends, you wake up in your bed and believe whatever you want to believe. You take the red pill, you stay in Wonderland, and I show you how deep the rabbit hole goes.... Remember, all I'm offering is the truth, nothing more.... (Wachowski & Wachowski, 1999)

The following essay explores the computer animation *The Meatrix* to show how cultural reference utilizes resonance, counters the norms of a dominant public, and becomes the center text for a distinct counterpublic. Specific elements within the animation itself show how cultural norms are challenged without repulsing the viewer, at once attracting and contesting. *The Meatrix* makes use of the culturally pervasive *Matrix* narrative, imagery and characters to attract and challenge an audience. The unique qualities of computer animation, discussed as "viral flash activism," make a multiple public through rhizomatic production. A rhizomatic dissemination functions by engaging our highly visual culture on a counterpublic screen. *The Meatrix* is thus discussed in terms of its distribution pattern, public creation, use of what I will call resonant reversal, and function as a counterpublic.

Justification

The Meatrix was released through its own website, www.themeatrix.com, on November 3, 2003. In its first week on the World Wide Web *The Meatrix* was viewed by 350,000 people. 152,000 watched it on a single day in the first month. After six weeks there had been 2.5 million viewers from around the world. After two months, the animation had been seen over 3 million times. As of July 2005, over 7 million individuals have seen *The Meatrix*, with 5,000 new viewers every day. *The Meatrix's* viewers have come from over 30 countries, including the United States, the UK, and more exotic locales such as Bangladesh and Slovakia.[i]

However, *The Meatrix* is not just a cleaver movie spoof, a humorous piece of cultural kitsch to spread around the workplace; *The Meatrix* also maintains significance because, along with its humor, kitsch quality, and cultural status, it has also been carefully crafted to spread an explicitly pointed message. As such, *The Meatrix* joins a growing list of popularly disseminated computer animations circulating on the World Wide Web. Prominent in this group are the JibJab animations, particularly their animated spoof on the 2004 Presidential election, "This Land."

Free Range Graphics, the public relations team responsible for creating *The Meatrix*, describes this type of message as "Viral Flash Activism" (FreeRangeGraphics.com, 2004). They describe their form of computer generated flash animation as "the most powerful publicity tool available to non-profits today" (FreeRangeGraphics.com, 2004). *The Meatrix* produces just what every non-profit activism organization, not to mention every for-profit corporation, wants: public attention. It is precisely this public attention that is addressed in this essay; in an era of communication explosion the greatest prize for a social movement organization like GRACE—or businesses like GRACE'S oppositional agent, industrial farming—is the interest of large numbers of people (consumers). This being the case, it is clear that rhetorical texts like *The Meatrix* are important because they can offer insight into the creation of publics, show us what qualities are present which attract attention, and help us to understand how such forms of discourse are functioning in the world.

Context

In early 2003 the publicity management and creativity firm Free Range Graphics invited proposals for their first "Free Range Flash Activism Grant." Free Range Graphics, self-described as "creativity with a conscience," had made themselves a highly sought-after company for their ground-breaking work with groups like Greenpeace, Amnesty International, and The Sierra Club. The grant was eventually awarded by Free Range founders Jonah Sachs and Louis Fox to GRACE from a field of over 50 proposals (GRACE).

GRACE is a non-profit organization based in New York City. Their efforts are divided between several "projects," including a Nuclear Abolition Project and a Sustainable Energy Project. Most of GRACE'S resources, however, are used for their Factory Farm Project[ii] and the associated campaign titled "Sustainable Table." The Sustainable Table campaign is primarily focused on the internet-based "Eat Well Guide,"[iii] a directory of retailers and restaurants "offering meat raised sustainably outside the factory system."[iv] *The Meatrix* has become the primary means of promoting Sustainable Table and the Eat Well Guide (GRACE).

GRACE provided Free Range Graphics founder Louis Fox with "background material" from which he drew inspiration for *The Meatrix*. GRACE documentation notes that Fox's "decision to spoof *The Matrix* was based on the similarities between the film and today's corporate system of agriculture" (GRACE, "Film Biography"). Fox produced *The Meatrix* using the popular computer animation programming tools Macromedia Flash MX and Adobe Illustrator. Internet encyclopedia WikiPedia defines Flash as "a vector graphics based graphics animation program by Macromedia. The resulting files, sometimes called "flash files", may be included in a web page to view in a web browser, or they may be played on a standalone player. The most common use is in animated adverts on web pages."[v] *The Meatrix* is a Flash file which plays automatically when a user opens the website: www.themeatrix.com. Upon completion of the animation the viewer is prompted to "click here" and switch to GRACE'S "action page."

The website www.themeatrix.com/action acts as a gateway to GRACE'S Sustainable Table and Eat Well Guide, as well as other related materials. The page is designed primarily as a stepping stone between *The Meatrix* and the Eat Well Guide, headlined with "Stop The Meatrix, Fight Factory Farms Now!" in *Matrix* styled lettering. A large block below the headline introduces the Eat Well Guide, implores viewers

to "buy meat from family farmers," and offers a simple "GO" link to www.eatwellguide.org. Although a connection between *The Meatrix* and an increase of traffic on the associated websites listed on the action page is plain, the rhetorical function of *The Meatrix* itself should not be limited only to the role of intermediary. *Meatrix* creators Free Range Graphics certainly don't see their work that way when they describe the qualities of "Viral Flash Activism:" "With the click of a button, thousands of viewers pass the movie on to friends, family and co-workers. At no extra cost, your message continues to travel around the web reaching an ever-expanding audience."[vi] Instead of concentrating on the conduit properties of campaign texts like *The Meatrix*, organizations like GRACE and Free Range Graphics perceive value in the "Viral" quality of a popular text. In such a case the choice to "Buy Meat From Family Farmers" by clicking the www.eatwellguide.org link is no more valuable than a choice to "Send The Meatrix to Your Friends." The justification for such a value is at the heart of this essay. I will thus explore the function of the viral quality as it relates to rhetoric and discourse.

Publics/Counterpublics

Michael Warner (Warner, 2002a, 2002b) describes three senses of the word "public" in its noun form. 1) *the* public, "a kind of social totality…the people in general"; 2) public as "a concrete audience"; and 3) *a* public, "the kind of public that comes into being only in relation to texts and their circulation…a text public" (Warner, 2002b). A public associated with a text like *The Meatrix* clearly falls within this third sense, *a* public; more precisely, *a counterpublic*. Explained as a "modification" of Habermas's public sphere analysis, Warner defines counterpublics "by their tension with a larger public" (Warner, 2002a). It should be made utterly clear, however, that a counterpublic does not simply oppose *the* public, or act as a singular opposition to a singular dominant public. As Phaedra Pezzullo (2003) notes, in agreement with Robert Asen (Asen & Brouwer, 2001), public and counterpublic should not be taken as binary oppositions, but as multiple. Pezzullo writes:

> When public dialogues reflect a multi-faceted negotiation of power, it is particularly important to recognize the complexity of various public spheres without reducing conflicts to mere binaries.

In other words, the counterpublic is at once a multiple composition of texts in circulation, a product of the same social processes inherent in all publics, and simultaneously a particular type of public which is at once subordinate to and in conflict with a dominant public.

The Meatrix has a public. Its public is both subordinate to and conflictual with a dominant public, thus is it a counterpublic. Taking these propositions separately I will first explore *The Meatrix* public through Warner's expectations common to publics and the contextual condition of *The Meatrix* in discourse. Second, I will look at *The Meatrix* as a means for producing a counterpublic, reading the text closely and attempting to tease out what elements are employed in this form of rhetoric. I hope to ultimately show how *The Meatrix* functions as a counterpublic by appealing to, and contradicting, resonant cultural fragments.

The Meatrix as a public

A public, Warner writes, "exists *by virtue of being addressed*" (Warner, 2002b).[vii] Unlike the common notion of a public which exists *to be addressed* we can consider publics which exist *because* they are addressed. *The Meatrix* doesn't address *the* public, in the sense of a national or worldly unity; nor does it address a concrete audience, like a movie theatre audience. In this case *The Meatrix* addresses *a* public, and that public consists precisely of those who have been addressed. Warner writes that:

> The idea of a public, unlike a concrete audience or the public of any polity, is text-based--even though publics are increasingly organized around visual and audio texts…Often the texts themselves are not even recognized as texts--as for example with visual advertising or the chattering of a DJ--but the publics they bring into being are still discursive in the same way. (Warner, 2002b)

Once we recognize the textual quality of something like flash animation—and come to realize that, though it is released to an indeterminate possible public, there must be a public which is formed when viewers are drawn to the text—then it is an easier step to see that the public is indeed text-based, generated

through association with text. To clarify this situation in relation to *The Meatrix* one need only look at the means of distribution and viewership. The "viral" distribution quality of flash activism translates into creation of a rhizomatic viewership of the text. Although at first *The Meatrix* was distributed to a definite list of GRACE members via email (GRACE), this was soon supplemented with a combination of press coverage, web-links and email forwarding.

Re-casting the viral as the rhizome, we move from distribution—as in dispersal of the viral—to creation—in the making of a public. Deleuze and Guattari (1987) offer the rhizome as an alternative to the constricted, arborescent forms of Western thought: the root and the radicle, or fascicular root. Professing that "the multiple *must be made*" Deleuze and Guattari offer a model based not on the "sedentary point of view" of history but a "Nomadology," "a logic of the AND." Such a perspective is incalculably useful in thinking about a public for *The Meatrix* because the formation of such a public appears in a historical model only as a chaotic whirlwind, a random distribution rather than a specific public creation. The rhizome as a model is appropriate in its characteristics of free connection, linear dimensionality, and circulation. Deleuze and Guattari summarize the rhizome:

> Unlike trees or their roots, the rhizome connects any point to any other point, and its traits are not necessarily linked to traits of the same nature…It is composed not of units but of dimensions, or rather directions in motion. It has neither beginning nor end, but always a middle (*milieu*) from which it grows and which it overspills. It constitutes linear multiplicities with *n* dimensions…Unlike a structure, which is defined by a set of points and positions, with binary relations between the points and biunivocal relationships between the positions, the rhizome is made only of lines: lines of segmentarity and stratification as its dimensions, and the line of flight or deterritorialization as the maximum dimension. (Deleuze & Guattari, 1987, 21)

The Meatrix's public too develops in a rhizomatic (rhizome-like) manner. Let me return to the description of distribution now but revisit it as a rhizomatic creation of a multiple public. Although we could historicize the process from an original email distribution and press release, we would soon discover the viral, rhizomatic qualities of this public formation incoherent to the genealogical project. From a small distribution of individual emails and press releases to 350,000 viewers in one week simply cannot be reasonably traced. From one freestanding website to 27,000 web pages linking to *The Meatrix* in a single month cannot be traced. From www.themeatrix.com to the 7 million viewers cannot be methodologically traced (GRACE). "The rhizome is altogether different, a *map and not a tracing*" (Deleuze & Guattari, 1987). Projected as a map, the rhizomatic creation of this public can be better observed.

Rather than a beginning and an end we draw instead on middle. At any given moment *The Meatrix* public grows in innumerable directions, with varied lines of dimensionality. One dimension of line connects individuals through the viral distribution of email. One sends to many, others receive and resend (forward), individuals email individuals, some ignore, others persist, resending, re-forwarding.[viii] In true rhizome form, however, the medium is never singular: some individual receives several forwards and post to a Blog,[ix] others will read the Blog, some will activate the link. Another line might connect a newspaper article to a viewer. This viewer now enters the public and may choose to begin a new line with an email or a "Hot Clicks" listing in an electronic publication. Message boards and listservs, *Meatrix* merchandise[x], state fairs, a radio interview (Gellerman, 2003), and a *Google* search[xi] for "Mad Cow" can all form new, rhizomatic, lines of flight.

The Meatrix is linked predictably by the People for the Ethical Treatment of Animals (*PETA*) website[xii] but it is also linked on *Seth Godin's Blog*—Seth writes that he received the link from Nick Usborne and that he is "in awe of how well executed the strategy"[xiii] is; *The Meatrix* is also linked in a post on the *Movie Gazette Forum* where "Tim" reports that he was "very amused"[xiv]; and the link is also provided on the *Cinema-L listserv* at American University—"Sasha" posts that it is "pretty funny stuff."[xv] Similarly, we can appreciate the unpredictable quality of rhizomatic public creation when we find a posting about *The Meatrix* on an anonymously written Blog called *TheMacMedic: Fantasies, delusions, and random thoughts from the life of the MacMedic*. Scattered with references to *The Meatrix,* MacMedic reminisces about his upbringing in the New England countryside and repeatedly includes various assertions of his own *Meatrix* neutrality, such as "Don't get me wrong, I am certainly not anti-meat, anti-agriculture, anti-business, or anti-progress."[xvi]

Still, the MacMedic is a member of *The Meatrix* public, and a dimension for line of flight (he provides a hyperlink to www.themeatrix.com. Yet without the usual structural identifications such as category, social

position or materiality, the construction of the public *can* be theorized: "a public is constituted through mere attention" (Warner, 2002b). Warner writes:

> Because a public exists only by virtue of address, it must predicate some degree of attention, however notional, of its members…The cognitive quality of that attention is less important than the mere fact of active uptake. Attention is the principal sorting category by which members and nonmembers are discriminated. (Warner, 2002b)[xvii]

So it is that MacMedic, Sasha, Tim, and Seth are all members of *The Meatrix* public. Cognition, understanding, and depth of consideration are not the defining characteristics, however, only the attention. While this seems incongruous with the intentions of a politicized text like *The Meatrix*, it is nonetheless very much a condition of our contemporary society. In a world full of texts and discourses calling our attention "Our willingness to process a passing appeal determines which publics we belong to …The direction of our glance can constitute our social world" (Warner, 2002b).

While it may seem at this point in the discussion that *The Meatrix* public is remiss of political agency, removed from definitive direction in its discourse or too loose in its creation to show signs of social *movement*, I believe that two important points need to be considered before we jump to such a judgment. First, we must keep in mind that this is not a read of a social movement per se, nor is it a read based on an idealized vision of public discourse. Rather, this is an attempt to understand textual circulation as it happens, to map out the distribution of a text in its creation of a contemporary public.

This brings me to the second point of consideration: *The Meatrix* has a public and that public is reading a text. While we have explored the creation of the public, we have yet to even begin to contemplate the text itself. What's more, we have so far only considered the overarching qualities of *The Meatrix* public as a public; by now moving on to discuss *The Meatrix* as a *counterpublic* we can discern what qualities the text contains which are facilitating the creation of a public which exists as subordinate and critical.

***The Meatrix* as a counterpublic**

Much of our contemporary discourse is based on texts, or fragments of texts, which inundate the social individual in a deluge of signs. Considerable literature is available which attests to the cluttered condition of our rhetorical environment. Without delving too deeply into this literature, let us suffice to say that there is an established recognition that while simplistic models of communication like the transmission of message from sender to receiver remain useful in some pedagogical or hypothetical situations, they can hardly be said to accurately represent the way we now look at public discourse. Instead, there is, indeed, a move toward *looking* at discursive texts as much as there is a move away from idealized "spheres" of public deliberation. The glance within white-noise-like arrays of signs, fragments filtered through the stream of piecemeal messages, soundbytes and spectacles have created a need for ways of reconceptualizing the public sphere.

Given that much of our contact with contemporary texts involves the act of looking, i.e. interactions with visual texts, some rhetorical scholars are recognizing the importance of images in public discourse. Take, for example, Kevin DeLuca and Jennifer Peeples' (2002) recast of the Public Sphere as the Public Screen. Bracketing their work as "supplementing the concept of the public sphere," Deluca and Peeples support a move from the idealized model of dialogue to the concept of dissemination, where "communication as dissemination is the endless proliferation and scattering of emissions without the guarantee of productive exchanges." DeLuca and Peeples begin with the premise that new technologies like television and the internet have "fundamentally transformed the media matrix that constitutes our social milieu." These "technological transformations," they argue, ""have constructed an altogether different cultural context." Together with shifts in the ad driven newspaper market toward highly graphical layout designs and the explosion of new "ad spaces" on everything from women's bikini bottoms[xviii] to the human forehead,[xix] we can plainly *see* that the television and internet-driven social environment has evolved to visual saturation. DeLuca and Peeples write:

> The public screen is a constant current of images and words, a ceaseless circulation of television, film, photography, and the Internet. These technologies' speed, stream of images, and global reach create an ahistorical, contextless flow of jarring juxtapositions. The public screen promotes a mode of perception that could best be characterized as 'distraction.' (DeLuca and Peeples, 2002,125)

While DeLuca and Peeples choose an analysis of mainstream press coverage of the 1999 World Trade Organization protests in Seattle to demonstrate the possibilities for alternative rhetors to enter into discourse with *the* public, a study of *The Meatrix* and the public screen can show how an alternative text generates its own public, *a* public. *The Meatrix* exists within a contextless visual atmosphere where perception is based in distraction and dissemination on the public screen offers no guarantee for productive rhetorical exchange. What is demonstrated by *The Meatrix*, however, are the possibilities for alternative rhetors to enter into discourse outside the mainstream press, to engage *a* public through a rhizomatic dissemination of screen image, and to produce a counterpublic. Thus, melding the theory and terminology of Warner with DeLuca and Peeples, we can consider rhetorical engagement with a *counterpublic screen*.

What distinguishes counterpublics, for Warner, is the "conflict with the norms and contexts of their cultural environment" (Warner, 2002a). Aware of a subordinate status, counterpublics, in tension with larger dominant publics are produced as marginalized publics which exist as contradiction, dissent, and/or repudiation. The following analysis looks to *The Meatrix* as a text productive toward a counterpublic, utilizing a counterpublic screen as a means for rhizomatic dissemination of a message of dissent. In so doing, it will also be shown that this counterpublic makes noteworthy uses of the contemporary textual atmosphere to attract attention.

Reading The Meatrix

In order to draw the attention necessary for producing a public, *The Meatrix* primarily makes use of allusions to prominent cultural norms. As a counterpublic text, however, *The Meatrix* maintains conflict with the norms of the cultural environment through contradiction and repudiation of those allusions. Such tactics, I argue, can be thought of as resonant reversal, a rhetorical strategy of juxtaposing allusions to prominent instances of cultural resonance with contradictory messages of opposition.

The Meatrix unabashedly references a prominently resonant text, *The Matrix*, starting with its name. *The Meatrix*, in fact, was released just two days before the release of *Matrix Revolutions*, the third film in the highly publicized and popular *Matrix* film series. Any doubt of this allusion is quickly eliminated in the opening moments of *The Meatrix*. The opening title, "What is The Meatrix," uses the same highly distinctive and recognizable font as *The Matrix* (Figures 2 and 3).

The allusion to *The Matrix* connects *The Meatrix* not only to a popular set of major motion pictures; it also enters *The Meatrix* into dialog with mainstream culture. *The Matrix* in this case ironically acts as a marker for cultural norms. I say ironically because the surface narrative of the *Matrix* films purports to question what we take for the "real world." As a point of reference for *The Meatrix*, however, the *Matrix* films become the representative of cultural norms, the real world, while *The Meatrix* plays the role of dissenter.[xx] Thus we find that allusion to the *Matrix* functions to draw the attention of a public *and* to set a referential marker for contradiction. In other words, reference to the popular narrative and characters of the *Matrix* film not only attract interest but also become a representative of mainstream culture; *The Meatrix* will contradict the mainstream representations in a way that destabilizes our senses.

The visual representations of characters within *The Meatrix* exemplify this dual attraction and contradiction. Take, for example, Moopheus, a reconstruction of *Matrix* character Morpheus, played in the film series by Lawrence Fishburne (Figure 4). Moopheus, like his exemplar, sports a black overcoat and "armless" sunglasses and speaks in a deep, monotone voice. As a point of reference, however, the resonant reversal becomes clear when the viewer realizes that Moopheus, although standing erect, is apparently a cow. We can consider this move resonant because there is an obvious reference to the popular movie character. The introduction of the bovine Moopheus is also a reversal because it transfers the character, and the story's narrative, from the human to animal realm. The anthropomorphic Moopheus representation of Morpheus transfers the cultural resonance of a human story to a contradictory setting where nonhuman affairs are central. This reversal is clear when we consider that the rhetor explicitly seeks to contradict the cultural norm of human-centered inconsideration of animals and animal products.

This same use of characters for resonant reversal is also manifest in *The Meatrix* other principle, Leo. Although his position in the narrative and character name clearly reference Keanu Reeves' *Matrix* role as "Neo," "Leo" appears to have little, if any, physical resemblance to the film character. Instead, Leo is portrayed as a simple-minded, stout and smiling pig. Like Neo, Leo the pig begins the story unaware that his reality is false and that the existence of a "real world" is made present only through Moopheus/Morpheus's intervention. As a reversal, however, Leo does not live the dark, lonely life of a

self-questioning computer hacker in present day New York City. Instead, Leo lives the idyllic life of a farm animal: happily eating slop from a trough in a spacious country barnyard (Figure 5). The contradictory reversal here plays further on the irony of the reference by suggesting that the barnyard is as false as the computer generated "reality" of the Matrix.

This representation of Leo the pig and his barnyard environment also references two other markers of cultural resonance. First, the happy talking pig and his animal friends reference the tradition of animated cartoons. Children and adults alike have been exposed to the phenomenon of cartoons. Whether in the form of Bugs Bunny, Huckleberry Hound or Porky Pig, Americans are not only familiar with the talking cartoon animal, they are also comfortable with the benign images of simplistically rendered characters encountered on Saturday morning television. This is similarly true of feature film pig and farmyard representations, animated or not, in movies like *Babe* and *Charlotte's Web*. Second, as those two films illustrate, Leo's barnyard calls upon the cultural norm of America's small farm. *The Meatrix* draws on the common cultural perception of farm animal life represented in movies, children's books, and toys. The child-like innocence of this idyllic image resonates with viewers, attracting their gaze while setting-up the opportunity for reversals.

Most of the balance of *The Meatrix* is based on presenting resonant reversals of the cartoonized idyllic barnyard life. It could be said, in fact, that the answer to the question posed in the title of *The Meatrix*, "what is the Meatrix?" is the idealized barnyard itself. The Meatrix is meant not as a fictional representation, however, but as an allegorical account of the false image presented as real in common cultural representations.

> Moopheus: "Do you want to know what it is?"
>
> Leo: "OK."
>
> Moopheus: "The Meatrix is all around you, Leo. It is the story we tell ourselves about where meat and animal products come from. The family farm is a fantasy, Leo. Take the blue pill and stay here in the fantasy, take the red pill and I'll show you the truth."
> *Leo takes the red pill. They go through a crazy transition. And land in a huge bleak factory farm pig barn, pigs in gestation crates as far as the eye can see. Leo finds himself standing in one.*
>
> Moopheus: "Welcome to the real world." (FreeRangeGraphics.com, 2003)

The ceremonial taking of the red pill scene reprinted here mirrors Neo's introduction to the "real world" in the original *Matrix*. Although this exemplifies a further use of resonant attraction via reference to the feature film, it is simultaneously the beginning of a series of resonant reversals turning the happy-farm cultural image on its head. Visually, the "real world" of the factory farm balances itself between maintaining the innocent feel of the cartoon and disrupting the viewer with dissonant images.

Take, for example, the images of chickens which accompany Moopheus's description of "cruel conditions" in factory farms. One image uses resonant reversal by taking the idealized cartoon depiction of the barnyard hen and placing it in cramped, heavily barred and tiered cages, with apparent feces on the floor and spots of blood scattered on the bodies of the birds. One of the chickens lies upside-down, with its neck bent back, head hanging out of the cage and the cartoon norm for death, Xs for eyes, indicating the condition of the carcass (Figure 6).

Although such a description of the image indicates the gruesome conditions of real factory farms, the image is lightened by the comic quality of the animation. Unlike more realistic genres of animation, such as the often brutally violent and realistic Anime style of Japan, the cartoon style used in *The Meatrix* always tempers the horrific. This is, moreover, what allows explicitly violent material in well-known animated series like *Tom and Jerry* and *The Road Runner* to be culturally acceptable for child viewership.

Particular care is present in *The Meatrix's* application of the cartoon style to introduce otherwise repugnant scenes of factory farms. This is perhaps the exceptional genius of *The Meatrix*; while gruesome photographs of maltreatment and poor conditions in factory farms have been readily available for years, the sickening quality of the images often repulses the casual viewer. *The Meatrix*, however, introduces the concepts and conditions in a format that is not only acceptable but draws viewer attention. On the other hand, the use of resonant imagery of barnyard cartoon animals in scenes of pain and suffering also contradicts the cultural norms. Take as an example the images used to portray what Moopheus describes as "systematic mutilation, practices such as debeaking chickens." Here the cartoon image is shown only in

silhouette; a human body holding a cartoonized chicken by the neck places its beak into an apparatus, pulls a lever, and cuts the beak from the chicken (Figure 7). While the image disrupts the normal understanding of barnyard life, and introduces the viewer to a horrifying practice, it is also visually palatable, allowing the attention to be maintained and the concept to be absorbed.

Finally, the idyllic cultural norm of the family farm is itself obliterated—by a giant cycloptic robot with waving tentacle arms (Figure 8). The robot not only plays into the *Matrix* image of the human harvest depicted in the film, the "Agri-corp" label is reminiscent of cartoon-world's all-in-one corporate provider "ACME." Moopheus narrates as the Agri-corp robot moves through a pastoral countryside stomping out the traditional symbol of the family farm: a red barn and a white-fenced animal pen. Each of the family farms is systematically replaced as the robot squats over the site of the former barn and seemingly defecates out a plain grey warehouse representative of the factory farm. The sky darkens ominously as the Agri-corp robot moves through the scene, growing larger as it approaches the screen.

> Moopheus: That is the Meatrix, Leo. The Lie we tell ourselves about where our food comes from. But it's not too late, there is a resistance.
> *(Moopheus is joined by another pig, and a chicken. All wearing black overcoats and sunglasses)*.
>
> Leo: Count me in.
> *(Enraged Leo jumps up out of the crate and freezes in "bullet time" ala the Matrix)*
>
> Leo: How do we stop them Moopheus?
>
> Moopheus: *(Addresses the user in the foreground)* We are going to spread the word. But it's you, the consumer who has the real power! Don't support the factory farming machine! There is a world of alternatives!
> *(He holds out his hoof with a large red pill in it).*
>
> Moopheus: Click here and I'll show you what you can do to escape the Meatrix..
> (FreeRangeGraphics.com, 2003) (Figure 11) (Figure 12)

The final image of *The Meatrix* has Moopheus looking toward the viewer, large red "pill" in hoof, "Click Me" printed in large black letters beckoning the viewer to mouse-click on the hyperlinked pill (Figure 11). This red pill acts as a final resonant reconnection to the Matrix. In the original Matrix film, Keanu Reeves' Neo character, like Leo the pig in the opening of *The Meatrix*, is given a red pill by Morpheus (Moopheus) to show him "just how far down the rabbit hole goes." Taking the red pill is a decisive moment for Neo, who is also offered a blue pill, which would allow him to fall asleep, awaken in his own bed, and continue to live in the false reality of the matrix. On the other hand, Neo can take the red pill and find out the "truth" about the matrix. Morpheus informs him that "no one can be told what the matrix is; you have to see it for yourself."

So too is the case with Moopheus and his red pill. The hyperlink to GRACE'S "action page" (described above) is also a choice: the viewer can choose to ignore the link, accept the entertainment value of the animation, and, presumably, remain in the meatrix. On the other hand, the viewer can follow the hyperlink to the GRACE action page and browse the information available there. I would like to suggest, however, that in this case the viewer has already taken the red pill, whether she chooses to click on the link or not. I would suggest that there may have been a choice made, but that choice was in pointing the web browser to *The Meatrix* animation in the first place. As we have seen above, the viewer of *The Meatrix* has been exposed to words and images which already demonstrate the rhetorical points GRACE seeks to express. Not only has the viewer been exposed to the concepts of animal cruelty, pollution and destruction of family farms, *The Meatrix* has also presented these concepts within the norms and in contradiction to the norms of resonant culture. The resonant reversals evident in the animation posit the viewer in a situation where their attention has been attracted by resonant features and their perception has been challenged by contradicting cultural norms. The use of visual imagery to accomplish this task makes use of the contemporary rhetorical environment, the public screen, as a means to produce a public. As a text which stands counter to the norms of resonant cultural features, however, this could be described as making use of a counterpublic screen. Furthermore, the visual format of flash animation works in harmony with the image laden rhetorical environment. In the world of distraction it appears that no one can be told what the Meatrix is, but you can see it for yourself.

Notes

[i] This information provided by GRACE, and widely reported in media accounts based on GRACE information.
[ii] www.factoryfarm.org
[iii] www.eatwellguide.org
[iv] The Eat Well Guide is produced in partnership with the Institute for Agriculture and Trade Policy
[v] Wikapedia. "Macromedia Flash." [web article] (Wikapedia.org [cited May 29, 2004]). Available from http://en.wikipedia.org/wiki/Macromedia_Flash.
[vi] FreeRangeGraphics. *Flash Movies*. [website] (2004 [cited May 31, 2004]). Available from http://www.freerangegraphics.com.
[vii] original emphasis.
[viii] How many times have we received an email message with a subject line approximating: Fwd:Fwd:Fwd:Fwd:Re:?
[ix] A Blog is defined by Wikipedia.org as "A weblog, or simply a blog, is a website which contains periodic, reverse chronologically ordered posts on a common webpage. Such a web site would typically be accessible to any Internet user...The format of weblogs varies, from simple bullet lists of hyperlinks, to article summaries with user-provided comments and ratings. Individual weblog entries are almost always date and time-stamped, with the newest post at the top of the page." (Wikipedia.org, 2004)
[x] T-shirts, baseball caps, coffee mugs, and cloth shopping bags are all available with *The Meatrix* logo, a picture of Moopheus, and the website address: www.themeatrix.com.
[xi] Google is a popular "search engine," a website which acts like a searchable directory of websites.
[xii] www.peta.org/feat/meatrix.
[xiii] http://sethgodin.typepad.com/seths_blog/2003/11/the_meatrix.html
[xiv] http://www.movie-gazette.com/discussions/topic.asp?TOPIC_ID=24
[xv] http://listserv.american.edu/cgi-bin/wa?A2=ind0311b&L=cinema-l&T=0&F=&S=&P=885
[xvi] http://www.themacmedic.us/archives/000257.html
[xvii] I would point out here that Warner's use of "attention" is similarly framed to DeLuca and Peeples' use of "distraction" (discussed below). Note the qualifiers "mere" and "notional" that point toward a glancing attention, rather than a constructed identification, or traditional fixation as "audience" or "reader."
[xviii] "Ass-vertising" as defined by its marketing firm creators, "necessarily involves putting a logo, a web address or a brief message on the seat of a pair of bikini style panties. The panties are then worn by beautiful girls, and revealed when appropriate." Appropriate is not clearly defined by the company. (Night-Agency, 2004)
[xix] Temporary tattoos are used as a "twist on a traditional sandwich board." (AdAge.com, 2004)
[xx] I am not implying that *The Matrix* is not a contrarian text. What is ironic here is that the culturally resonant features of *The Matrix*, widely incorporated into contemporary culture, themselves become points of mainstream cultural resonance. This occurs, in this instance, out of direct context with the film. The graphics, characters, and plot elements referred to by *The Meatrix* are taken out of the original context, and do not carry with them the contrary notions ascribed within a reading of the film in whole. It is because of their commercial, branded popularity that these decontextualized elements are resonant to most *Meatrix* viewers.

List of Figures

Figure 1. An unlicensed, unattributed graphic depicting Simpsons characters in Matrix style attire and freeze-frame action poses.

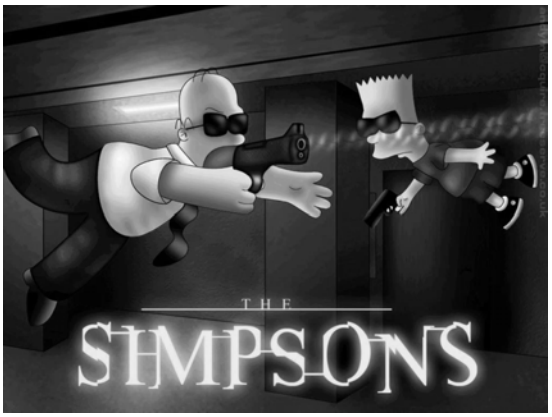

Figure 2. The Meatrix opening title uses the same distinctive font as The Matrix movie series.

Figure 3. The Matrix logo appears prominantly here on a film promotion poster

Figure 4. Matrix character Morpheus shown in this publicity image for "Matrix Reloaded", the second Matrix film.

Figure 5. Leo the pig feeds happily in the idealized barnyard

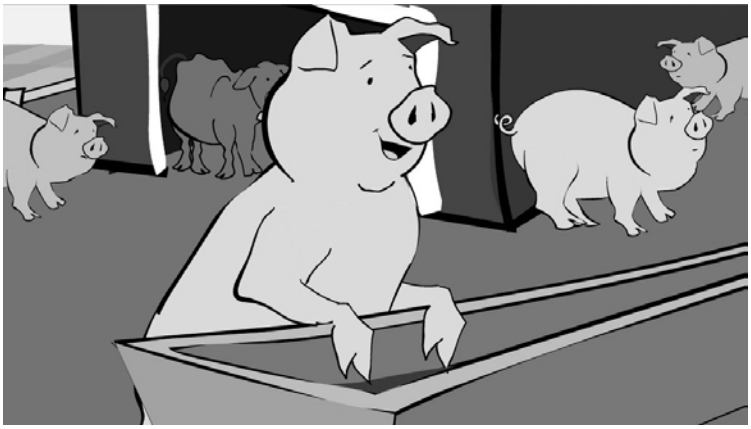

Figure 6. Harsh conditions portrayed in The Meatrix.

Figure 7. A chiken is debeaked in sillouhette

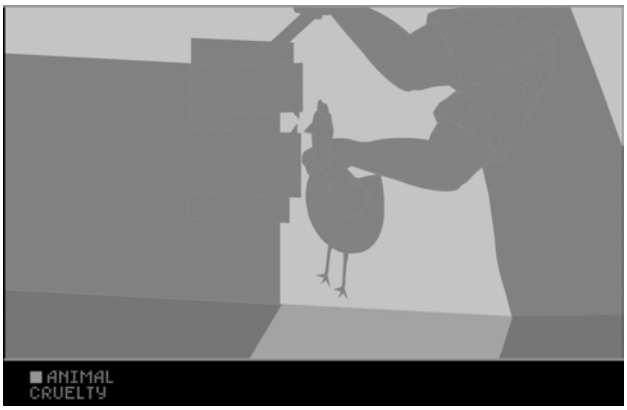

Figure 8. A giant robot crushes family farms and replaces them with factory farms.

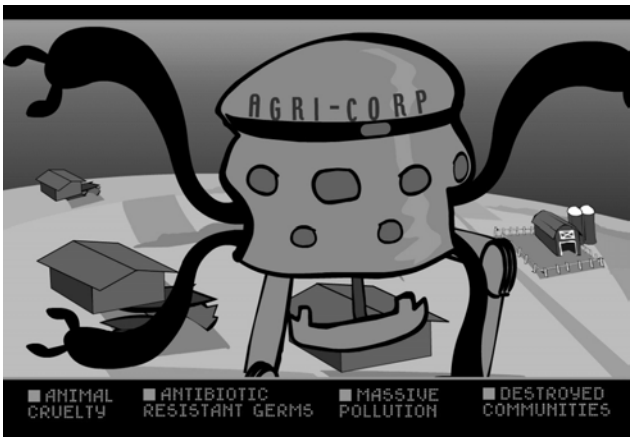

Figure 9. Moopheus and his comrades pose here in striking similarity to Matrix promotion materials.

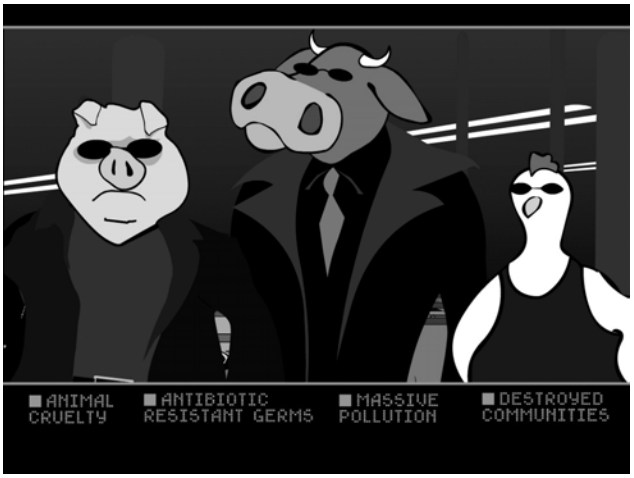

Figure 10. The scene pans around Leo in a mid-air freeze special effect made famous by The Matrix.

Figure 11. Moopheus offers the viewer their own red pill, the gateway to "the truth"

Figure 12. Moopheus offers the choice, but has it already been made?

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On the Bosom of this Grave and Wasted Land I Will Lay My Head

Janisse Ray

This article was originally published in the 20th Anniversary Issue of Orion Magazine*(Summer 2002). It served as inspiration for Ray's address at the conference.*

Four years ago I returned from Montana to my Georgia homeland. I wanted to live where I knew the people around me, where my son could run barefoot and pick blackberries and climb magnolias. I hungered to be part of a rural community defined by land and history and blood. I longed to be closer to the landscape that produced me, and wished that my own son could know it, be of it.

We moved into my grandmother's heart-pine house, on land my great-grandfather had farmed, amid tobacco fields and cow pastures in Spring Branch, a farming community in Appling County. Silas would go to Altamaha Elementary, where my mother was schooled.

In my mind the return held two possibilities: either I would fail, and leave after a year or two, or I would revitalize my grandmother's farm, buying it piece by piece from aunts and uncles, and I would die where seven generations of grandmothers had died before me.

The landscape I had wanted to remember from my childhood was one of vast and functional forests, such as I found in Montana, but childhood is a mythological place, with mythic forests. After seventeen years, I somehow expected that the ruin I had seen as a child had been arrested, and corrected. Instead, it had accelerated. What I found was a fragmented landscape, with only pieces of true forest left here and there.

I learned that, for the past decade, the South has been in the middle of a cutting cycle that equals the one at the turn of the nineteenth century, when most of our old growth was cut. Trees grow fast in the South, and logging has been a way of life. While Southerners have been noted for a strong sense of place, an environmental ethic is new to us, so the timber industry goes mostly unregulated and unchecked, and the cutting is rampant.

To see the worst of it, I fly over Tennessee on the clearest day of the year with pilot Larry Peterson. We are thirty-five hundred feet above eastern Tennessee in a tiny Cessna that reminds me of a whit dragonfly, bound for one of the biggest clearcuts in the southern United States. Larry is a pilot with Southwings, an environmental flying service whose mission is to protect critical habitat in the Southeast by piloting reporters, biologists, and activists so they can survey logging and mining practices from the air.

"Severe clear, we call this," he says through headphones.

From Chattanooga we fly across the murky green body of the Tennessee River, toward the Cumberland Plateau, the tableland where the Earth stopped the accordion action that produced the Appalachian Mountains. Flying in a small plane is much like snorkeling. Temporarily creatures of blue sky, we peer out our bubble mask at a world beneath us. Way down below, like a dark leaf floating, there's a vulture.

"This will give you an idea of what the land looked like, before we got so greedy," Larry says. The trees are soft looking, almost like giant moss, and so thick they completely hide the ground.

So far, the Earth has been green from near to far-chartreuse to emerald to aquamarine. We begin to see the logging. Where the green turns to gray and brown, that is clear-cutting, dirt showing through. The clearcuts are huge and odd-shaped; the world down there is a big green buffalo, and her hair has been worn off in painful, rawhide-colored patches.

Unpaved logging roads scribble through the cuts, which are divided by narrow bands of trees—these are streams. Along them loggers have left buffer zones of "forests," usually thirty feet on either side of the channel. Tennessee has no statutes regulating the quality of a timber operation, nor its extent, and like most

southern states, its best management practices are voluntary. Streams, however, are regulated by the Clean Water Act. Nevertheless, when Larry circles one particularly scarred area, I can see the stream-buffer is missing in places. Water-filled ruts testify that equipment has been driven through the stream.

Visibility is perfect—we can see fifty to seventy miles in any direction. There are more clearcuts, and more. We come upon a crew of loggers at work, although we can't see the people, only equipment. Far below, toy log trucks wait on a tan road, which is scuffed to white in places, and rutted. It runs alongside a pile of cut trees that looks like a faggot of twigs of perfect length. The drivers haul the make-believe trees away in small handfuls. We bank to watch a feller-buncher at the edge of a stand of trees. The machine looks gentle, the way it swings its wide arm toward a standing tree and hugs it close, and then the tree, as if in absolute trust and loyalty, topples slowly to the ground.

What the loggers see ahead of them down there is not what I see. They see a day's work. I see the systematic removal of the Earth's vegetation. Now, for the first time, I see that this land was meant to be covered by a thick, forest-green comforter, studded with lakes and stitched with rivers. Not this thin and threadbare quilt, with great patches missing.

We fly over miles of clearcut until we're in what may be the center of destruction: everywhere I look, in every direction, the forests have been carved with logging roads and trees taken away. It seems endless—fifteen thousand acres laid to the ground in the past five years. Activists call this the Triangle of Destruction-from McMinnville to Spencer to Tracy City, the Cumberland Plateau is steadily being razed.

The loss of these hardwood forests is as painful to me (in this moment not mentioning the tragic loss of human life) as the loss of the World Trade Center towers for those who loved the New York City skyline. This is a different kind terrorism—more mindless than premeditated—and suddenly I am weeping over this land, my home, the southern United States.

Larry banks the plane away, "You needed to see it," he says. "You don't need to be punished."

The South has become the woodlot for our nation. From 1977 to 1997, harvests in the thirteen southern states increased by fifty percent. Today, two-thirds of all wood harvested in the United States comes from the South.

Were it sustainable, the logging would be acceptable—after all, people need both wood and jobs. But it's far from sustainable. In 1991, for the first time since records have been kept, removal of softwoods outstripped net growth across the South. Environmentalists blame the loss largely on "chip mills," factories that grind whole logs into small wafers for making paper and chipboard (ninety percent of the logs go into paper, ten percent into chipboard). Chip mills have tripled in number in the past fifteen years; since 1987 over one hundred have been built in the Southeast. The more than 155 chip mills currently in operation log an estimated 4.6 million acres of forests each year. In a year one chip mill can obliterate seven to ten thousand acres of trees.

As the pine forests in Georgia, Alabama, and Mississippi run out, the timber industry pushes northward—into the sloping forests of the Smokies and the Blue Ridge. Nor has the cutting stopped at pines. The timber industry is going into shady bottomlands and along fragile mountain slopes for hardwoods, and into sloughs and creeks for the slow-growing and noble cypress. Removal rates of hardwoods, too, now approach unsustainable levels.

One day my young son and I drive past the huge sawmill on the outskirts of our town of Baxley. Silas and I count the logging trucks lined up, waiting to dump their loads of pine trees. Fifteen. The trees already cut and piled make a brown, barky mountain; the tractor-trailers look small beneath it.

"Mama," my son asks, "Don't they have enough yet?"

The problem with industrial forestry is that there is never enough. There are always stockholders wanting greater profits, meaning a more luxurious life for themselves and their families. The motto of industrial capitalism is *more*, *more*, *more*, and its profits always come at a heavy cost to the land and those who live there. It has been hard to witness forests close to home getting cut: the acres between our farm and Silas's school, where some of the trees had cavity holes—signs of occupation by the endangered red-cockaded woodpecker in the not-too-distant past. Or a certain strip of trees just beyond the county's landing strip; or the breathtaking Eason's Forest, which had to be cut to pay estate taxes.

Since we heat with wood, I take advantage of the cutting. On a particular Saturday morning, I take the chainsaw and leather gloves out to Ten Mile Highway where a pine forest has been felled. The small hardwoods have been pushed up into windrows to burn. For hours I work my way around the big piles, cutting easy lengths of oak and gum. When my arms get tired from the buzzing of the saw, I shut it off and haul the firewood to the truck, length by rough length. This will keep us warm in the drafty old farmhouse. I cut more, until the truck's axles sag, and then drive back to the farm and stack the wood in the log chicken

coop, which is collapsing slowly but will last another winter. It's time to go pick up my son from his grandmother's house. I finish stacking as the sun sets in streaks of hot pink and luminous gold over the gray harrowed field. I stand a minute, watching it go extravagantly down.

The worst cut, for me, was John's Pond, the woods between Hoboken and Folkston, Georgia, which I passed on my way to Jacksonville. This forest was big, maybe two miles of glorious mature longleaf pine alongside a remote stretch of rural highway, a real forest in this land of fields and trailer parks and brush. Palmetto and wiregrass grew beneath the trees, and in passing, I spotted bluebirds and Sherman's fox squirrels foraging. I am certain that Bachman's sparrows and gopher tortoises and indigo snakes lived there; maybe flatwoods salamanders. The trees were getting mature enough to house even the red-cockaded woodpecker, a species tied to old-growth pines.

It was a one-of-a-kind forest, among the last of the great southern uplands. It gave me great hope that we might be able to keep some of our forests intact, even with more than eighty percent of the land in private hands.

One day, speeding toward the airport, I saw that one section of John's Pond was gone, turned into a muddy square of skidder marks and tree limbs. In the spread of wet dirt sat a loader, a bulldozer, and a tree-cutting machine. I was alone in the car and the road was empty, and for a solid mile I screamed.

The next time I passed John's Pond, the foresters were replanting it "You should be happy about the planting," my friends tell me. And I am. John's Pond won't be a parking lot.

It won't be a forest either.

It'll be a tree farm, full of slash pine engineered to grow fast in habitats to which it is not native. The replanted trees will be all one age, one species, planted in rows: a pine plantation. It's likely that herbicides will have been applied, and the tract will have been "bedded," plowed in wide furrows, which effectively destroys the understory.

Across the entire South, the U.S. Forest Service estimates that thirty-six percent of natural pine forest has been converted to tree farms, and that seventy percent will be converted by 2020. Such plantations may briefly sustain deer, squirrel, and common birds until the thickly planted trees shade out all groundcover. After that, they become ecological dead zones.

I have a dream in which I am canoeing with my husband. The stream enters a concrete road culvert, where it runs shallow through red clay. I am prying us along with a paddle when I see a cluster of violet-green swallows in the culvert. They fly toward us, trying to get out. One hits my hair and plunges into the neck of my sweater, then burrows down my back. I reach into my sweater, close my hand around the bird and draw it out.

The young swallow is desperate to escape, struggling frantically against my closed fingers. As I reach out my arm to let it go—at that very moment—it flings its head backward against my fist so hard that it breaks its neck.

Horrified, I wake and recount the dream to my beloved. He listens, and later turns to me with a question.

"What would you do today," he asks, "if you knew beyond a doubt that you would not fail?" He would like to stand on the edge of the Grand Canyon, step off into it, and fly like a raven. I've never wanted to fly. I am Earth-bound, terrestrial. I think about his question.

"I would return the Earth to the way it was," I say.

The morning following the flight, I meet Todd Gregory, a volunteer with Forest Watch, which monitors timber operations in the forests I flew over.

We stand in the dirt parking lot of a gas station while Todd tells me about his homeland. "This was a large area of hardwood forest not owned by the government. And it was wild." The J. M. Huber Company, he says, owned thousands of acres, where it mined coal up until the 1930s. When the coal industry busted, the company leased the land to the Tennessee Wildlife Resources Agency for the creation of a public hunting area.

"Where we chose to live was the edge of a wild plateau supporting all kinds of wildlife," Todd continues. "We had a sense of wilderness." Then Huber began selling land to timber companies, who have been logging it ruthlessly.

"Now it's had the heart cut out of it" says Todd "A couple of coves (small, sheltered valleys) are left. And it's happening so quickly. The oldest clearcut I can show you is five years old." He shakes his head matter-of-factly. "The forests were just recovering from a hundred years of strip-mining. Now they're clean-shaven. I can take you eight miles on one road and not get out of a clearcut."

We get into Todd's big truck and drive out through the cutting, to ground-truth what I had seen from the air. Todd drives me through miles and miles of nothing, into the place I saw from the sky as endless clearcut. In some places there is tangled regrowth, a few years old. Some sections where hardwoods have always grown have been replanted in knee-high loblolly pines. In the most recent cuts the ground is disfigured by heavy equipment; branches and scrub trees have been dozed into piles for burning. "Only eight percent of the cutting is monitored by the state," Todd says. "You need a license to cut hair. You need a license to inspect dates on fire extinguishers. And we don't even know where they're cutting."

When it's time to say goodbye, Todd stops me before I climb into the car. All day he has been rational and optimistic, yet I know that sometimes you spend all day with a person in order to hear the one sentence that comes from the bottom of his heart.

"You asked me how I feel about it," he says, then pauses. "I'm pissed off." A light flares in his eyes, and he turns and walks away.

On the way back to south Georgia, traveling on a mountainous road between North and South Carolina, I see a sign announcing an overlook, next to a line of boulders that have been spray-painted with Jesus slogans. I pull over, because it is early, and the world, after all, is still gorgeous. I expect the typical outlook, a concrete slab bolted to a guardrail, not this granite outcropping as big as a church that rises out of the Great Smoky Mountains. I walk out across it. Partyers have left beer cans and food wrappers about, and broken their bottles against the rock. There is more spray-painting: Jody was here. Brent loves Kim. Repent. I move slowly to the uneven edge of the overlook.

Instead of a cliff, the rock rolls away and away, like a scroll, and beyond it, rising out of the mists, is a dream world, a land remembered. The mountains spin away, ridge upon tree-covered ridge in bands of color, deep blue-green fading toward gray, the crust of the Earth softened by forests of hickory and beech. Then, as if in some heavenly alchemy, the ridges disappear into the smokelike mists of an impenetrable forever.

"My God," I gasp. My one wish has been granted. I have stumbled upon the world as it was. My legs fold and I squat on the rock, mesmerized. For a few minutes I can see the Earth unchanged. Then I get back in the car and reenter the industrialized, road-netted, heavily used land that makes up most of the eastern United States, full of clearcuts, pine plantations, development, and signs that say, LARGE LOG TRUCKS ENTERING AND EXITING HIGHWAY.

My lovely heartland is being replaced by vainglorious nonessentials that lead us to forget what it means to be human in a trembling world.

In towns little and big across the South, at libraries and universities and bookstores, people listen wide-eyed and nod when I speak of these things—that a pine plantation is not a forest, that the number of products on the international market now exceeds the number of species in the world. Sometimes they raise a hand and express their own grief and dismay at the loss of our landscapes. Ten years ago, or five, they might not have done this. Now, they see with their own eyes what is happening. There aren't enough forests left.

Still, not everyone agrees with me, and especially not my forestry friends. "The South has been timbered for years and years, and we still have timber," says Phil Gornicki of the Florida Forestry Association. "The biggest threat to a forest is encroachment of urban land-uses, which is a permanent conversion. A pine plantation at least provides aquifer recharge and air filtering."

I ask him about wildlife. "If you study it," he replies, "every stage of a forest is attractive and useful to different sets of wildlife." Deer and turkeys, for example, flourish in young pine plantations.

I press him. "But what about species like the red-cockaded woodpecker?"

"Granted," he says, "in the South we have a lot of short-rotation forests. This is why we have national parks and state land-buying programs, to preserve mature forests."

There's another element in this equation, foresters point out, and that's demand. "People in this country are still demanding forest products," Phil observes. "We can produce trees in the South. It's become the timber basket of the country."

It's a nice image: timber basket. I think of flying above these forests, and seeing the logs, far below, being piled into a lovely wicker basket. A gift basket of trees, cut on demand.

When I get tired of the aesthetic poverty of pine plantations, I go find a real forest. We don't have national forests, or state parks, or national parks close to us in south Georgia, but we have Okefenokee Swamp, located less than an hour south of the farm.

Although most of the old-growth cypress in Okefenokee Swamp was logged in the 1910s and 1920s, in 1937 President Franklin Roosevelt protected this largest freshwater swamp in the country by making it a

National Wildlife Refuge. He did so at the urging of a woman who had tutored his children, Jean Harper, whose biologist husband, Francis Harper, was an early explorer of the swamp. Lucky for us that Roosevelt protected it, and that in the 1970s it became a legally designated wilderness area, because now when forests across the South are falling it's one of the few places we can go to understand wildness.

One spring, Silas and I canoe across it with friends, including three other twelve year olds. The journey is thirty-one miles by canoe, requiring three hard days of paddling. Sometimes, all day, there isn't enough dry land to stand upon, and at night we sleep on platforms erected over the water. We pass through the wet prairies of the eastern side, where flag iris, pitcher plants, water lilies, and spatterdocks are blooming, where sandhill cranes are bugling through the shrub thickets. We hear male alligators bellowing, defending mating territory.

As we paddle, I wonder what Okefenokee would have looked like before the logging, almost a century ago. Then I abandon that train of thought. It's beautiful here, the trees older and bigger every year. Aren't we lucky, I think.

Saving our forests, I've come to believe, doesn't have much to do with the will of the people like myself who love wild places. Our forests are increasingly under the power of the corporate lobbying dollar. People who benefit collectively from the ravaging of our natural resources collude to continue the conversion of greenspace to greenbacks.

This can happen because as a nation we are true believers in the capitalist economic system. Even as climate changes globally and polar caps melt and seas inch higher along coastlines worldwide, we cling to the belief that capitalism will bring prosperity to all the world, starting with ourselves. Lost in this prosperity, wooed by its trinkets, we fail to see that industrial capitalism, which we have now managed to spread globally, does not mean prosperity for all, but for the few. That it cannot go on forever producing more and more. That it succeeds at the expense of local communities, local economies, and local ecosystems. That it causes problems—like cancer or ozone thinning—that technology has not been able to fix.

More and more of our timberland are owned by corporations. We are no longer taking the trees we need for firewood and construction, but are sending our precious, limited forest resources worldwide. To think that John's Pond became cardboard for an anonymous corporation halfway across the globe, for people who didn't love those trees or care what animals loved them, is heartbreaking to me.

The knowledge that capitalism, by its nature, ensures the destruction of forests does not keep me from hoping that we can stop the hemorrhaging of wild things—by protecting wild places, by changing public policy, and by recognizing decent and smart alternatives to clear-cutting.

A month or two after flying over the clearcuts in Tennessee, I find myself at Ichauway, the plantation near Albany, Georgia, that belonged to Robert Woodruff, who earned a fortune through Coca-Cola. Woodruff loved these longleaf pine forests, where he hunted quail from horseback; now Ichauway is run by land managers at the Jones Ecological Research Station, on site.

Today is field day, when the foresters and ecologists offer advice to the area's timber landowners. All morning we have been riding around Ichauway in open buggies, learning about restoration, the role of fire in the landscape, and native species. I am listening closely, because my family has decided to turn some of the fields at the farm back into longleaf.

Finally it is Leon Neel's turn to talk. Leon is in his mid-seventies. All his life he has been an ecological forester, perfecting a method of harvesting timber that will produce an income for the landowner while maintaining an intact forest. Single-tree selection, or sustained yield, he calls It. "We never cut the entire forest," he says. "We cut individual trees." These trees he chooses carefully, based on disease, age, proximity to others, wildlife in the area.

He tells us about a forest he has managed for fifty years. On this property, a timber cruise in 1941 counted 25 million board feet of timber. Over the years, with an annual cut, 46 million board feet of timber have been harvested. Even so, when the property was last cruised in 1995, it still contained 63 million board feet of timber, and it supports the highest population of red-cockaded woodpeckers on private land anywhere.

"It takes fifty years to grow a fifty-year-old tree," Leon says. "It takes one hundred years to grow a hundred-year-old tree. Some people forget that. It would take several generations to restore a forest."

As he talks, the hot fall sun beats down from high in the sky. A crow calls out over the tops of the pines, which stretch far. The trunks of the pines show signs of the fires that pass through. The ground is thick with wiregrass and the spent spires of blazing star. "There are not many places left in the world that look as good

as this," Leon says, humble and soft voiced. "Probably this is one of the best longleaf stands you will ever see." The group is quiet. "It's something special."

We know that we will never in our lifetimes see on the farm the kind of forest we toured at Ichauway, but maybe our offspring will. A dozen or so old-growth pines stand tall around the house, but the rest of the land is in fields and pastures. Early one morning in the middle of winter we spend a day tree planting. When Mama and Daddy arrive, my husband and I are up and dressed in work clothes, gloves stuck in our back pockets. First we sit at the old enamel kitchen table, push the breakfast dishes aside, and draw a map of the farm: road, house, pastures, fields, stream run, the pecan tree we discovered in a fencerow. Around the map we mark where we want the forest to be, years from now—coming up out of the hardwood bottomland, along the bottom edges of the fields. We call it a Forest for the Children.

Daddy has bought one thousand seedlings from the Georgia Forestry Commission, and they come in four bundles, each about as big as a foal. We pile them on the back of the pickup and drive out to the field. All day, using hand dibbles, we plant the trees, one by one, by making a hole in the ground with the dibble, pushing the seedling in and arranging its roots, then using the dibble to push dirt against the roots. We stamp the dirt down around each tree.

We plant at random, wandering here and there as if we were the wind itself, spreading seeds. Longleaf seedlings don't have trunks for a few years; they look like tufts of thick grass. After we take a few seedlings, we carefully close the bundle so they won't dry out. We work steadily. My little niece and nephew arrive to spend the day, and they plant too, sharing a dibble, until they get tired and wander away to climb trees and build sand castles in the field.

Mama and Daddy leave with the children in the late afternoon to cook supper, and by the time we finish, the sun is going down toward Alabama. My husband and I gather the tools, then stand and survey the day's work. It is more than a day's work. It is our dream to rebuild a forest, and also the Earth's dream. We are making the dream of the Earth come true. We are filling in the holes of the quilt.

I stand and hold my hand out over the future forest. "Grow," I say to the trees. "Grow for the children. Grow straight and tall and ancient. Spread far and wide until you cover this land." My husband is beside me.

"Welcome back," he says.

Poisoning a People, Poisoning a Planet: Farmworkers, Environmentalist Justice, and the Material Rhetoric of Pesticides

Emily Plec
Western Oregon University

Recent scholars and activists have called attention to the ways we can "transform the possibilities for fundamental social and environmental change through redefinition, reinvention, and construction of innovative political and cultural discourses and practices" (Cole & Foster, 2001, p. 14). One of these transformations involves redefinition of environment; "wilderness" thus becomes home and community, the spaces in which we engage the natural world. In his book on the Environmental Justice movement, Patrick Novotny describes this redefinition as including wilderness and "where we live, work, and play" (Novotny, 2000). For millions of farmworkers in the United States and abroad, environmental issues have more to do with the latter than with pristine and sublime images of "wilderness." This paper addresses the importance of redefining the environmental as "wilderness and*" by examining the material rhetoric of pesticides and offering potential articulations of pesticide discourses for consideration.*

In an exploratory essay written a quarter century ago, titled "Rhetoric and Death," Henry W. Johnstone, Jr. (1980) states that he wants "to describe the area where rhetorical transactions end and nonrhetorical reactions begin" (p. 65). Johnstone approaches his topic philosophically but, in a sense, this has also been the project undertaken by proponents of material rhetoric. Rhetorical critics and theorists who engage Marxist materialism have moved beyond description to critically examine problems and practice judgment at the intersections of symbolic transactions and physical reactions. For Johnstone, rhetorical transactions, in contrast to nonrhetorical reactions, involve understanding, consideration, and freedom (even when severely constrained). "Rhetoric is an evocation or raising of consciousness" (p. 68). Moreover, his conception of rhetoric as transaction is dependent upon a "wedge" driven between the attending self and the object of attention; these wedges constitute the spaces of possibility for redefining selfhood in the rhetorical transaction. As Johnstone points out, "One cannot evoke an object of attention without evoking a self" (p. 68).

In considering the material and rhetorical dynamics of the interconnected problematics of farmworkers[i] rights, environmental justice (EJ), and sustainable agriculture (specifically the efficacy of pesticides), I was struck by the title and purpose of Johnstone's (1980) essay. Clearly, pesticides effect death (a seemingly nonrhetorical reaction); indeed, that is their intended purpose (a rhetorical transaction). To choose to apply pesticides, then, is to make a profound rhetorical and material gesture toward death.[ii] Since before Rachel Carson's *Silent Spring*, environmental advocates have fought to ban, limit, or at least test the numerous chemical killers developed by agricultural researchers every year. Johnstone's essay also anticipates and alludes to some of the problems in rhetorical studies that motivate communication scholars to examine material theories of rhetoric. Two of these: the question of the materiality of discourse or discursivity of the material world and the idea of the self as an interpellated subject can help us to better perform rhetorical criticism as well as practice sound judgment.

Following a discussion of the material consequences of pesticide poisoning among farmworkers[iii] and their families, I take up the discussion of rhetoric's materialism. Drawing upon Ronald Greene's (1998) call for a materialist rhetoric grounded in a logic of articulation, and Stuart Hall's elucidation of the latter concept, I present a collage of potential articulations to the problem of pesticide poisoning of farmworkers, each of which has the potential to open different possibilities for environmental justice advocates. I

conclude by discussing the role of environmental justice movements and communication scholars in the evocation of objects of attention, such as websites, medical studies, films, agribusiness spokesperson discourse, theater productions, news articles, cultural folk traditions, government officials, rallies and marches, congressional reports, farmworker narratives, and consumer practices.

The Materiality of Pesticides[iv]

The multi-billion dollar pesticide manufacturing industry relies upon basic capitalist principles: exploit an existing need and innovate constantly. The existing need, pest control in agriculture, can be met in numerous ways as advocates of sustainable agriculture have demonstrated (Perfecto, 1995). Also, the need that pesticide manufacturers address is self-perpetuating, creating a potentially endless cycle of capital flow into the coffers of the chemical industry. As chemical pesticides are introduced into the environment, they kill pests as well as many of the natural parasites that control pest populations and that benefit the environment in other ways. Some of the pests (and their parasites) adapt, becoming resistant to the chemicals in their fight for survival. Farmers facing these chemically resistant pests then need different means of controlling their populations. The strong relationship among agribusiness, the chemical industries that manufacture pesticides, the federal government, and late consumer capitalism practically insures that chemical pesticides will be one of the primary solutions to which farmers turn to address their needs. Fortunately, sustainable agricultural practices such as crop rotation and other organic farming methods are among the fastest growing sectors of the agricultural industry. Such approaches still only comprise about 1% of the industry, though ("In California's Central Valley," 2005).

Few regulatory measures currently exist for pesticides. One study reports that produce is more frequently tested for compliance with cosmetic standards developed by the agricultural industry than for toxic pesticides: "Mexican growers must conform to strict cosmetic standards for vegetables, standards that have been written into U.S. regulations as a means of limiting both domestic production and foreign competition" (Wright, 1986, pp. 50-51). For produce imported to the U.S. from the agricultural valley of Culiacan in Mexico, every load is examined by the FDA for compliance with the cosmetic standard (no bruising, crushing) while only one of every fifteen loads is tested for pesticide contamination levels (Wright, 1986).

Environmental Protection Agency (EPA) regulations require safety materials to be available and adequate training to be provided for the application of hazardous materials. Despite these regulations, farmers, contractors, and pesticide applicators are frequently exposing farmworkers to toxic pesticides. Citing recent reviews of agricultural labor and health studies, Salazar et al. (2004) point out that "minority and disadvantaged persons, such as migrant farmworkers, are particularly vulnerable to pesticide health effects." Moreover, EPA estimates suggest that "as many as 300,000 farmworkers suffer from pesticide-related illness each year, and that many of these are children (Salazar et al., 2004, p. 147).

Many farmworkers report having minimal or no training and little professional knowledge about risks associated with pesticide exposure. Most of their information about pesticides comes from family members or firsthand experience (Salazar et al., 2004). Due to this lack of technical information about occupational hazards, many farmworkers actually increase their risks of exposure. For example, Wright (1986) observed migrant workers in camps in the Culiacan Valley of Mexico.

> Pesticides are routinely mixed using water from irrigation ditches. The pumps and plumbing used to draw water, in none of the observed operations, had back-up valves to prevent the return of the pesticide by siphon action to the canal in the event of the failure of the pump or motor. During mixing operations, powders and liquids from pesticide containers were spilled on the surrounding area. Pesticide containers are discarded casually, and are often re-used by migrant workers for domestic purposes (Wright, 1986, p. 34).

According to Wright (1986), within the corporate transnational agricultural framework, "Protection of plants is recognized as an important social responsibility; protection of people and the environment is in practice given less weight" (p. 49). Or, as one teenaged Hispanic farmworker put it, "They worry about the fruit a lot. They don't worry about the people" (Salazar et al., 2004, p. 156).

Farmworkers are a vulnerable population because of their occupational exposure to hazardous material. There are three major ways in which farmworkers are exposed to pesticides: through foliar, soil dust, and airborne residues. Of the three, "foliar residues are considered to be of greatest importance, soil dust

residues of medial importance, and airborne residues of least importance. Dermal absorption is the primary avenue of exposure, inhalation and ingestion are secondary avenues" (Sakala, 1987, p. 666).

The most frequent cause of human poisonings is a class of insecticides called organophosphates. Organophosphates poisoning (through such pesticides as parathion and diazinon) causes acetylcholinesterase inhibition (Philip, 2001, p. 211). Acetylcholinesterase (ACHE) "is an enzyme that clears the area around a synapse of the acetylcholine (ACE) chemicals that transmit messages after electrical stimulation" (Wright, 1986, p. 35). The result of the lowered ACHE levels is nervous system malfunction, producing weakness, fatigue, and even paralysis (Philip, 2001). Although organophosphate pesticides can be absorbed through skin, inhaled, or swallowed, farmworkers are most likely to absorb the chemicals through their skin. For this reason, many studies have focused on the development of interventions designed to empower farmworkers to take precautionary measures. Programs and literature encourage farmworkers to protect themselves from dermal absorption of pesticides and transmission through residue on clothing and in vehicles (Arcury et al., 2002; Coronado et al., 2004; Parrott et al., 1999; Salazar et al., 2004).

Symptoms of organophosphate poisoning include dizziness, narrowed pupils, skin rash, loss of appetite, nausea, vomiting, headache, weakness, stomach cramps, difficulty in breathing, involuntary defecation and urination, disorientation, shock, respiratory failure, excessive bronchial secretion and pulmonary edema, tremors, coma, and in severe cases, death (Arcury et al., 2002, p. 233; Swartz, 1975, p. 27; Wright, 1986, p. 39). "Pesticide exposure can also have long-term effects on health in the form of cancer and neurologic and reproductive problems" (Arcury et al., 2002, p. 233). Some studies link pesticide exposure to infertility and birth defects as well as neurological disorders (Clarren, 2003, p. 23). Symptoms can be mistaken for other illnesses, too, leading to mistreatment.

In addition to the possibility that their symptoms will be misdiagnosed, many farmworkers fail to seek medical attention in the first place. Some of the reasons are financial; the worker is paid by piece rate or hourly and cannot bear the loss of income or even the travel time. Workers also fear reprisals from their bosses, who might fire them if they voice their concerns about pesticide poisoning (Swartz, 1975). Some farmworkers do not even practice basic safety measures such as washing before eating lunch. One adolescent farmworker "stated that he would not leave his place in the field to wash his hands because 'the boss would see you and get mad'" (Salazar et al., 2004, p. 156). A worker may lack basic information about pesticides and about worker's compensation protections, and some are prohibited from seeking compensation or health care by bosses who fail to comply with laws (Swartz, 1975, p. 28; Wright, 1986, p. 40). Finally, farmworkers are dissuaded by a lack of sympathy from medical personnel and a lack of trust of the medical establishment. Undocumented workers fear they will be deported if they seek medical attention. Migrant health clinics try to address many of these barriers to treatment while also promoting farmworker safety with few resources and little or no enforcement of federal or state regulations.

The children of farmworkers also experience the effects of pesticide poisoning. Studies identify an elevated incidence of leukemia as well as cancers of the brain and kidney among children of farmworkers (Daniels et al, 1997). Miscarriage and fetal loss is "more common among spouses of pesticide applicators than among spouses of nonagricultural workers" and "more commonly experienced during the spray season" (Coronado et al., 2004, p. 142).

Many workers who experience mild symptoms do not associate their illness with pesticides. Some attribute their symptoms to the traditional Mexican illness *susto* (Baer & Penzell, 1993). Some do not believe the farmers would intentionally put their health at risk. Others are simply not adequately informed about pesticides, and the minimal regulations that do exist are rarely enforced. Even the EPA standards, when publicized and enforced, do not prevent most of farmworkers' exposure to pesticides. Still today, it is all too common for some farmers, especially those in "Third World" countries, to spray pesticides while workers are in the field (Wright, 1986). In one Florida Rural Legal Service study conducted in 1980, 48% of more than 400 farm workers interviewed had been sprayed at least once while harvesting (Perfecto & Velasquez, 1992). Swartz (1975) points to another kind of intentional poisoning:

> While many pesticide related illnesses are the result of carelessness – directly spraying workers in the field or allowing pesticide clouds to drift away from target areas onto nearby workers – another cause of poisoning is knowingly allowing workers to enter fields and orchards too soon after the areas have been sprayed. (Swartz, 1975, pp. 28-29).

In fact, only a handful of pesticides currently on the market have published reentry periods; most have not been adequately tested. Reentry periods are recommended to the EPA by the Agricultural Re-entry Task Force, "a group formed by chemical companies" that includes peer review by "scientists selected and paid by industry"(Clarren, 2003, p. 24). Moreover, the existing reentry intervals are usually set by laboratory testing of the degradation of a single pesticide on an edible portion of the crop even though workers are handling the foliage (Swartz, 1975, p. 29). Once again, the focus is on protecting the interests of consumers, not farmworkers. Also, there are synergistic effects from pesticide interactions when farmers use multiple pesticides or workers harvest different crops. "Because many fieldworkers work on several crops, they may be exposed to several different types of pesticides throughout a given season" (Coronado et al., 2004, p. 142). Finally, decay products can be even more toxic than the original pesticide. As Swartz (1975) points out, each substance produced and affected by the life cycle of the pesticide needs to be tested.

Like other farmworkers, strawberry workers have expressed concerns about the impact chemicals on their health. According to an article by United Farm Workers (UFW) President Arturo Rodriguez, strawberry workers are exposed to the soil fumigant methyl bromide, which has been linked to birth defects and brain damage in laboratory studies as well as to hundred of injuries among California farm workers (Rodriguez, 1997). These cases illustrate the importance of considering the cumulative and synergistic effects of pesticides upon farmworker communities.

In his examination of the "politics of pesticide poisoning" among farmworkers in Mexico's Culiacan valley, Angus Wright (1986) summarizes the nature of the problem facing agriculture:

> Powerful commercial growers subject rural workers and residents to pesticide hazards even though growers clearly possess the technical knowledge and expert advice to avoid much of the abuse. Peasants subject themselves to pesticide hazards because they are eager for any promised solution to their economic weakness, and because they genuinely do lack the training and knowledge to handle pesticide technology properly. Although this is an oversimplification of the situation, it serves to emphasize an important aspect of this analysis—that pesticide abuse is largely a result of the unequal distribution of power and resources. (Wright, 1986, p. 47).

To put it another way, "When you are working in the field, you feel like you have no rights" (Salazar et al., 2004, p. 158). Clearly, pesticide poisoning is an issue that affects our understanding of human rights, sustainability, and environmental justice. The material consequences of pesticides are, in theory, relatively non-discriminatory, though children and elderly persons are especially vulnerable because of their developing or weakened immune systems. In practice, however, pesticide poisoning presents a case illustration of environmental racism and economic discrimination. Before turning to the discussion of material rhetoric, it is worth highlighting some of these mitigating factors.

Environmental Injustice

Of the more than 4 million migrant and seasonal farmworkers in the U.S., 81% are foreign-born with 95% of those born in Mexico (Arcury, Quandt, & Russell, 2002). 90% of U.S. farm workers are people of color, and most of these are Mexican or Mexican American (Burch & Harry, 2004; Perfecto & Valasquez, 1992). Mexican and Mexican American farmworkers, as well as other people of color, are frequently the targets of racist epithets, insults, and discrimination. These discursive practices reinforce the rhetorical dehumanization of farmworkers, contributing to a social and cultural climate that enables pesticide poisoning to continue without substantial public intervention.

Economic discrimination also contributes to the environmental injustice facing farmworkers. "Poor people have the greatest exposure to pesticides, at work and in their communities. Those communities facing pesticide contamination of their air, soil and water are largely lower-income rural towns with a high proportion of farmworkers" (Cole & Bowyer, 1991). Numerous medical professionals have documented the existence of "cancer clusters" in rural towns, many of these highlight the increase in incidence among children especially.

The extent to which nonwhite race and poverty are markers of environmental injustice among farmworkers is demonstrated by the systematic exclusion of this single class of workers from state and federal labor protections. Farmworkers, unlike workers in general, are vulnerable populations because of their occupational pesticide exposure as well as the ethnocentrism and inequality of the broader society. "One reason workers, in general, have not been viewed as a vulnerable population is the assumption that

resources exist in the workplace to protect workers and address health care issues" (Daroszewski, 2004, p. 170). As mentioned above, aside from unenforced EPA regulations aimed at limiting exposure, farmworkers' occupational risks have not been addressed. "Farm workers are intentionally excluded from the Occupational Safety and Health Act (OSHA), which governs health and safety standards in the workplace; from the Fair Labor Standards Act, which governs minimum wages and child labor; and most importantly, from the National Labor Relations Act, which guarantees the right to join a union and bargain collectively" (Perfecto & Valasquez, 1992).

A dramatic alteration in the relationship among pesticides, agriculture and farmworkers needs to take place in order to move toward environmental justice. As Perfecto and Velasquez (1992) note, "The time seems ripe to reject the anachronistic notion that chemical poisons must be part and parcel of modern agriculture and redefine the meaning of 'modern' to include the health and safety of farm workers, farmers, consumers, and the environment" (Perfecto & Velasquez, 1992). An adolescent farmworker echoes this vision in a more localized way: "I think the farmer should take . . . more responsibility than just making sure the work is done. I think they should take the responsibility of the health of the workers" (Salazar et al., 2004, p. 163). The kind of redefinition and individual implication that is called for can be approached from a material rhetoric perspective.

Material Rhetoric and the Logic of Articulation

Rhetorical critics in the communication field have attended to the interpretive dimensions of material rhetoric, advancing a critical rhetoric and ideological criticism that address the politics of representation. Ronald Greene (1998) critiques this narrow focus upon the politics of representation in his essay, "Another Materialist Rhetoric." Greene argues that communication scholars engaged in the theoretical development of ideology criticism and constitutive or critical rhetoric focus on a logic of representation to the exclusion, and detriment, of material rhetoric. He proposes the abandonment of the logic of representation for a logic of articulation in order to "focus on rhetoric as a technology of deliberation that allows a series of institutions to make judgments about the welfare of a population" (pp. 38-39). The perspective offered by Greene does not deny practices of power such as those identified above as environmental racism and economic discrimination but it does reject the idea that these are foundational to any governing apparatus. Instead, "A materialist rhetoric built on the logics of articulation . . . maps how they are transformed, displaced, deployed and/or challenged by a particular governing apparatus" (p. 39).

Greene only briefly describes the kind of logic of articulation he feels is necessary to support a new materialist rhetoric. He cites Lawrence Grossberg's (1992) definition of articulation as "the production of identity on top of differences, of unities out of fragments, of structures across practices. Articulation links this practice to that effect, this text to that meaning, this meaning to that reality, this experience to those politics" (Grossberg, 1992, p. 54; cited in Greene, 1998, pp. 34-35). In the case of agricultural pesticides, articulation also links those politics (chemical agribusiness, environmental racism) to these bodies (farmworkers and their communities). As Richard Marback (1998) notes in his study of the material rhetoric of the Monument to Joe Louis, "Rhetoric is always already embodied. Meanings are made, then, through the ways we occupy, and are asked to occupy, spaces and texts" (p. 86). The implications of this theoretical move are significant. As Greene notes,

> Not only does a logic of articulation allow for abandoning a politics of representation, it generates the possibility of rematerializing the political, economic, cultural and affective structures of public deliberation as sites of rhetorical effectivity. In other words, the materiality of rhetorical practices exist in how they occupy a position in different institutional structures historicizing those institutions at the same time as those institutions put rhetoric to work for the purpose of governing. The point is that a logic of articulation opens the possibility of studying how rhetorical practices traverse a number of different structures for the purpose of making judgments and planning reality. (Greene, 1998, p. 35).

Like Greene, I see articulation as a necessary component of an effective material rhetoric. In contrast to Greene, I view the politics of representation as an important part of the process of articulation. Marback (1998) observes, and I concur, "A material rhetoric that situates corporeality, spatiality, and textuality in each other can become a powerful critical tool" (p. 87). He elaborates:

> A material theory of rhetoric would articulate the impact of material and representational practices on each other. To weigh these inscriptions in terms of each other would be to critically engage dominant strategies and meanings made available for public life. . . . A material theory of rhetoric would usefully engage the spatial and textual meanings of equality and justice through which we experience the corporeality of ourselves and others. (Marback, 1998, p. 98).

Likewise, Sloop and Ono (1997), in their discussion of material judgment and "out-law discourse," argue that a "materialist conception of judgment must recognize that, even while theorists and critics become more comfortable with the de-essentialization of subjectivities, judgments continue to be made as if those subjectivities were essential" (p. 57). In other words, attention to textual meanings and the politics of representation helps us to forge a material rhetoric that is articulated at once to how bodies accrue meaning through symbolic communication and how "rhetoric traverses a governing apparatus" (Greene, 1998, p. 38). I call for the initiation of such a material rhetorical investigation into farmworker/pesticide articulations toward the end of this essay.

In order to operationalize a logic of articulation that accounts for the significance of representation yet does not become preoccupied by textuality, it is necessary to explore the concept further. Left implicit in concepts such as Michael Calvin McGee's (1975, 1980) "ideograph," articulation is the linkage between words, images, concepts, and practices that might not otherwise be connected. As a critical practice, articulation "highlights the dynamic nature of social and cultural meanings and the necessary provisionality of methods and strategies of analysis, expression and action (Brooker, 1999, p. 11).

The term "articulation" is, ironically, articulated in a number of ways by theorists of language and culture. For example, Ferdinand de Saussure (1966) posits articulation as the arbitrary linkage between a signifier and signified. For Roland Barthes (1972), articulation has to do with the production of new, though still arbitrary and unfinished, meanings. Articulation has also been claimed by post-Marxists such as Ernesto Laclau and Chantal Mouffe (1985) as a way of connecting the economic critique of classical Marxism with contemporary perspectives on culture and politics. As Barker (2000) points out,

> The concept of articulation is also deployed to discuss the relationship between culture and political economy. Thus culture is said to be 'articulated' with moments of production but not determined in any 'necessary' way by that moment, and vice versa. Consequently, we might explore how the moment of production is inscribed in texts but also how the economic is cultural, that is, a meaningful set of practices (Barker, 2000, pp. 9-10).

It is this last sense of articulation that most closely resembles the formulation proposed by Stuart Hall. Hall's (1986) concept of articulation works at a number of levels. His responses to interviews first published under the title "On postmodernism and articulation" indicate a double meaning of articulation as both a speaking forth and as the conjunctive synthesis that unites seemingly discrete elements, under certain conditions (Hall, 1986, p. 141).

Extending this definition, Jennifer Slack (1996) asserts articulation first as a non-reductive theory of contexts and as a method of cultural analysis. She then moves to consideration of the epistemological, political, and strategic levels at which articulation works as a way of thinking, exposing power relations, and intervening in particular formations. Slack's (1996) discussion highlights several features of articulation that help to elaborate its usefulness as a conjunctive analytic practice. Like Hall, she defines theory in cultural studies generally, and the theory of articulation in particular, as "a 'detour' to help ground our engagement with what newly confronts us and to let that engagement provide the ground for retheorizing" (Slack, 1996, p. 113). Slack argues that, methodologically, articulation enables us to "engage the concrete in order to change it" (p. 114). This process of "rearticulation" demonstrates how articulation works not only to connect already-existing epistemological categories and material practices but also to create new ways of thinking discourse and action together.

Hall's (1986) definition of articulation makes clear the provisional quality of any unity among different discourses. He argues that the linkage between discourses "is not necessary, determined, absolute, and essential for all time;" thus, "The 'unity' which matters is a linkage between that articulated discourse and the social forces with which it can, under certain historical conditions, but need not necessarily, be connected" (p. 141). In this way, articulation is situated within, and manifested in, ongoing cultural practices. Its praxis lies in our critical abilities to "see the ways in which a variety of different social groups enter into and constitute for a time a kind of political and social force" and to use that insight to forge new alliances (p. 144).

In the next section, I briefly describe just a few of the innumerable material rhetorics that articulate pesticide poisoning to farmworkers. My purpose in forging these articulations is to encourage other scholars and students to develop extensive examinations of the connections between environmental justice issues and the governing apparatuses with which they intersect. I also aim to further the purpose of farmworker advocates and environmental organizations by exposing these intersections and implicating my self within some of them.

Articulations in the Rhetorical/Material World

For this study, I examined a wide range of texts, seeking only articulations to the issue of pesticide poisoning in farmworkers, seeking only possibility. The texts were drawn from a sample that included the websites of farmworker advocacy organizations, an anti-pesticide group, and the Oregon State Department of Agriculture, medical studies of farmworker health, films about farmworkers' labor conditions and rights, official statements from agricultural and corporate farm bureau spokespersons, eco-theatre performances, news and magazine articles, folk traditions, rallies and marches, congressional reports on pesticides and migrant farmworkers, and the narratives of farmworkers themselves. I discuss just a few of these texts briefly, although they are all worthy of much more extended examination and analysis.

Where I live, the primary state agency charged with considering the relationship between agricultural pesticides and farmworkers is the Oregon Department of Agriculture (ODA). The ODA's website includes information about the various Departments, Divisions, and Boards within the ODA. The Pesticides Division includes a page that defines pesticides according to Oregon State Law and federal law. It links to a downloadable PDF file of the ODA Pesticides Investigations and Enforcement brochure, which explains the job of the pesticide investigator, sampling practices, and answers to common questions about investigation and enforcement. The back side of the brochure includes contact information for the reporting of pesticide exposure. Ironically, the Pesticides page also includes a link for the Pesticide Use Reporting System (PURS) page. A largely empty white screen frames a small box of text, centrally positioned on the screen:

> The PURS web page is unavailable. Insufficient funding and spending authority were provided to operate the system during the 2003-2005 biennium. While statutes still require reporting, the department will not take enforcement action for failure to comply. No means exists for the department to collect pesticide use reports." (ODA, 2005).

From a material rhetoric perspective, this statement effectively invites pesticide users to violate regulations if it is in their interests. It denies responsibility for enforcement by placing the blame squarely on the state's failure to provide adequate legislative appropriations. It also writes the impact of pesticides on farmworkers out of the system. The PURS becomes a site for the collection of reports and enforcement of compliance, which is something quite different than being the agency which protects the health of farmworkers and their communities. The ODA's rhetoric is material, directly impacting the lives of two disproportionately matched groups of people—those who profit and those who perish because of pesticides.

The issue of pesticide poisoning among farmworkers can easily be articulated to larger social discussions of public health, even to material discourses about state intervention in mortality. For these and other reasons, it is important to consider the range of medical discourses and health care practices that bear on farmworker health.

In the last three decades, much research has been conducted with communities of farmworkers in the south, southeast, and on the west coast, as well as in crop-specific farming communities in other regions. Farmworkers are difficult medical research subjects to access for a variety of reasons, which clinicians and academics have cited elsewhere. Despite the problems of access, trust, and compensation, researchers have gleaned important information about the impacts of pesticides on farmworker health. Some of these findings were presented in the first section of the paper. The practice of articulating medical reports to the goals of environmental justice movements can create spaces for collaboration among health and medical agencies, including Migrant Health Centers, environmental organizations, community or citizen action groups, and teachers and students of chemistry, sociology, environmental studies and (pre)medicine, among others. Parrott et al.'s (1999) study and development of the "Cultivando Buenos Habitos" campaign directed toward Georgia's migrant farmworker population demonstrates a collaboration between a

Department of Speech Communication and a Cancer Control Program operated by the state. Such collaborative efforts can result from the articulation of activist, educational, and medical discourses.

Discourse produced by farmworker advocates, pesticide industry lobbyists, agribusiness leaders, and government officials constitutes an important site for the articulation of social and cultural values. Wright (1986) calls attention to the fact that "The problem of pesticide hazards clearly arises from a combination of corporate and public policy that has shaped the character of commercial agriculture around the world" (Wright, 1986, p. 26). The character of commercial agriculture is illustrated in the following public statements. Employing an easy either-or fallacy, Rebeckah Freeman, a "governmental affairs director for the American Farm Bureau Federation," describes the pesticide poisoning of farmworkers as "a trade-off." She asks, "Do you want your fruit and vegetables to look pretty or do you have a social issue with these pest-management tools?" (qtd. in "In California's Central Valley," 2005). Doug Nelson, executive vice president of the pesticide trade lobby CropLife America, simply frames the issue as an inevitability: "This country, as much as people would like to think it could survive without these products, it can't" (qtd. in Ritter, 2005).

In addition to attending to the discourse of industry lobbyists and representatives, there are numerous reasons we should pay attention to the discourse of government spokespersons, not the least of which is the fact that "two-thirds of the highest ranking officials [in the EPA's Office of Prevention, Pesticides and Toxic Substances] since the OPPTS was established in 1977 now receive at least part of their paycheck from pesticide interests, according to a report by the Environmental Working Group" (Clarren, 2003, p. 24). EPA Deputy Administrator Linda Fisher was a lobbyist for Monsanto and the associate assistant administrator in the OPPTS was previously employed by the American Farm Bureau Federation, "where he criticized EPA efforts to assess pesticide risks, specifically the application of an extra tenfold safety margin for children" (Clarren, 2003, p. 24).

In my own backyard, Jeff Kropf, an Oregon State representative and farmer who fought to strip funding from the Pesticide Use Reporting System discussed earlier, employed a rhetoric of denial and deflection in his effort to defeat the program. "I don't believe liabilities exist, because they would have been caught in the incredibly complicated process of registration. . . . We are already highly regulated. It needs to be proven that uses of certain chemicals damage human beings before we go forward with knee-jerk regulation" (qtd. in Clarren, 2003, pp. 24-25).

Director of the ODA Katy Coba (2004) performs a kind of doublespeak in discussing the ODA's registration of pesticides in a speech to the Eastern Oregon Forum, an event sponsored by the agricultural industry. She says, "We investigate potential misuse of product. We ensure fertilizer products meet standards for heavy metals and declarations as to micronutrients and other components. And, as you all know, the department was charged with implementing a pesticide use reporting system that has had many starts and stops with the present budget situation and other issues" (Coba, 2004). These discourses are important because, as Burch and Harry (2004) note, government sources that appear to be neutral often present biased positions. Their study reveals how seemingly neutral government sources, quoted in California news stories about pesticides and farmworkers, actually present a subtle pro-pesticides position when examined closely and qualitatively. By articulating the discourse of spokespersons to other material rhetorical texts, we can better assess the strategies through which governing apparatuses assert authority and control over meaning and practice.

Other material rhetorics surveyed for this study but omitted from this article also warrant investigation. Future research on farmworkers and pesticides should take up and further probe the articulations among the above discourses, as well as websites, eco-theatre performances such as Cherrie Moraga's (1992) *Heroes and Saints* and Teatro Nuestra's (1990) *La Quinceanera* (see Cless, 1996), the organizing activities of immigrant groups and labor movements (such as the 2004 Freedom Rides for Immigrant and Farmworker Rights), histories of farmworker rights organizations (e.g., Stephen, 2001), farmworker publications, and folk traditions related to illness (see Baer & Penzell, 1993).

The Role of Environmental Justice Movements

The articulations sketched above are only an initial step toward the development of a material rhetoric of pesticides that accounts for (and ceases) the pesticide poisoning of farmworkers and farm communities. Other articulations need to be remade, including those that call attention to the complicity of consumers. For example, Weir and Shapiro's (1981) *The Circle of Poison* emphasized how pesticide dumping in the

Third World threatens North American consumers. Importantly, a logic of articulation requires that such examinations and interventions not divorce themselves from the local impacts of pesticide use and production but remain connected, so that we may consider the complexity of the problems and solutions we face. Likewise, although I proceed from a relatively anti-pesticide and pro-organic ideological position as a farmworker advocate and environmentalist, I recognize the importance of engaging the discourses of farmers, chemical manufacturers, agribusiness lobbyists, and government officials, who often are in the position of defending and promoting the use of pesticides. This is where the politics of representation matter. This is where authentic, implicated communication needs to occur—in the spaces between the profits of agribusiness and the poisoning of farmworkers.

Wright (1986) reminds us that "the problem of pesticide poisoning of field workers is part of a larger environmental and community health concern of major proportions" (p. 26). Perfecto and Velasquez (1992) add, "Environmentalists, heeding the call for environmental justice, are being challenged not to stand by and allow environmental policies that solve problems for some, yet leave others at risk – and they are responding." Increased attention to, and alliances with, farmworker advocacy organizations will help to support this articulation of environmentalism in the 21st century.

Environmental organizations have a varied history with farmworker and pesticide issues, despite the prominent role Rachel Carson's *Silent Spring* played in environmental movement and, more specifically, the effort to ban DDT. Robert Gordon (1999) examines the relationships between the UFW's anti-pesticide campaigns and unionization efforts and the environmental politics of groups such as the Sierra Club. He focuses on the reasons why mainstream environmental groups refused to support UFW boycotts, despite the fact that they acknowledged the hazards pesticides posed. Smaller organizations such as the Center for Science in the Public Interest, Environmental Action, Friends of the Earth, and the Environmental Policy Center recommended the restriction of hazardous pesticides to the EPA "and endorsed the UFW's boycott of California lettuce and grapes" (p. 53). In short, Gordon suggests that "the political, ideological, class and ethnic differences" between the Sierra Club and the UFW "ultimately prevented an effective alliance from developing" (p. 55).[v] He more or less concludes, as Cesar Chavez did more than thirty years before, "The unity which the union movement can have with the environmentalists . . . is crucial to our survival" (qtd. in Gordon, 1999, p. 53).

Scholars and teachers of environmental communication can impact the articulation of environmental justice and farmworker rights by putting rhetoric to the work of governing more humanely and equitably, by using their positions in the community and academy to open up new spaces of articulation (through research programs, service work, internships, independent studies, grants and workshops), and by considering their own rhetorical and material practices as they can be articulated to the interests of farmworkers.

Notes

[i] I choose the term "farmworker" for ease of representation and because of the numerous ways in which the articulations between the location and nature of the work impact identity. Other researchers occasionally use "farm worker" which tends to include people such as farm owners who work the land, their family members, and contractors who also labor on the farm; I preserve their usage only when quoting because it is principally the class of (predominantly seasonal and/or migrant) wage or piece-rate laboring farmworkers who suffer most under the matrix of economic oppression, racism, and ethnocentric discrimination.

[ii] Johnstone (1980) suggests that the subject being killed (insect, fungus, farmworker) must be cognizant of the threat in order for it to qualify as a rhetorical transaction. A stimulus-response relationship to pesticides, for Johnstone, might constitute a mere reaction. In contrast, I read the intentionality and effect of pesticide poisoning as a material rhetorical transaction because it articulates rhetorical bodies and material practices in ways that produce new meaning and significance for daily life.

[iii] As Arcury et al. (2002) point out, "The nature of farm work exposes everyone who works on a farm to pesticides—farm owners and managers as well as farmworkers. However, farmworker pesticide exposure must be considered separately because of the extensive hand labor that most farmworkers perform and because farmworkers have limited power to influence workplace safety" (p. 233).

[iv] Following Parrott et al. (1990), I use the term "pesticides" to refer to "the use of insecticides, rodenticides, fungicides, herbicides, fumigants, defoliants, moluscicides, nematocides, algicides, and acaracides, with 1.2 billion pounds of pesticides being used in the U.S. each year" (p. 50).

[v] The Sierra Club now has an Environmental Justice Committee and an Environmental Justice Policy which states that "we must attain social justice and human rights at home and around the globe." Further, the Club's Environmentally Hazardous Substances Policy states, "The release of any environmentally hazardous substance should be prohibited, unless the environmental benefits clearly outweigh environmental damage. Safety and environmental quality are the primary factors in deciding whether or not to use such a substance. In each case, strict limits to the use of the substance should be established and followed. This will protect worker and community health, conserve resources and improve environmental quality" (qtd. in Pezzullo, 2005).

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The Biography of Landscape: Reading Chicago's Jackson Park

Barb Willard
DePaul University

This paper examines the biography of a landscape, Jackson Park, on Chicago's south side. It was once the site of the 1893 World's Columbian Exposition and today is undergoing ecological restoration in an effort to restore some of its natural ecosystem. This project examines the four major iterations of this landscape as it has moved, at the hands of humans, from a natural to a cultural landscape (and then, by some measure, back to a partially natural landscape). The story that is told through these iterations is, I argue, a story that reflects our changing relationship with the environment and functions rhetorically as a material marker of human presence and preference.

This is the story of a landscape. Just as the author of a story book puts pen to paper in order to shape her story, so does the landscape architect put shovel to dirt to carve a story out of the land. The interpretation of both the natural and the cultural landscape reveals the material mark that humans leave on the environment in an effort to construct particular meanings in place. In this sense, we can think of the creator of a landscape, such as a landscape architect, as an author and the natural land upon which she works as her medium through which she creates a meaningful *text* to be interpreted by others. Of course, authors of cultural landscape are themselves influenced by the historical milieu in which they *write* on the land. The text they create is informed by the relationship that people in a particular time and place have with the land and with the environment. Donal Carbaugh (1996) writes that "communication occurs in places, cultivates intelligible senses of those places, and thus naturally guides ways of living within them" (p. 38). I maintain that cultural landscapes, acting as communicative artifacts, fulfill the role of communication as identified by Carbaugh. The analysis of the text of cultural landscapes identifies the role of communication about, in, and on the environment.

This paper will interpret one particular cultural landscape in an effort to reveal what Pierce Lewis (1979) calls the "unwitting autobiography, reflecting our tastes, our values, our aspirations, and even our fears, in tangible, visible form" (p. 12). This landscape is called Jackson Park and sits on the banks of Lake Michigan on the south side of Chicago. It was the site of one of the most significant world fairs in history; the World's Columbian Exposition in 1893 and today is the site of extensive ecological restoration in an effort to restore some of its rare natural ecosystem. This project examines the four major iterations of this landscape as it has moved, at the hands of humans, from a natural to a cultural landscape (and then, by some measure, back to a partially natural landscape). The story of this place is, I argue, one that reflects our changing relationship with the environment and functions rhetorically as a material marker of human presence and preference.

Chapter 1: Sublime Lake Michigan

About seven miles south of the center of downtown Chicago, there is a tract of land - about 600 acres on Lake Michigan's coast. What we now call Jackson Park was once a beautiful, by contemporary aesthetic standards, low lying, wind swept beach front of dunes and marsh land, with a few small oaks. Many current Lake Michigan environmentalists have such a landscape in mind when they embark on coastal restoration projects. And yet, when Frederick Law Olmsted was commissioned to design the park,

he saw only a landscape that stood in stark contrast to the "sublime" beauty of Lake Michigan. As he would describe in his 1871 plan for the park:

> There is but one object of scenery near Chicago of special grandeur or sublimity, and that, the lake, can be made by artificial means no more grand or sublime. By no practical elevation of artificial hills, that is to say, would the impression of the observer in overlooking it be made greatly more profound. The lake, may, indeed be accepted as fully compensating for the absence of sublime or picturesque elevations of land. (Rybcynzki, 1999, p. 300)

Olmsted was not alone in this perception of the landscape. The official *Book of the Fair* published the year after the exposition closed, described the original site as "a sandy waste of unredeemed and desert land, in its centre a marshy hollow, and without trace of vegetation, save for a stunted growth of oak, and here and there a tangled mass of willow, flag and marsh grass, which served but to render its desolation still more desolate" (Bancroft, 1894, p. 47).

Ultimately, for Olmsted, the only solution for this rather "desolate and useless" lake front was to extend the lake into the land by creating a system of lagoons that would connect various sections of the park. Water then would be the unifying theme and would play upon the sublime beauty of Lake Michigan. Olmsted's response to the original landscape and his desire to build upon the features of the lake reflect a particular understanding of nature prominent in the late nineteenth century, the awesome and sublime majesty of grand natural features "of a superhuman scale that inspire[d] awe and fear" (Spirn, 1995, p, 95). While large bodies of water, like Lake Michigan, or majestic mountains, like the Rockies, might have fit in with this image, the prairie and dune lands of the Midwest did not meet the aesthetic criteria of sublimity. Consequently, Olmsted and his partner Calvert Vaux developed a plan that would rely on human engineering capabilities of the industrial age, to improve upon a "natural setting" so that it would more readily reflect sublime features. The plan called for dredging out the marshes to create waterways and using the leftover sand and soil to create islands and raise the level of the site above lake level. Of course, the observer would not realize that this landscape was artificially created, for Olmsted was known for his talent at concealing the artifice of his design. Anne Whiston Spirn (1995) writes that the "radically reshaped" landscapes of Olmsted's creation represent the "conflicting environmental values and competing purposes" that culture has with nature (p. 91).

Unfortunately for Olmsted, this great engineering feat was never accomplished. The plans were accepted by the Chicago Park Commission and work had just begun when the great fire of 1871 swept through Chicago, leaving much of this city in ruins. Consequently, all energy went into rebuilding the city, and much of the park was left in its original state. But my story of this landscape is not over.

Chapter Two: The White City

Frederick Law Olmsted returned to Chicago in 1890 and, along with Daniel Burnham, designed the World's Columbian Exhibition Fairgrounds and its famed White City. The site of the World's Columbian Exposition was Jackson Park. Olmsted was pleased with the prospect of both realizing his initial plans for this tract of land as well as creating a fairground that would celebrate the 400th anniversary of Christopher Columbus' excursion to the "new world." Once again, Olmsted eyed the swampy marshland to determine how he could write a story on the land, a story about human progress, about the march of civilization, and about the United States' four centuries of achievement as testimony to its imperialistic aspirations. In order to realize this vision, Olmsted and his crew brought in 200,000 cubic yards of dirt, drained the marshes, scraped down ridges, and planted hundreds of thousands of trees, shrubs, low plants, and aquatic plants.

The soil, sand, water, and foliage that would constitute the foundation of the fairgrounds and the staff that would comprise the grand, but temporary structures, was the communicative medium used to convey that the United States was a unified nation with a fully developed civilization of its own. The White City in particular with its uniformity in design, use of beaux-arts classical architecture and classical imagery throughout was the center of this idea of unity and order (as opposed to the not so far away Black City that was Chicago - a site of perceived disorder, chaos, and urban decay). Most visitors entered the fair at the administration building which led to the Court of Honor and White City the visitor was immediately struck by the magnificent white classical buildings and formal grand basin with its Statue of the Republic and the fountain of Columbus. The republic, a statue much like the Statue of Liberty, was placed at one end of the grand basin - beckoning the fountain with the statue of Columbus on his ship at the other end of the basin.

This system of waterways, both formal and informal, stressed the importance of water as the essential natural force giving rise to the age of exploration, and imperialism. Outside of the Grand Basin, the apparently natural lagoons were staged with a variety of boats representing the transportation of a variety of cultures, from Venetian gondolas to Native Americans wearing buckskin clothing paddling canoes. The placement of these modes of transportation outside of the Grand Basin, where only Columbus reigned, indicates the civilized placement of Columbus compared to the placement of lesser cultures in the apparently primitive setting of the natural looking lagoons.

Except for the Grand Basin in the White City, the waterways, while all humanly constructed, had apparently natural borders and informal in design. In contrast, the placement of the buildings was axial and formal in design. This combination of formal and informal waterways and foliage created the illusion of a site that had both natural and man-made features. The center of the fair, The White City, with its façade of European culture and the building's interior containing proof of American technology and progress, was representative of the height of great civilization – the borrowed culture of Europe matched with the industrial progress of the United States. This was positioned directly next to Olmsted's carefully constructed system of lagoons, Wooded Island, the Japanese garden and other formal gardens. These two design elements placed side-by-side speak to the utilitarian extraction of natural resources for human use, both industrialization and "natural beauty." The transformation of marshy bog into a formal park also attests to a European imperialism. The unruly Midwestern landscape was turned into an ordered representation of "sophisticated" landscape architecture and thus lost its native quality.

Chapter Three: The Pastoral Respite from the Black City

By 1895 all of the temporary structures built for the World's Columbian Exposition were either torn down or destroyed by fire. Olmsted, too old to carry out his final design for Jackson Park, sent his sons to oversee the third iteration of the landscape design. This plan remains the predominant design to this day.

One of the many ideas that resulted from Olmsted's and Burnham's plan for the fair was the City Beautiful Movement, the idea that symmetry, unity, and markers of civilization should be a central part of urban planning. Such design would inspire city residents to follow suit, living an ordered, civilized existence. Parks would serve a significant role in such a design, offering the pastoral scenery and recreational space necessary for respite from industrial civilization. This idea was heavily influenced by the nineteenth century ideal of the pastoral landscape, the middle landscape between the wild and urban environments.

Olmsted's sons returned to the original plan of 1871 to guide their reconstruction of the park. With the waterways left in place, their primary task was to plant trees and foliage on the site where the buildings once stood. Wooded Island, a man-made structure with an authentically natural appearance, sat in the in the center of the lagoons with its stand of native oak trees and was kept in tact. The pond south of the present Museum of Science and Industry (the only building left from the WCE of 1893) was altered from formal to natural contours and the connections between the lagoons and Lake Michigan were blocked off. Additionally, they introduced a great lawn on the north side of the Museum. Their overall design reflected "a use of predominantly naturalistic design with the inclusion of some City Beautiful elements, such as civic buildings" (Tippens, 2004, p. 164). Later in 1899, the south end of the park was turned into the first full-size golf course west of the Alleghenies, and other major recreational features were added including a field house, tennis courts, and a track.

The main purpose of the park was to create pastoral scenery that would fulfill the role of providing a healthy antidote to the industrialization of the big city. Olmsted described Jackson Park's design as "an antithesis to [the city's] bustling, paved, rectangular, walled-in streets; this requirement would best be met by a large, meadowy ground, of an open, free, tranquil character" (Ranney, 2004, p. 47).

The senior Olmsted designed Jackson Park, as recreation area, with the same concept in mind that he had when he designed many of his other masterpieces, with the belief that public parks could civilize American society. He felt that the U.S. In general lacked civilization because of what he called the "pioneer condition." By this he meant that "community ties were weak, where people felt little in common with their neighbors and violence was rife, where residence was transient, and where tendencies toward social disintegration was strong" (Ranney, 2004, p. 43). Landscape architecture, Olmsted thought, would provide "people with opportunities to come together in healthful outdoor settings" and ultimately, "encourage a democratic community and help to civilize America" (Ranney, 2004, p. 43). And so, in an

effort to realize the democratic ideal, Jackson Park was once again called upon to offer up its soil, sand, and waterways to convey a particular meaning - the pastoral respite and civilizing force in the heart of the industrial metropolis.

Chapter Four: Redemption

The final chapter in this story (but certainly not the final chapter for Jackson Park) is going on today by the efforts of committed volunteers and Chicago Park District employees who are working on both the preservation of Olmsted's vision along with the restoration of its natural ecosystem features. Over the years, the park remained much the same as when the Olmsted brothers designed it except for a period of twenty years beginning in 1954 when the park offered up its soil for the patriotic effort of the Cold War. At this time, the U.S. government turned the shores of Lake Michigan into a Nike Missile Base with four nuclear missiles, filling in the south lagoon to create a solid platform for the base. In 1972, the base was dismantled but not without leaving behind its material mark of buried nuclear remains and outfalls that would cause concerns and the eventual need for remediation in recent years.

By the 1970s, Jackson Park and Wooded Island had become a rather dangerous and run-down site. In 1973, Doug Anderson, a Chicago native who as a boy grew up climbing the trees of Wooded Island, began giving bird tours of the island at the request of a Chicago Alderman. The primary purpose for the self taught naturalist to guide citizens through the island was not out of Chicago's desire to become a major naturalist site, but rather to offer an early morning human presence to reclaim the park from gang activity. Taking his job as an ambassador of Chicago's natural environs quite seriously, Doug Anderson began major efforts to galvanize the community behind restoration efforts at Jackson Park.

In 1977, four years after Anderson began his bird tours, Wooded Island is dedicated as the Paul Douglas Nature Sanctuary. Ornithologists all over the world began to recognize the significance of the Chicago region as a major migratory bird center for birds as they traveled north and south. It turned out that Olmsted's design of Wooded Island and the surrounding lagoons provided an ideal stopping site for the migratory birds. Consequently, great attention was directed toward the surrounding natural areas to determine how the site could be improved to aid the travels of our avian friends. Two major restoration efforts began. The open grassland that had been the site of the Nike Missile Base was turned into Bob-O-Link Meadow and Woods (named after a bird that frequents the park). Native plantings, controlled burns, lagoon shoreline restoration and pathways with interpretive signage created an ideal natural habitat for both humans (who had to stay on the trail) and wildlife, which today enjoy the meadowlands, grasses and natural wildflowers. Because the lagoons had been cut off from Lake Michigan, they did not have proper drainage and as a result, suffered from improper drainage, poor water quality and overgrowth of aquatic plantings. In 2001, the $3.5 million Jackson Park Lagoon Restoration Project began to help improve water circulation and biodiversity. In 2002 the Army Corps of Engineers returned for partial haz-mat reconnaissance and remediation at the former Nike base. In 2003, major ground planting started on Wooded Island, returning this primarily oak woodland back to a more natural state. This restoration required, and still requires, the removal of the invasive European buckthorn. With all of this restoration taking place, Jackson Park has turned into a major nature sanctuary, drawing hikers, birders, groups of volunteers, schoolchildren, and those interested in restoration projects to its site. Doug Anderson, now in his 70s, just celebrated his 30th year of providing bi-weekly tours of Wooded Island.

Restoration ecology is an inexact science, and a controversial one at that. It is often guided by the notion that if we can remove the handprint of humans, then nature will revert to a natural evolutionary state. William Jordan (2003), one of the leading practitioners and philosophers behind restoration ecology, believes that this practice has a sort of redemptive quality for humans. Moved to action by the guilt over the harms that humans have wrought on the land, restorationists redeem themselves by working on a piece of land, restoring it to the point prior to European settlement. As Jan Dizard (2003) describes, the restoration philosophy is that "[i]nstead of a world careening toward calamity, we might achieve a world in which large swaths of land are more or less in tact; and if the swaths are made large enough, they may be a decisive counterpoise to the disturbed and degraded lands that are beyond reclaiming" (p. 45). As the restoration volunteers work on the land in Jackson Park, they have physical evidence of the world of calamity every time they look to the north - toward Chicago's Loop. Working on the land allows urban residents are reminded of the importance of their work as they compare what is (the city) with what could

be (the meadow and woodlands). And so Jackson Parks soil, sand, and water has now become a sort of confessional for those seeking redemption over the misdeeds of humans.

Conclusion:

From lake shore swampland, to renowned fair grounds, to pastoral park, to missile base, to nature sanctuary, this is the varied past of this piece of shore line we call Jackson Park. My interpretation of the biography of Jackson Park Chicago is a case study in how a particular landscape, especially one rich in cultural meaning, can be interpreted by rhetorical scholars. I believe that this particular story of a landscape is a hopeful one. It reveals the human impulse to correct what we have destroyed while still leaving room for an active human presence. Cultural landscapes such as parks, gardens, and lawns offer a rich symbolic text for analysis. Future research might look at other sites to determine their historical and cultural patterns that emerge when analyzing the symbolism of a place. Such an analysis would, at least, identify the cumulative record of humans in this particular place and, at most, go even further, exploring the natural history and geology of a place. Furthermore, such analysis can lead us to a greater understanding as to how we shape the land to reinforce a particular relationship between humans and the environment. These cultural landscapes are at the very nexus of nature and culture and therefore, demonstrate how our interpretation of the natural world is, literally, carved into the land.

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Moving Toward Sustainability through Environmental Justice

Markus Nils Peterson
Markus John Peterson
Tarla Rai Peterson

This mixed method case study among border residents of Cameron and Hildalgo Counties, TX, examines a community familiar with explosive population growth, transnational disputes over common pool natural resources, and environmental degradation. We identify residents' environmental values, household characteristics, participation in environmental decision making, and perspectives on the appropriate relationship between political structure, economic development and environmental preservation. Our goal is to discover and demonstrate how relationships between environmental values, education, ethnicity, income, cultural attitudes toward public participation, and proximity of households to environmentally degraded and/or pristine areas influences environmental decision making. This understanding should suggest pathways toward sustainability that integrate biodiversity conservation with civic engagement, and are grounded in enhanced environmental justice.

At the risk of being charged with essentialism, we ground this essay in the belief that the tradition of identifying human society and the natural environment as mutually exclusive is THE most fundamental challenge facing decision makers, indeed any stakeholders, who seek sustainability (Leopold 1949, World Commission on Environment and Development 1987, Busch 1996, Latour 2004). Human society cannot achieve sustainability without understanding the integrative relationship between material processes and socio-political practices, and then applying that understanding in the policy arena. Such an understanding, let alone application, is impossible when nature itself divides human communities. Sustainability can only develop when humans begin to understand nature as a fundamental material for crafting Aldo Leopold's (1949) expanding community of ethical responsibility rather than a socio-economic wedge. Our goal with this project is to move toward such an understanding and application, particularly as it relates to environmental justice (EJ), which is typically thought of as political practice, and environmental preservation, which is typically thought of as material process.

Environmental injustice blocks attempts toward sustainability by rendering the materiality of nature a wedge between social elites and the disenfranchised. The conservation problems associated with environmental injustice are acute on borders between developed and developing nations, because locals and immigrants are prone to differential treatment, differential access to political systems, and differential conceptions of EJ. This context has growing implications in a globalizing world, because communication, transportation, and associated technologies facilitate existence of borderlands between nations without physical contiguity.

We are conducting a mixed method case study among border residents of Cameron and Hildalgo Counties, TX, where immigration is driving environmental decision-making initiatives, while EJ and the exclusivity of "community" are being shaped by environmental decision-making processes. This community is familiar with explosive population growth, transnational disputes over common pool natural resources, and environmental degradation. For decades, it has faced a divide between those who would implement Hardin's (1968) life boat ethics by keeping out, or at least isolating, poor immigrants from Mexico, and those who are struggling to build a more inclusive and sustainable community (Peterson 1997).

The project draws on archival research, personally administered surveys and interviews, spatial data, and ethnographic fieldwork to identify environmental values, household characteristics, participation in environmental decision making, and perspectives on the appropriate relationship between political

structure, economic development and environmental preservation. We identify and explore cultural practices involved in judgments that lead Cameron County residents to value the environment in certain ways, to opt in or out of participation in environmentally related public processes, and to morally ground their values for the environment (Peterson et al. 2002). Our goal is to discover and demonstrate how the relationship between environmental values, education, ethnicity, income, cultural attitudes toward public participation, and proximity of households to environmentally degraded and/or pristine areas influences environmental decision making. This understanding will suggest a path toward sustainability that integrates biodiversity conservation with civic engagement, and is grounded in enhanced EJ.

What is Environmental Justice (And who gets to decide)?

Critics of the EJ movement claim it has no basis in scientific fact, but rather is a mask for efforts of minorities and other disenfranchised groups to gain political power (Bowen and Wells 2002). While poor and minority communities often are located in or near environmentally degraded areas (General Accounting Office 1983, Commission for Racial Justice 1987, Bryant and Mohai 1992, Mennis 2002), few if any studies have demonstrated a causal relationship between decisions to locate a polluting facility and either the income or ethnicity of local residents.

Such claims ironically reveal the critics' fragile epistemological ground. The EPA's definition of EJ mandates "fair treatment" and "meaningful involvement" of all potentially impacted groups (http://www.epa.gov/compliance/environmentaljustice/). According to this perspective, if minorities and those from lower income brackets are struggling to gain political power in the environmental decision making community, they are not meaningfully involved. Moreover, the EPA version of EJ defines "fair" as equal (i.e., no group receives a disproportionate share of negative environmental consequences). Few rational people would argue all socio-economic groups bear an equal share of negative environmental impacts. Our review of EJ research, particularly as it applies to sustainability within democratic political contexts suggests to us two important questions:

(1) What exactly does it mean, and

(2) Who gets to decide?

To have meaning in liberal democracies, where both equality and liberty are valued (Mouffe, 2000), EJ must constitute more than fairness, defined as equal treatment. Walzer (1983) described 3 potential definitions of distributive justice: free exchange (i.e., market distributes social goods), need (e.g., income, status, etc. distributes social goods), and dessert (i.e., merit system distributes social goods). None of these versions of justice are adequate in all circumstances or cultures, and each version has different implications for EJ. For instance, if all people received an equal environmental quality level for a given investment of time or money free exchange justice would exist. This version of EJ would preclude disparities rooted in ethnicity, but not income. It would be "just" for all poor humans to live in cardboard shacks, with open sewers, in the shadow of landfills filled with toxic waste from plants producing electrical power for wealthy humans. In contrast, EJ rooted in the need version of justice, would mandate expending exceptional efforts for those living in degraded environments. EJ rooted in the merit system might require me to earn the right to protection from exposure to radiation from nuclear waste by contributing to the president's campaign fund. Further, equal treatment is problematic within a liberal democratic context because protection of individual freedom maintains differences in decisions that influence exposure to environmental hazards (e.g., I may choose to live near or far from a power plant) and differences in the ability to act on those decisions (i.e., income).

Deciding what EJ means in people's lives is only the beginning. Besides developing a meaningful description for EJ, we need to question who participates in that process of discovery and definition. Although justice can be distributed, hence defined, in multiple ways (Walzer 1983), excluding some people from the very community that distributes justice is unjust by any definition. The lifeboat ethics proposed by Hardin (1968, 1993) wherein the environmental degradation imposed by, or imposed on, the poor is avoided by keeping them out of the boat, perpetuates the dangerous illusion that sustainability can be achieved without developing an inclusive community. Beating back those who attempt to clamber into the

lifeboat not only masks environmental injustice; it perpetuates a fragmented and dysfunctional community. Within such divided communities environmental degradation is always an externality for someone.

While critics have failed to trivialize the material significance of the EJ movement, they have suggested an inordinate research focus on the results of environmental injustice as compared the processes that create it. Environmental justice studies have tended to focus on the spatial relationship between pollution sources and disenfranchised people (General Accounting Office 1983, Commission for Racial Justice 1987, Bryant and Mohai 1992, Mennis 2002). Although some studies are beginning to identify the everyday cultural politics leading to environmental injustices, such as zoning (Maantay 2002), they have yet to delve into the exclusion of disenfranchised voices from the environmental decision making process itself.

To address environmental degradation associated with environmental injustice we must identify factors related to political participation by those living in degraded environments, understand how different socio-cultural groups define EJ, and discover how the material that constitutes our bodies and habitats interacts with these political practices. A communication study among those living in borderlands offers possibilities for exploring how minorities and the poor are excluded from environmental decision making processes, as well as what results from the exclusion.

Research Methods

We have capitalized on the benefits of methodological heterodoxy (Newman and Benz 1998, Tashakorie and Teddlie 1998, Strauss and Corbin 1997) by combining open and closed ended questions within personally administered questionnaires, living within the social situation, taking field notes, and conducting archival analysis. This approach allows us to utilize the advantages of grounded theory (Strauss and Corbin 1997) and identify currently unimagined reasons for environmental decision making participation and conceptions of EJ. The survey/interview asks questions about environmental values, household characteristics, attitude toward development, perspective on EJ, participation in environmental decision making, and beliefs about democratic practice.

This project relates directly to a universe of communities straddling international borders between more and less developed nations (e.g., US/Mexico, Costa Rica/Nicaragua, South Korea/North Korea). The "borders" can be physically separated (e.g., Singapore/Indonesia), but distance, cost, or enforcement of immigration restrictions can effectively close any "border" thereby excluding communities from the universe. Further, communities must share a common pool resource (Ostrom 1990) that influences environmental quality. Because such resources and their impacts often travel great distances (e.g., tuna, wildebeest, airsheds, soil erosion, and watersheds) this scope condition does not mandate physical adjacency of communities.

Within this universe we are focusing on the population consisting of residents of Cameron and Hidalgo Counties, Texas. This location allows us to follow the Mexican/U.S. border to its southernmost tip in Texas. To achieve study objectives we are applying three partially overlapping sampling frames within this population: (1) the general population, (2) physical border residents, and (3) EJ activists. We have obtained a sample from frame one from county tax roles. Because many informants in the second sampling frame live off the grid, we are designing a sampling approach that avoids potential sampling errors associated with the use of telephone or tax records. We are targeting residents along the Military Highway (the southmost transportation corridor along the U.S. border), including those living in *colonias,* through Cameron and Hildalgo counties. Within this framework, we are attempting to personally interview someone in every third household. For our third sampling frame, we are using key informants from prior studies in the county, and a literature review of public records (e.g., minutes from zoning and other community planning meetings), local newspapers, radio shows, and newscasts to generate a comprehensive list of activists involved with EJ issues. With the exception of those with P.O. boxes, we are attempting to visit each informant at least once during 4 time intervals, morning and evening on a weekday and on a weekend day, before resorting to phone contact

As needed, Spanish translations of the survey are being administered. We employed bilingual translators to conduct a forward (English to Spanish) and backward (Spanish to English) translation process to improve comparability between English and Spanish surveys (Marín and Marín 1991). Each translator worked individually first, and then the translators consulted with each other and the authors to resolve discrepancies.

We promote design validity by utilizing prolonged on-site engagement, peer debriefing, triangulation, and member checking (Newman and Benz 1998). Time in the field builds credibility, because we are able to develop an intimate knowledge of the people, region, and context within a study area (Creswell 2003). Practical constraints (e.g., funding) often make spending the requisite time periods in the field difficult. We have included researchers who grew up in the Rio Grande Valley as advisors to provide additional contextual insight. We will use peer debriefing (Cresswell 2003) to address potential biases of "native" researchers, and identify biases in interviewing approaches. Peer debriefing will support consistency within the study and resonance with people outside the social context. We will achieve triangulation by combining individual interview notes, field notes taken while living within the social situation and summaries of historical accounts. Our member checking takes two forms: including clarification questions in the interview and asking informants to critique conclusions from past and current analyses of the situation.

Methodological Issues Raised During Data Collection

Today I want to discuss 2 methodological issues this project has emphasized: why use multiple methods and why collect data personally.

Why use multiple methods?

We all think of multiple methods as a way to increase validity. Those of us who prefer to use qualitative, interpretive, and critical approaches to research often jump on this bandwagon as a way to legitimize our numberless results. For example, if newspaper articles, television news reports, transcripts of public meetings, and informant directed interviews all support the same claim, we congratulate ourselves on the validity of that claim.

For this project, the primary value of multiple methods was different. The ethnographic aspect of our research led to a complete redesign of sampling frame, as well as our data collection methods. Our first sampling plan was confined to Cameron County, which exemplifies the population we are most concerned with (people inhabiting borders between developed and developing countries where environmental degradation is blatant, and where common pool resources are directly related to that degradation). After considering several options for obtaining a random sample from county residents, we had settled on property tax roles. We determined to devise a separate sampling frame for *colonia* residents. We also proposed a third sampling frame, made up of local EJ activists.

Our plans were called into question as soon as we limped toward the border. We discovered immediately that society was divided along legal/illegal lines. As we neared our destination, the car broke down, and we ended up at a local Ford dealership. While we waited inside to discover the extortionate price the dealership was going to charge us (he had estimated somewhere around $500.), Shannon kept watch on our car, which was out of sight from the main doorway. A young man carrying a small tool box slipped out of the shadows around the lot, and began doing something under our car's hood. Curious, we walked outside, and asked what he was doing. He showed us he had fixed the problem, explaining in Border Spanglish. We were delighted, and offered to write him a check for his services. He replied that he could not cash a check, but would be grateful for cash. We managed to dig out $40, which he accepted with alacrity, and then disappeared just as someone charged out of the service bay. We hopped in our car and drove away.

It did not take long to realize that the political boundaries of Cameron County were not the most appropriate for our study. We discovered Military Road, which provides a transportation corridor through both Hidalgo and Cameron Counties. Besides living on the border between Mexico and the United States, these residents live on the border of the Wildlife Corridor U.S. environmental agencies have been working to develop for the past 20 years. We also discovered that the largest *colonias* are in Hidalgo County. So, we changed our sampling frame to include both Hidalgo and Cameron Counties, with a focus on the households along Military Road.

As we got to know people along Military Road, we soon realized that *colonia* residents are not the only people who are missed on the tax roles. In these neighborhoods, many properties provide habitation for multiple households. Utilities are shared by means of electric cords run from one mobile home to another, and some have no indoor plumbing. Nils found that many of those who could not read the English survey, could not read it in Spanish either. Rather than read it themselves, they preferred to listen to his awkward

pronunciation, nodding encouragingly whenever he got something right. We are very happy we had taken the time to change our questions from the "agree/disagree" format, because we were afraid they would have agreed with everything. Every now and then we stumbled upon a wealthy neighborhood, often built around elaborately landscaped oxbow lakes. Our acceptance rate for the survey remained high, but there was less opportunity for extended conversations.

Without the ethnographic component of this project, we might have used a completely inappropriate sampling frame. By sampling a random group of Cameron County residents, we would have had no problem publishing our results, but they would have been worse than irrelevant. We would have ignored Hidalgo County. The Wildlife Refuge Managers who want to know how to work with new residents moving into the valley would have learned what long-time residents had to say, but would have missed out on responses from most new residents. Environmental Justice advocates (and critics) would have learned what residents of established neighborhoods had to say about justice, political participation, and the environment.

Why collect data personally?

Personally administered questionnaires are expensive, requiring extensive researcher time and funding for travel. Many argue that, especially for a standardized questionnaire, this is not cost effective. Instead, researchers tend to administer questionnaires by mail or by telephone. In addition to lower response rates, these collections methods suffer from lack of sufficient researcher oversight.

We noticed that everyone answered one of the statements on our questionnaire in the same way. In English, the statement is: Communities should control the disposal of factory wastes, or Factories should control the disposal of their wastes." Respondents are asked to mark 1 of seven blocks, ranging from strong preference to one, through neutral preference, to strong preference to the other.

Nils became suspicious that people were interpreting this question differently than we had intended it, and asked one person to expand on her answer. The respondent, who (along with everyone else) had marked the strongest possible preference for factories controlling the disposal of their own wastes, explained, "if you make the mess, it's your job to clean it up." We now ask for clarification of this response on every survey administered. Thus far, every respondent has offered the same explanation when asked about this question.

This is a commonly asked question on surveys of public preferences regarding natural resource management. The general intent is to discover whether the individual rights of property owners and producers or the protection of the community is more important to people. That is not how our respondents have interpreted the statement. We would not have discovered this problem had we hired someone to administer the questionnaire via telephone, or if we had administered it as a mail-out. Because we administered the surveys personally, we noticed the unexpected unanimity among respondents, and were able to query them, discovering an alternative interpretation of this statement.

Conclusions

This case study will provide information regarding the extent and conceptions of environmental injustice within Cameron and Hidalgo Counties, Texas. Further, we may provide natural resources managers and planners a salient approach for defining EJ in liberal democracies. By combining knowledge of local ecology and socio-political dynamics, this study will increase understanding of how environmental values, education, ethnicity, and income relate proximity of households to environmentally degraded and environmentally pristine areas, and how this relationship influences environmental decision making within these border communities. Achieving this goal has important implications for conservation in contemporary democracies. When liberty excludes equality (hyper-liberty) some members of the community will suffer environmental injustice, likewise when equality excludes liberty (hypo-liberty) others will suffer environmental injustice. A community as a whole will only experience EJ when its members experience both liberty and equality. In dynamic systems (including both human social systems and Earth's ecosystem), however, maintenance of both equality and liberty requires a venue for productive conflict between the two dimensions of democracy, as shifting environmental and social constraints change the landscape within which EJ is defined. Accordingly we address what factors promote broad and diverse community engagement in environmental decision making. This study will provide border communities

throughout the world a contextually rich approach for grounding environmental policy in EJ, to facilitate their negotiation of the symbolic and material challenges associated with sustainable development.

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The Embodied Rhetoric of "Health" from Farm Fields to Salad Bowls

Jean P. Retzinger
University of California, Berkeley

This essay explores representations of body image, gender, and race/ethnicity in both print and television advertising for fast food restaurant salads. It extends this discussion by also examining the testimony written on the (gendered and ethnic) bodies of those agricultural fieldworkers responsible for the production of fresh fruit and vegetable crops in the United States. Of interest are the ways in which the material rhetoric of advertising and the material practices of farm labor do and do not connect with each other under the rubric of "health."

For decades Americans have been admonished to "eat your vegetables." In skirmishes across dinner tables and in USDA pamphlets promoting federal dietary guidelines,[i] the battle has been waged in the name of "health"—and propriety. For vegetables (fresh, frozen, or canned) stand as evidence of a proper meal,[ii] proper nutrition. The USDA's own findings, however, conclude that while Americans have indeed been eating more overall, raising concerns about obesity, few Americans meet the minimum recommendations for fruit and vegetable consumption. The vegetable of choice for most Americans remains the potato—usually in the form of French fries. Coming in at a distant second is head lettuce with tomatoes, onions, and carrots rounding out the top five.[iii] These patterns in vegetable consumption have remained largely unchanged over the past seven decades. Thus, while its form may have changed, Americans' meat and potatoes diet largely persists, available at fast food restaurants across America, with lettuce, tomatoes, and onions as a garnish.

Rising rates of obesity in the United States (and globally) have recently prompted the examination and critique of fast food restaurants.[iv] In seeming response, fast food chains introduced vegetables (and now fruits) onto their menus in the form of "designer" or "premium" salads. Wendy's led the way, launching its "Garden Sensations" salad line in February 2002. Burger King quickly followed suit in July 2002. Within a few months, McDonald's (March 2003), Jack in the Box (April 2003), and Subway (March 2004) introduced competing salads—all of which have been prominently advertised in print and television campaigns.[v] Ironically, then, with the introduction and promotion of salads, fast food restaurants lead the way in encouraging fresh vegetable consumption.

The enormous sums of money devoted to advertising in America (currently nearing $250 billion annually) offer a compelling reason to take advertisements and their messages seriously—however trivial individual ads might appear. But advertising deserves attention for other reasons as well. Jean Baudrillard (1996) describes advertising as "pure connotation," further noting that advertising "contributes nothing to production or to the direct practical application of things, yet it plays an integral part in the system of objects not merely because it relates to consumption but also because it itself becomes an object to be consumed" (p. 161). As a form of material culture and as a rhetorical force, advertising plays a crucial role in the dissemination of meaning: affirming, reinforcing, and transforming cultural beliefs and values. Judith Williamson (1978) notes in the introduction to *Decoding Advertisements* that "advertisements are selling us something else besides consumer goods: in providing us with a structure in which we, and those goods, are interchangeable, they are selling us ourselves" (p. 13). The "social tableaux" depicted in print advertising and the mini cinematic narratives of television commercials offer highly distorted representations of race, class, and gender in contemporary America—but they still provide poignant glimpses into cultural dreams and anxieties.

Advertising for food may be especially worthy of investigation. Food has long since ceased to function in a merely nutritive role. As Fernandez-Armesto (2002) argues in *Near a Thousand Tables: A History of Food*, food gives pleasure; it forges society; it can encode meanings; "it has spiritual and metaphysical, moral and transmutative effects" (p. 20). It is also, quite simply, "what matters most to most people for most of the time" (p. xi). The material fact of food and its prominence in our daily lives is matched in equal measure by the messages it relays regarding social class, ethnicity, gender, regional or national identity, religious beliefs and practices, psychological propensities, and sexual fantasies. "Every mouthful, every meal," write Bell and Valentine (1997), "can tell us something about ourselves, and about our place in the world" (p. 3). As such, it is a commodity that seems especially malleable within advertising, for it possesses the capacity, as Appadurai (1981) states, "to mobilize strong emotions" (p. 494).

These strong emotions frequently operate at cross-purposes. Susan Bordo's (1995) analysis of food advertising in *Unbearable Weight* examines the ways in which advertising messages directed primarily at women pose a discourse of (bodily) control against fantasies of indulgence. Jean Kilbourne (1999) devotes a chapter of *Can't Buy My Love* to advertising's tendency to eroticize food, linking food to sexuality and love, and, by extension, to addiction and eating disorders. These explicit examinations of food advertising extend the work of feminist scholarship spanning several decades that has investigated the relationships between women, media, self-esteem, and body image—focusing particularly on eating disorders primarily affecting girls and young women (Chernin, 1981, 1985; Thompson, 1994; Beardsworth and Keil, 1997; Counihan, 1998; Groesz *et al,* 2002; Neilson, n.d.; Sopolo, 2005).

The relationship between food and the body resonates in yet a different way among environmental historians. Food serves as one of our most intimate links to the environment. Every food contains within it the sun, soil, air, and water required to transform seeds into sustenance. Each bite connects us to the agricultural policies and practices inscribed on rural lands. Our bodies, literally shaped by food, ultimately stand as direct testimony to our consumption of the environment and serve to inform others about the nature of that relationship.

Those who labor within agricultural fields, though, bear the brunt of American political and economic policies related to food. The class and ethnic markers of their bodies are strongly implicated in both the material conditions under which they labor and the (limited) attention those labors receive. To a great extent, agricultural labor remains invisible in America. This may be attributable in part to the physical distance between the farm fields where our food originates and the kitchens where it comes to rest.[vi] This invisibility may also be due in part to a psychic distance: the fact that the number of Americans actively engaged in and knowledgeable about food production has declined precipitously (Berry, 2002), especially since the end of World War II. Currently less than 2% of the American population is engaged in agricultural labor. Those who perform farm labor are further marginalized by their immigration status (81% are born outside the U.S.) and by poverty (61% have family incomes below the poverty level) (Das *et al,* 2002). Whatever its cause, invisibility allows and even encourages exploitative and dangerous worker health and safety conditions to fester, particularly with regard to pesticide use in fruit and vegetable crops. The testimony written on the bodies of agricultural workers remains largely hidden from view—though it surfaces intermittently in investigative reporting and in statistics compiled by federal and private organizations.

"Politics," as Judith Williamson (1978) succinctly states, "is the intersection of public and private life" (p. 10). In many respects advertising represents our most "public" and ubiquitous form of mass-mediated communication—reaching us not simply via radio and television broadcasts or inscribed in print media, but emblazoned as well in public spaces: on billboards, buses, taxicabs, buildings, and sewn/printed into the very fabric of our clothing. Advertising is public, but it speaks to us in intimate ways and "influences us privately: our own private relations to other people and to ourselves" (Williamson, 1978, p. 10). The language of advertising is meant to seduce: dazzling us with a seemingly infinite range of choices, offering pleasures for eye and ear alike, making promises and suggestions, urging us to express our "individuality" by obtaining just the right constellation of mass-produced goods, flattering our savvy and good taste.

Advertising works hard to create a sealed and seamless re-interpretation of the world, excluding other evidence and perspectives. Analyzing advertisements helps reveal their strategies and expose their fissures. But juxtaposing ads with other discourses renders them more legible still. In an essay challenging the ease with which audiences can construct liberating readings of mass mediated texts by exploiting their polysemic qualities, Celeste Condit (1989) argues that audiences are "constrained by a variety of factors in any given rhetorical situation" and these include "access to oppositional codes" (p. 103). Though Condit is writing about television programming, her analysis applies as well to advertising which, through its sheer

ubiquity and repetition, also "disseminates and legitimates, in a pleasurable fashion, a political vocabulary that favors certain interests and groups over others, even if by no other means than consolidating the dominant audience by giving presence to their codes" (p. 114). Advertising for fast food salads focuses attention on the body, but in ways that render concerns about health a matter of narcissism, while simultaneously exploiting anxieties and stereotypes about sexuality, body image, ethnicity, and gender as a means of reinforcing the regimes of bodily propriety and control. The bodies excluded altogether from advertising, though, best reveal the paucity of its discourse. This essay attempts to re-introduce the testimony of those bodies alongside an analysis of the messages found in fast food salad ads.[vii]

Advertisements speak to our dreams and aspirations more than to our rational minds. They may allude to (or even arouse) our current dissatisfactions—but always with the goal of securing a sale. Such narratives conspire to persuade us that we can be happy (in the future) if only we take the proper action (buy something). Thus, advertising feeds our narcissism, allowing us to view ourselves (and our bodies), as the measure of all things. Food fads and health crazes are frequently swept into this vortex, leaving behind a long line of dietary experiments in America since the late eighteenth century (Levenstein, 1988; Fernandez-Armesto, 2002; Pollan, 2004). As Harvey Levenstein (1988) argues, "food processors have responded nimbly, churning out foods in low-calorie, low-sodium, low-cholesterol, low-fat, caffeine-free, high-fructose, high-protein, high-calcium, and high-fiber forms" (p. 205). Low or no-carb foods can now be added to this list. Each swing of the health pendulum is accompanied by advertisements promoting new foods and new diets.

Marion Nestle's (2002) answer to what constitutes a "healthy" diet emphasizes balance. She notes that our diets must "provide enough energy (calories) and vitamins, minerals, and other essential nutrients to prevent deficiencies and support normal metabolism. At the same time, they must not include excessive amounts of these and other nutritional factors that might promote development of chronic diseases" (p. 5). For food historian Fernandez-Armesto (2002), the concept of health is somewhat more complex. Noting that when 18th century sailors learned to ward off scurvy through a diet that included fresh fruits, food became elevated "above its commonplace role as a nourisher, to the ranks of a healer" (p. 40). Fernandez-Armesto continues:

> Food health became a quest in which rising science met abiding religion. It was both a pseudo-science and a mystic vocation: pseudo-scientific because of the new prestige of science in the nineteenth-century West; mystical because it was developed beyond evidence by visionaries who, in many cases were religiously inspired: if food was the key to physical health, why not moral health, too? (Fernandex-Armesto, 2002, pp. 40-41)

The ability of scientists to break down the chemical composition of foods seems to have encouraged what Michael Pollan (2004) describes as a reductionist attitude towards food in which "we've learned to choose our foods by the numbers (calories, carbs, fats, R.D.A.'s, price, whatever), relying more heavily on our reading and computational skills than upon our senses" (p. 74). Eating by the numbers attempts to create a mathematical formula out of the concepts of "health" and "balance."

While it might be expected that claims to health would be the primary way in which fast food restaurants promote their designer salads, explicit references to health appear only infrequently in ads or in accompanying articles (about restaurant salad bars) paired with them in "Special Advertising Sections." In advertising discourse about health, narcissism sets the tone, pairing physical appearance with a reductionist approach to food and encouraging a belief that personal transformation can be easy and enjoyable. Under the heading "Slim Down Your Salad," the article adjoining an advertisement for Kraft Carb Well Ranch Dressing offered "a guide to help you make a healthy—and tasty—salad" from a restaurant salad bar. Using data on calories, fat, vitamins A, C, and D, folate, potassium, calcium, protein, fiber, and sodium as its measure, the guide recommended, for example, adding cherry tomatoes and a hard-boiled egg, but skipping the red onions (as not worth their weight in either potassium or Vitamin C). Selecting kidney beans was encouraged as providing "a burst of color" as well as fiber and protein, yet the mathematical formula never quite added back up to "tasty." Instead health (and pleasure) are reduced to a set of numbers—and the numbers that matter most are those found on a bathroom scale: the slim salad promises the slim body.

The upbeat copy stresses ease and convenience, echoing the "therapeutic ethos" that Jackson Lears (1983) found characteristic of advertising beginning in the early twentieth century and further feeding our narcissism. These modern ads betray the same "almost obsessive concern with psychic and physical

health" that Lears argues signaled a shift away from "a Protestant ethos of salvation through self-denial" (p. 4). Advertising attempts to persuade that personal sacrifices are unnecessary; restraint is an anathema. Instead, salvation (or at least personal transformation, success, status, youth, beauty, sexual attractiveness, and the friendship of others) is only a purchase away. If counting calories and carbs and grams of fat requires too much effort, then simply "eat your way to better health." McDonald's promises that "getting active is easier than you think" and claims that "making smart menu choices is a snap." Leading "a healthy, active life" is "cool," "colorful," "easy," "fun," and "user-friendly." No sacrifices are necessary. Simply "swap one menu favorite for another tasty choice," in order to proclaim, "I'm feeling better about me, and 'i'm lovin' it.'"

Perhaps because salads, in the eyes of McDonald's spokeswoman Joanne Jacobs, are already thought to wear a "nutritional halo" (Aschoff, 2003), fast food restaurants have decided that claims about health in their advertising are unnecessary. Or perhaps in attempting to attract a consumer who may be already too well-versed in the numbers game, fast food restaurants wish to avoid further scrutiny of designer salads with calorie, fat, and sodium levels that rival (and at times exceed) those of a McDonald's Quarter-Pounder or cheeseburger. One further concern, even with "healthy" fruits and vegetables, also remains unaddressed in these ads: food safety.

In 1991, the USDA began the Pesticide Data Program (PDP) to test for pesticide residues in agricultural commodities. The PDP has tested over 50 different commodities, including fresh, frozen, and canned fruit and vegetables, for more than 380 different pesticides. PDP reports are issued annually, available on the USDA website. In 2002, the latest year for which data is available, the PDP conducted tests on 10,056 were fruit and vegetable commodities, both fresh and frozen, from both domestic and foreign sources. Approximately 47 percent had detectable pesticide residues (PDP 2002). "The foods most likely to contain residues of high-risk pesticides are apples, pears, peaches, grapes, green beans, tomatoes, peas, strawberries, spinach, peppers, melons, lettuce, and various juices" (Benbrook, 2003).

While testing for pesticide residue is a relatively straightforward process, understanding the health risks associated with consumption of those residues is considerably more complicated. And while the risk assessment formula itself is fairly simple--exposure = residue concentration x amount of food consumed (Tomerlin, 2000, p. 15)—it is difficult to measure either variable with much precision. Nor do scientists necessarily know how to calculate the effects caused by the interactions of various pesticides. Still, Stenersen (2004) argues that "residues of pesticides are ranked very high as an important risk factor in society (see, for instance Faustman and Omenn, 2001), although toxicologists do not think such residues are very significant for human health. Even in the literature fundamentally critical to pesticides, the authors admit that pesticide residues in food are seldom a real toxicological problem (e.g. Emden, 1996)" (p. 226). One cautionary note sounded by some individuals concerns the effects of pesticide residues on children. Because of significant differences between children and adults in terms of metabolic rates, body composition, development of reproductive and central nervous systems, as well as diet, the effects of pesticide exposure on children is more complicated and less well understood (Kegley and Wise, 1998, pp. 16-18).

Though appeals to "health" might seem a powerful motivating factor among a public "obsessed with the idea of eating healthily" (Pollan, 2004. p. 17), such claims remain largely outside the discourse of advertising for fast food salads. Advertisers turned to other strategies for selling salads to the American public instead. Still the body remains firmly on display.

If, as Fernendez-Armesto notes, food and religion have long been linked through a strong moral imperative, an equally entrenched association exists between food and sex. The sheer physicality of eating and the pleasures to be derived from the sensual properties of many foods link gustatory and sexual appetites. These delights often find entrance initially through the eye. We learn through advertising to "derive pleasure from the spectacle alone" (Buck-Morss, 1989, p. 85). Alexander Cockburn (1987) argues, "there are curious parallels between manuals on sexual techniques and manuals on the preparation of food. . . true gastro-porn heightens the excitement and also the sense of the unattainable by proffering colored photographs of various completed recipes" (p. 125). Gastro-porn is characterized, then, by images of seduction, of foods displayed in stereotypical but wholly artificial perfection, destined to remain forever out of reach and unobtainable. It is not simply the culinary dishes destined for upper-class tables (or coffee-table books and magazines) which receive this treatment. Fast food, despite its ubiquity and low status, has been "aestheticized to . . . a point of frenzy and hysteria" (Kroker *et al*, quoted in Smart, 1994, p. 171). Fast food advertisements (like the restaurants themselves) are awash in garish colors and dazzling displays.

At times gastro-porn seems employed only to stimulate salivary glands. Television ads employing gastro-porn techniques add motion to the mixture. In a series of ads from 2004 (archived on the AdLand web site) for Wendy's, Subway, Arby's, and McDonald's, lettuces and spinach (often mixed with sprays of water) float and flutter in a green cascade, whole heads of lettuce splash into wooden bowls, fresh vegetables and other ingredients in a rainbow of bright colors tumble across the screen and land in salad bowls, streams of salad dressing ooze onto mounds of ripe vegetables, and salad bowls, heaping with vegetables, cheeses, bacon and chicken, spin in slow circles as the camera holds a tight shot. The camera work and lighting, color and motion, do their best to lure us in, attract our gaze. "All you need is your appetite," coos the Arby's ad.

Gastro-porn depends on imagery; too many words threaten to interrupt the pleasures. A McDonald's ad fills a borderless page with an extreme close-up of a bright green lettuce leaf, curled sensuously, glistening with droplets of water. Superimposed over the image, the ad copy appears in the form of a Q & A exchange ("a series of real answers to real questions asked by our customers"). The answer to the query, "What makes your lettuce so crisp?" is at once simple and yet inscrutable: "Our lettuce is fresh and never frozen, so the crunch you hear is pure fresh lettuce from the same place you buy yours. Simply put, the only unnatural aspect of our lettuce is the speed at which it travels from the farm to the restaurant." The answer both presumes consumer ignorance about food preparation and handling (by implying that other fast food restaurants freeze their lettuce) and flatters our shopping expertise (in suggesting we purchase our produce directly from the farm with no intermediary stops) with the goal of persuading us that McDonald's offers ingredients that are exactly the same, only better, than those we buy for ourselves. Such contradictory messages make it evident that gastro-porn isn't intended to trigger analysis, only Pavlovian responses to sensuous images. Physical perfection and beauty have long served as the language of advertising.

There is a beauty to be found in the appearance of agricultural fields as well, even to some extent amidst the vast monocultural fields representing the imposition of human order upon the natural environment. The straight lines of row crops create dizzying patterns of green against brown for passing motorists. Salinas, California prides itself as the "salad bowl to the world." Situated in Monterey County, Salinas and its surrounding area has become "the home of the packaged salad and value added fresh vegetable industry with over 90% of the market share. Monterey County is the State's third largest agricultural producer" netting just under $3.3 billion in sales in 2003. "Forty-one individual commodities each gross over 1 million dollars," with leaf lettuce the number one commodity, earning $555.6 million in 2003 (Profile 2004).

This visual perfection is gained at a cost. In California alone, according to the California Department of Pesticide Regulation (DPR), "some 175 million pounds of pesticide applications were reported in 2003, a 4 percent increase from the previous year" (DPR, 2005). Reported pesticide use in California climbed fairly steadily through the 1990s (when the California DPR began collecting complete records), peaking in 1998, with 214 million pounds applied to agricultural fields across the state. Reports of pesticide use began to fall in 1999 and continued to decline for the next two years, though reported use is now on the rise once again. The ten crops most heavily sprayed with pesticides are: grapes, cotton, broccoli, oranges, ornamentals, almonds, tomatoes, lettuce, strawberries, and alfalfa (Reeves *et al,* 1999, p. 7). Pesticides are meant to ensure that fruit and vegetables crops meet our expectations of physical beauty. Grocery stores create their own displays of gastro-porn with flawless produce piled high and glistening. The toxins themselves remain invisible.

The visual enticements of gastro-porn can be enhanced by sound—shifting attention from the food itself to consumer response. In the most recent television ads for fast food salads, close-up shots of the salads themselves have given way to the "mimed celebration of other people's decisions" (Williams, 1980, p. 193), expressed in sub-verbal moans or one-word exclamations, sounds one might associate with sexual pleasure. The fact that these scenes take place in the workplace adds further intrigue. This trend may have originated with the McDonald's "Watcher" ad which aired in 2004. The narrative opens with a woman in an employee lunchroom asked to watch a co-worker's salad. She is left alone with the salad that looms in the foreground of the screen. The camera swoops in for a close-up shot of the salad. The woman quickly succumbs to its temptations. She takes a bite. "Love grilled chicken," she moans. She takes another bite. "Love bleu cheese," she murmurs. Within seconds she has consumed the entire salad and departed the scene of the crime, leaving yet another co-worker to take the blame. Transgression is also the theme of a Wendy's fruit salad ad in which a woman hides under her desk in order to eat her Wendy's fruit salad

undetected and undisturbed. The implication of both ads is that women must hide their appetites, whether for food or for sex.

Gene Weingarten skewered the McDonald's "Watcher" ad in an August 2004 column in the *Washington Post*, railing, "So we have, in one ad, a celebration of shockingly unethical behavior, stupidity, larceny, gluttony, sloth, envy, greed, cowardice, bearing false witness against a neighbor and littering. Other than out-and-out murder, is there any commandment or deadly sin that this ad does not advocate, condone, or endorse?" (p. W11). Weingarten neglected to add "lust" to his list, though it is present—at least in the form of "cooked sex" that Williamson (1978) discusses in *Decoding Advertisements*. "Cooked sex" manages to appeal to our prurient interests while masking our obsession at the same time. "Sex becomes a referent system, always hinted at, referred to, in innuendo, double entendre, or symbolism, but never 'raw'" (p. 120). Ads titillate while hoping to avoid offense.

Women left alone with food in advertising replay the story of the Garden of Eden, succumbing over and over again to temptation. When men and women eat together, at least in Wendy's ads, they voice their pleasures and dissatisfactions as a chorus. Seated around a lunchroom table, four office workers take turns assessing their level of satisfaction with their fast food salads. The first three utter a simple "eh." When the camera reaches the woman with a salad and soft drink from Wendy's, she murmurs an approving "ummm!" "So we got 'eh' and you got 'ummm'?" a co-worker asks in frustration. The vagaries of their communication suggest their disappointments extend far beyond fast food salads. A second ad suggests that such disappointments need not matter—as long as our salads satisfy. Interspersed with an employer's announcements that "Last year was not our best. We fell short of our projections in nine out of ten areas. In fact, I'm sad to report a record loss in terms of money," are the interjections of the employees: "great!" "impressive!" "outstanding!" "incredible!" "awesome!" and "fantastic!"--as they happily bite into their Wendy's salads. The final shots of both ads revert to visual gastro-porn as salad ingredients fly across the screen in an orgy of excitement. Whatever else their message, these ads paint an unflattering portrait of American white collar employees: largely complacent, easily distracted, but engaged in petty crimes and competitions directed at each other.

Farm workers rarely make it onto the glossy pages of an advertisement or occupy even 30-seconds' worth of prime-time attention in a television commercial. On occasion, though, agricultural workers can be seen amidst the fields in which they labor, planting or staking tomato plants by hand, bundling onions and garlic, stooping to pick strawberries, cutting and tossing head lettuce onto conveyor belts pulled by slow moving trucks across endless fields. They are mostly Hispanic (90%), mostly men (80%), mostly illegal immigrants (52%) (Das *et al,* 2002), wearing jeans and long-sleeved flannel shirts or hooded sweatshirts and gloves (sometimes plastic), regardless of the weather, as protection from the sun and pesticides. Grapes, cotton, broccoli, oranges, ornamentals, almonds, tomatoes, lettuce, strawberries, and alfalfa together "account for half of all reported agriculture-related pesticide illnesses" (Reeves *et al,* 1999, p. 7). These are crops which still require considerable hand labor. Every strawberry, every bunch of grapes, every head of lettuce, every tomato, and a multitude of other fruits and vegetables is still picked by hand. Those hands (mostly brown) labor in fields and orchards saturated with pesticides.

If the bodies of those responsible for planting, tending, and harvesting our foods are rarely glimpsed or acknowledged, Americans, for the most part, are acutely aware of their own bodies. The relationship between the foods we eat and the condition/shape of our bodies is understood by most individuals on at least some level. This relationship is not strictly a matter of food calories or composition. "Our bodies are 'molded by a great many distinct regimes' (Foucault, 1977, p. 153) of which food, eating and associated codes of conduct represent one complex example" (Smart, 1984, p. 169). Our physical bodies must negotiate the social body, revealing, in each encounter, adherence to or departure from cultural norms and expectations.

Eating disorders represent one response to societal expectations and cultural regimes. It is difficult to arrive at accurate figures for the number of individuals with eating disorders, but most estimates claim that between 5 to 10 million Americans, the majority of them young women, suffer from anorexia, bulimia, and other disordered eating behaviors. Race and class as well as gender have figured into studies of eating disorders. Women of color were considered less likely to engage in disordered eating, though more recent studies have suggested otherwise. Women across all ethnic groups are more likely to adopt eating disorders, especially as their income level rises (Sodolo, 2005; Neilsen, n.d.). Although the tendency is to view eating disorders (and the individuals who engage in them) as pathological, Bordo (1995) notes that "preoccupation with fat, diet, and slenderness are not abnormal. Indeed, such preoccupation may function as one of the most powerful normalizing mechanisms of our century, ensuring the production of self-

monitoring and self-disciplining 'docile bodies' sensitive to any departure from social norms and habituated to self-improvement and self-transformation in the service of those norms" (p. 186). Many point to media images—and particularly the images found in advertising--as promoting a preoccupation with body image and the quest to attain the thin ideal. Current research seems to substantiate this view (Groesz *et al*, 2002).

Because salads are often viewed as a "diet" food, likely to aid in the effort to lose weight, body image and body ideals (explicit or implied) may be expected to play a significant role in fast food salad advertisements. "Your body is a temple," states a Subway ad for its fresh salads, "But that doesn't mean it can't have a little fun." The body depicted is a cartoon drawing of a young girl sporting a red onion ring as a hoola-hoop. Such "playfulness" about the body seems reserved for cartoon characters and children. For adult women, the message is more serious. Even absent bodies bear witness to the thin ideal. "Little black dress, here I come," reads the headline positioned above a close-up of Applebee's Mesquite Chicken Salad. Thus salad becomes a means to an end: bodily perfection and desirability.

When the body is present it often upstages the salad being sold. A series of Burger King ads exemplify this tendency, and subsequent confusion over what is being sold. Burger King, enlisting the services of the Crispin Porter & Bogusky advertising agency, created the character of a fashion designer named Ugoff to help sell their salads. While the television commercials feature Ugoff himself in parodies of fashion expertise, the print advertisements celebrate "The Pouch: The Ultimate Lunch Accessory." The phrase accompanies the image of various models, each young, sleek, and dressed in a fashionable black and white ensemble, delicately holding a small white bag, patterned discreetly with what appears at first glance to be a single flower. Upon closer inspection the image is revealed as a fork filled with salad. A thin column of text along the right margin, topped by a small image of the salad itself, reveals the product. These postmodern ads make no attempt to mask the fact they are selling the packaging more than the product. That packaging includes the slim young bodies of multi-ethnic models: white, black, Asian. The emphasis on surface over substance is further parodied and celebrated in two versions of this ad in which the left hand page is made to resemble fashion magazine articles, one posing the question, "What's in your bag?" (answered by glimpses into the purses of four fashion designers—one of whom is none other than Ugoff) or featuring seven different purses, complete with their designer label, price, and contact information, one of which turns out to be the Burger King Pouch. The ads both mock and reinforce young women's anxieties about appearance and style—including body image.

While these Burger King ads for the most part appear to gloss over racial differences, some ads exaggerate "the other," giving prominent attention to markers of race and ethnicity. Black models are given copy meant to convey that they are bold and sassy. "I want to put 'me' at the top of my to-do list. I want to have my cake and eat it, too. And I want a salad that's not like, you know, rabbit food," exclaims one black model in a McDonald's ad, dressed all in red, her mouth open wide. "And, I want it now or else I'm gonna pout!" she concludes. A close-up of another black woman's face beams down upon a McDonald's Fiesta Salad. Her mouth, too, is open wide in a large grin and the accompanying caption reads, "my taste is out there," with the words "out there" given a 3-D effect in bright red and yellow. She sports animal print sunglasses and boasts, "I don't do dull. Mild is not my style. I can't stand bland." Similar to a television commercial for McDonald's salads featuring another young black woman, the words echo the rhythms of hip hop and the rhyme of poetry slams. Meanwhile, a white model, dressed in layered white t-shirts and blue jeans, in an ad for the same product states, "sometimes i need to bring out my wild side. so i'll grab a new Premium Fiesta Salad. . . . wow." She is positioned at the bottom of the page, both below and smaller than the image of the Fiesta Salad, and tilting her body inward in an extreme body cant. The headline above her reads, "it's my party. it's my salad." For white women, whose ego occupies only a lowercase "i" and who party solo, wild is attainable through a purchase; for women of color, wild is their "natural" state of being. Pieterse (1992) argues at the conclusion of his historical survey of the images of blacks in advertising that though there are more ads in which "ethnicity plays no significant part, . . . [m]ore often, however, existing stereotypes are fine-tuned and made to look new as they are recycled" (p. 210). Some stereotypes persist intact, others are modified, while new stereotypes seem to be emerging, including "the aggressiveness of black women" (p. 203). Black women's bodies add hipness and cool to counter the stereotype of salads as the bland food of diets and self-denial.

On those few occasions when a salad is gendered as an appropriately masculine food, advertisements play upon a different set of stereotypes. A Wendy's ad celebrates choice with the options of fries, chili, baked potato, side, or Caesar side salad combo meals. The condensed history lesson depicted here is meant to demonstrate culinary progress: fries are now an option, not a requirement. Though the ad boasts that

"Wendy's has changed everything," the feature that remains obviously unchanged in each scene—whether "65 million years ago" when the meal of the day was a "brontosaurus combo with fries" or the present day chicken sandwich with a side salad--is the fact that "men eat and women prepare" (Bordo, 1995, p. 117). In each scene a female servant or waitress happily hands over a meal to a waiting and hungry man. Meanwhile, parody is employed in a Jack in the Box commercial to exaggerate men's tendencies to eschew salad. The ad depicts an "intervention" staged to assist the male protagonist, "Gary," who is in denial about being a salad dodger. "Maybe I've dodged a few salads," he finally admits, "But who wouldn't? Fast food salads are so . . ." Though unable to complete his commentary, with the help of family and friends, and, of course, Jack and his new Chicken Caesar Salad, Gary can overcome his salad-dodging ways. In a brief 30-seconds, with masculinity constructed through food preferences, implied lack of commitment, and the shirking of familial responsibilities, Jack in the Box delivers a high-calorie serving of stereotypes. Thus male and female, black, white, and Asian bodies figure into ads in ways that reveal the regimes of culture and the strictures of stereotypes.

Other bodies display these regimes in still more concrete and dangerous ways. Thirty percent of the pesticides used in California agricultural fields are on a list of chemicals known to cause cancer or reproductive harm (Das *et al,* 2002). The symptoms of pesticide poisoning include: headache, nausea, skin irritation, muscular incoordination, vomiting, diarrhea, loss of reflexes, irritation of nose and throat, abdominal cramps, uncontrollable muscular twitching, difficulty in breathing, mental confusion, excessive sweating, intense thirst, profound weakness, rapid pulse, rapid heartbeat, convulsions, fever, blurring of vision, unconsciousness (Pesticide Certification Training, 2002, p. 161). An "increased incidence of asthma, allergic reactions, and other respiratory problems" has been linked to pesticides (Kegley, 2001). Chronic effects of pesticide exposure may not appear until 15 to 30 years after exposure, and few studies have been conducted on farmworkers. The evidence that does exist indicates an increased risk for several cancers, birth defects, infertility, and miscarriages among farmers and farmworkers compared with the general population (Reeves *et al,* 1999, pp. 19-20).

Despite whatever bucolic notions of rural America and farming we might possess, agriculture is one of the most hazardous occupations in the U.S. "Between 800 and 1,000 farm workers die in the United States each year as a direct consequence of pesticide exposure, according to a 1997 report by the U.S. Department of Health and Human Services" (Sanchez, 2003). The most recent report from the Bureau of Labor Statistics cited 707 fatalities in 2003 among agricultural workers (a category that also includes forestry, fishing, and hunting)—resulting in the highest fatality rate among private sector businesses at 31.2 fatalities per 100,000 employees. 333 of these deaths were associated specifically with crop production.[viii] Non-fatal injuries are more difficult to calculate. Over 22,000 non-fatal injuries associated with crop production were reported in 2003 (Bureau of Labor Statistics). "More than 313,000 farm workers in the United States may suffer pesticide-related illnesses annually, according to the World Resources Institute, a Washington-based, nonprofit environmental group" (Sanchez 2003). "The few analyses available indicate that nationwide, the majority of pesticide poisoning cases are never diagnosed or reported (Blondell 1996, U.S. GAO 1993)" (Reeves *et al,* 1999, p. 21). Lack of health insurance or access to medical care contribute to this situation, but "the primary reason farmworkers are unlikely to report pesticide-related injuries and illnesses is fear of employer retaliation" (Reeves *et al*, 1999, p. 21-22). Such retaliation usually means firing workers who seek compensation or even medical attention for their injuries. Both jobs and bodies are endangered in agricultural fields across America every day.

While any given advertisement may be insignificant in itself, together they construct webs of meaning that help shape our views of ourselves, others, and our place in the world. In fast food salad advertising, "health," when found at all, refers to the physical appearance of the individual body. In the absence of even this flimsy concept, an emphasis on sexuality, stereotypes, and body ideals reinforce dominant codes of propriety—and our narcissism. Creating an oppositional code requires familiarity with a larger discourse, one that can step outside the narrow confines constructed by the discourse of advertising (and further cemented by mainstream media neglect).

The concept of "health" has the potential to serve as a powerful motivating force for human action. But it may be more likely to accomplish this if we were to understand that "health" encompasses more than our own individual bodies. We might, as Wendell Berry (1992) writes, "begin with Sir Albert Howard's illuminating principle that we should understand 'the whole problem of health in soil, plant, and animal, and man as one great subject.' Eaters, that is, must understand that eating takes place inescapably in the world, that it is inescapably an agricultural act, and that how we eat determines, to a considerable extent, the way the world is used" (p. 129). Our bodies are already linked to the soil, water, air that makes

agriculture possible and thus provides the food we eat—in our own kitchens and in restaurants (fast food or otherwise)—each and every day. We must begin to understand that our bodes are linked as well to the bodies of those farmworkers who make our eating possible. The health of the one is inextricably tied to the health of all. We can and should eat our vegetables. But doing so will constitute a "healthy" choice only if we purchase fruits and vegetables grown and harvested by farm workers laboring in safe, healthy, and sustainable environments.

Notes

[i] According to the USDA, "increasing Americans' consumption of fruits and vegetables has been a mainstay of the Federal Dietary Guidelines for more than a decade" (Guthrie 2004, p. 1), most notably through its joint sponsorship of the 5-A-Day program with the National Cancer Institute (NCI) and the Produce for Better Health Foundation. In March 2005 McDonald's joined the 5-A-Day partnership.

[ii] Bell and Valentine (1997) in *Consuming Geographies* argue that the concept of a "proper" meal implies a meal eaten together as a family and that "part of the intention behind producing such a meal is to produce 'home' and 'family'" simultaneously (p. 59).

[iii] *Agricultural Statistics 2004* estimates that Americans ate just over 45 pounds of potatoes per person in 2003 (the latest year for which figures are available). Of these, 51% are consumed away from home. Per capita consumption of the other most popular vegetables are: head lettuce - 22.3 pounds, tomatoes – 18.6 pounds, onions – 17.4 pounds, carrots – 12.7 pounds.

[iv] Eric Schlosser's 2001 book *Fast Food Nation*, which remained on the *New York Times'* bestseller list for nearly two years and was translated into more than 20 languages (http://ckp.kp.org/newsroom/nw/archive/nw_050412_fastfood.html), and Marlon Spurlock's 2004 documentary *Super Size Me*, which by September 2004 had made about $10.5 million at the box office and was ranked the fourth highest grossing documentary of all time (DVD Talk http://www.dvdtalk.com/interviews/003252.html), offer the most prominent of these critiques.

[v] If even a fraction of the fast food industry's combined advertising expenditures (reaching $3.1 billion in 1998) were devoted to promoting these salads, the amount would exceed government expenditures on its "5-A-Day" program (5-A-Day; Dukcevich 2002). Marion Nestle (2002) claims the "total funding available for public communication" of the "5-A-Day" program was under $3 million in 1999, or, as she notes, "miniscule in comparison to the advertising budget of any single candy bar, soft drink, or potato chip" (p. 131).

[vi] Barbara Kingsolver (2002) discusses the environmental impact of the physical distances our food travels in "Lily's Chickens," an essay in *Small Wonder*. Kingsolver notes that the second largest source of fuel consumption in the US (and thus the world) involves the production and transportation of food. "Americans have a taste for food that's been seeded, fertilized, harvested, processed, and packaged in grossly energy-expensive ways and then shipped, often refrigerated, for so many miles it might as well be green cheese from the moon. . . . Transporting 5 calories' worth of strawberry from California to New York costs 435 calories of fossil fuel" (p. 114).

[vii] Many of the 34 ads used in this study were gathered from two simple content analysis projects, one examining women's magazines and a second on primetime television. Of the 1379 print ads, 256 advertised food, with 13 of these for fast food salads. (Another 9 ads were for salad dressings, which also receive some attention in the following analysis.) Of the 467 total prime-time television ads, 68 advertised food, 3 of them for fast food salads. Additional print (9) and television ads (9) for fast food salads were derived from a variety of other sources. No ads for fresh fruits or vegetables were found in either study. The magazine study examined advertising in 2 issues each of 9 magazines (for the randomly selected months of July and August 2004). The magazines included in this study were: *Better Homes and Gardens, Bon Appetit, Elle, Essence, Glamour, Good Housekeeping, Ladies' Home Journal, O*, and *Self*. The television study consisted of the top 12 ranked prime-time programs (as measured by Nielsen Ratings) during the week of May 2–8. The programs in this sample include (in order): *CSI: Crime Scene Investigation* (CBS), *Desperate Housewives* (ABC), *American Idol* (Wednesday) (Fox), *American Idol* (Tuesday) (Fox), *CSI: Miami* (CBS), *Survivor: Palau* (CBS),

Everybody Loves Raymond (CBS), *Grey's Anatomy* (ABC), *Two and a Half Men* (CBS), *Without a Trace* (CBS), *Lost* (ABC), and *House* (Fox).

[viii] An additional 158 fatalities were reported in 2003 for animal production and 44 more for agriculture and forestry support activities. (Bureau of Labor Statistics, 2004, p. 8).

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Environment/Human Dialogics: Toward a Queering of Nature

Julie Kalil Schutten
University of Utah

Critical environmental study calls for the creation of a bridge between the symbolic and the material, furthering environmental sustainability. This paper begins by briefly re-acquainting the reader with the ideologies of ecofeminist rhetoric and identifying the essentialist critiques of these ideas. Next, I examine aspects of a queer ecofeminism and then articulate the theoretical aspects of a queer nature. Lastly, I conduct a brief case study of the socially constructed tropes of "wilderness" in order to flesh out how queering "nature"/"wilderness" might carve out a space for radically new discourses between humans and more than humans. A queering of nature would empower us to articulate that nature isn't*. I call for the end of categories that totalize the forces we now call nature. The ontology of "nature" is that it is multiple and this is what characterizes nature as queer. Queering nature "allows" nature to be multiple and fluid—not one single, stable entity. Conceptualizing "nature" as destabilized identity is a necessary step toward environmental sustainability as it conceptually shifts the ideologies of environmentally destructive paradigms. Additionally, from the standpoint of the critic, queering nature has possibilities to "validate" modes of communication not previously seen as "real" (human) discourse.*

At the 75th Western States Communication Association conference Connie Bullis's (2004) presidential address entitled, "WSCA and the Sustainability Challenge" continued an important conversation linking issues of communication theory and practice with environmental sustainability. Bullis stated:

> In our efforts to legitimize and celebrate the fundamental importance of the symbolic, we sometimes assume the symbolic is so foundational that there is nothing else of significance, there is nothing outside of communication, making it difficult to fully acknowledge the material, and importantly as related to sustainability, on the intersections between the symbolic and the material. (p. 457)

Adding to this, Tom Jagtenberg & David McKie (1997) have suggested that the communication discipline must work to expand its discourse to include more-than-humans. Communication scholars who study the environment examine a variety of topics including but not limited to social movement rhetoric and conflict communication. However, fewer communication scholars are working to examine how human relationships are constructed in dialogue with nature and in turn how the social construction of nature itself constrains or enables such interactions (Houde & Bullis, 2000; Rogers, 1998; Jagtenberg & McKie 1997). Critical environmental study calls for the creation of a bridge between the symbolic and the material, furthering environmental sustainability.

Ecofeminist scholars have attempted to further an understanding of how to sustain a healthy environment by examining human connection to "nature." Unfortunately, communication scholars have done little with ecofeminist theory (for exceptions see Stearney, 1994; Peterson & Peterson, 1996; Rogers, 1998; Houde & Bullis, 2000; Rogers & Schutten, 2004). Environmental sustainability and freedom for the oppressed "Other[i] depends on new ideologies that invite oppositional conceptualization about the environment, thus transforming the dominant/patriarchal paradigm. An understanding of how the Ecofeminist Movement is communicating the need for a shift in the current worldview is important because environmental stewardship and empowerment of the Other relies on the current patrilineal structure being challenged, including challenges to the social construction of "nature." This paper begins by briefly re-acquainting the reader with the ideologies of ecofeminist rhetoric and identifying the essentialist critiques

of these ideas. Next, I will examine aspects of a queer ecofeminism and then articulate the theoretical aspects of a queer nature. Lastly, I will conduct a brief case study of the socially constructed tropes of "wilderness" in order to flesh out how queering nature might carve out a space for radically new discourses between humans and more than humans.

Review of Ecofeminist Ideologies

Ecofeminist literature encompasses ideologies dealing with dualities and instrumentalist ideologies (Plumwood, 1993; Warren, 1994), oppression of the Other (Plant, 1989; Warren, 2000), patrilineal subordination (Mies, 1986; Shiva, 1989), separation between humanity and divinity intertwined within the Judeo-Christian ethic (Daly, 1973; Mickelsen and Dittman, 1990), Goddess suppression and re-emergence (Starhawk, 1990, 1989; Spretnak, 1990), spirituality, the maternal archetype (Gaard, 1993; Stearney, 1994), environmental destruction and women's relationship with nature (Warren, 1993; Stroyls and Bullis, 1993; Salleh, 1997) grassroots politics (Lahar, 1991), and queer ecofeminism (Gaard, 1997; Sandilands, 1997; Lee and Dow, 2001; Polk, 2003;). Thus, ecofeminist ideology offers a strong intersection across race, class, gender, sex/sexuality. Scholars can view ecofeminism not as a singular ideology, theory or method, but as both an ontology—i.e., a political stance about the nature of the world—and as an epistemology—i.e., a critical method (Deegan & Podeschi 2001). Much ecofeminist critique borrows from the poststructuralist (and therefore anti-essentialist) tendency to identify binary oppositions, contextualize those oppositions within the operation of oppressive and destructive social systems, and ultimately "deconstruct" the system's logic by identifying the fractures and indeterminacies both faced by the system and created by the system itself. In other words, ecofeminists use poststructuralist tools for critiquing an oppressive system. In particular, the ecological principle of interconnectedness becomes central in ecofeminist projects, both as an ontological principle (a claim about the nature of life/existence) and as a means to undermine the concepts of separateness and control upon which the dominant, dualistic paradigms (patriarchal, scientific, technical) are based.

The "roots" of ecofeminist thinking can be traced to Rachel Carson and the publication of her book *Silent Spring* in 1962. *Silent Spring* served as a type of manifesto dawning the inception of the Ecofeminist Movement and she is often viewed as the "founding mother" of ecofeminism. Several years after Carson's book was published, Francoise d'Eaubonne articulated the concept of "ecological feminism" in 1974, to draw attention to women's potential to bring about an environmental revolution (Stearney, 1994). This revolution would entail new gender relations between men and women and between humans and nature (Merchant, 1990). Liberal, radical and socialist feminism all have been concerned with the human/nature relationship that underlies the foundations that led to ecofeminist philosophy. Thus, contemporary ecofeminist ideology has derived meaning from each of these three types of feminism (Peterson & Peterson, 1996).

Ecofeminism and Essentialism

A number of critics have criticized ecofeminist theory as operating from an essentialist standpoint. According to ecofeminist and philosopher Karen Warren (2000), spiritual ecofeminists defend spirituality as a necessary part of all ecofeminist practice and philosophy while other ecofeminists claim that spiritual ecofeminism practiced in Western cultures reinforces harmful gender stereotypes that position women as "closer to nature than men." Warren argues that ecofeminist spiritualities are important epistemologically, stating

> Practitioners often base their spirituality on claims about the importance of immediate, concrete, felt experiences of women-nature connections. Since ecofeminist philosophy is interested in "situated knowledges" and "standpoint epistemologies" it needs to address the role spiritualities do or could play in the generation, articulation, and understanding of such knowledge claims. (Warren, 2000, p. 194)

Ecofeminists such as Warren appear to favor a strategic essentialism to further their premise or world-view that all humans/more-than-humans are interconnected regardless of essentialist claims. Following Warren, the woman/nature connection, while essentializing innate female connections to nature, often advances studies in ecofeminist philosophy.

Donna Haraway's (1991) essay: "A Cyborg Manifesto: Science, Technology, and Socialist-Feminism in the Late Twentieth Century" suggests how to move beyond binaries. In an effort to de-center feminist identity politics, Haraway articulates an alternative image—the cyborg. Haraway's essay de-centers many essentialist claims that undergird ecofeminist theory. Haraway states, "There is nothing about being 'female' that naturally binds women…Gender, race or class consciousness is an achievement forced on us by the terrible historical experience of the contradictory social realities of patriarchy, colonialism, and capitalism" (p. 155). Commenting on Haraway's discussion of the "feminist rejection of the myth of identity," Catriona Sandilands (1997) states:

> The story goes something like this: where once (we think) the category "woman" was taken to hold some substantive truth of those who possessed/were possessed by the label/state, now the collective noun seems fictive, even oppressive. What coherent list of attributes does it describe that is not part of the patriarchal narrative through which it was constructed? What unique standpoint does it reveal that is not produced through destructive social and political relations that consign women to an unwilling, undesired specificity? (Haraway, 1991, p. 20).

In this light, any and all categorizing is flawed by its a priori construction by dominant institutions. Thus, many Western theories of identity are totalizing and in turn work to erase or police difference (Haraway, 1991). Haraway maintains that ecofeminists have focused too strongly on the need for the organic, opposing the technological. Thus, she conceptualizes a cyborg image of animal and machine. Haraway states:

> Cyborg imagery can suggest a way out of the maze of dualisms in which we have explained our bodies and our tools to ourselves. This is a dream not of a common language, but of a powerful infidel heteroglossia. It is an imagination of a feminist speaking in tongues to strike fear into the circuits of the supersavers of the new right. It means both building and destroying machines, identities, categories, relationships, space stories. (Haraway, 1991, p. 181)

Of interest for this essay is the ability of the cyborg to blur categories toward non-essentialist theory. Yet, the cyborg does have an origin and ideology that can be politically loaded and used in oppressive ways (e.g. the cyborg industry, military etc.). In short, the cyborg is not devoid of social construction by dominant groups. The cyborg is a hybrid being that speaks equally well to machine and human, an idea that would prove difficult for many ecofeminists to embrace. Nonetheless, the cyborg is an important metaphor in that its performance of animal and machine centers it on the "gap" between "real" and the "artificial", articulating a more fluid category than that of "woman" (Sandilands, 1997).

Continuing to question the essentializing aspects of ecofeminism, communication scholar Lynn Stearney's (1994) article "Feminism, Ecofeminism, and the Maternal Archetype: Motherhood as a Feminine Universal" examines the use of the maternal archetype in environmental rhetoric. Stearney states, "This use of the maternal archetype, moreover, warrants a further conclusion: that women possess the appropriate psychological characteristics to 'mother' the earth and to spearhead a reawakening of environmental ethics" (p. 153). This "ethic of care" is then passed to women through ecofeminist rhetoric assigning the responsibility "to nurture, sustain, and protect the earth" to women (Stearney, 1994, p. 153). Stearney's article points out that even the construction of "mother" is not value-free from patriarchal tainting. This lines up with Haraway's call to eliminate categories. This essentialist aspect of ecofeminist philosophy draws parallels between the reproductive cycles of women and the reproductive or regenerative cycles of earth[ii] (Stearney, 1994). As such, this type of thinking solidifies that women have a privileged relationship to nature because they are mothers. Adding to this, Richard Rogers (1998) states, "Not only does Stearney's position reinforce ideas as determinant, but her critique ignores or dismisses nature's role in this definitional process. No discussion occurs about what metaphors or other types of symbols the natural world 'suggests'" (p. 262). Stearney's article brings essentialism to the center of the debate regarding ecofeminist epistemology while simultaneously continuing to ignore nature as its own multiplicative entity.

Queering Ecofeminism

The conceptualization of a queer ecofeminism radically alters the discussion of human/earth relationships. Greta Gaard's essay entitled, "Toward a Queer Ecofeminism" discusses Val Plumwood's (1993) well-known ecofeminist critique of Western philosophy's "master model" of identity. This identity rests at the core of Western culture as it works to perpetuate the "dualized structure of otherness and negation" (Plumwood, 1993, p.42). Adding to Plumwood's list of dualisms, Gaard (1997) maintains that, "ecofeminists must specify the linked dualisms of white/nonwhite, financially empowered/impoverished, heterosexual/queer and reason/the erotic" (p. 116). These additional dualisms proposed by Gaard would more clearly illustrate the ecofeminist intersection across race, class, sex/sexuality and culture (reason)/nature (the erotic). Plumwood's original list did not claim completeness; however, these dualisms were not present. The oppression of queers may be described as the mutual reinforcing of the dualisms: heterosexual/queer, and reason/the erotic (Gaard, 1997). According to Gaard, a "queer ecofeminist perspective would argue that the reason/erotic and heterosexual/queer dualisms have now become part of the master identity, and that dismantling these dualisms is integral to the project of ecofeminism" (p. 118-119). Taken together, Gaard called for a queering of ecofeminism stating that, "A queer ecofeminist perspective would argue that liberating the erotic requires reconceptualizing humans as equal participants in culture and in nature, able to explore the eroticism of reason and the unique rationality of the erotic" (p. 132). Gaard states that a queer ecofeminism would allow individuals to:

> Examine the ways queers are feminized, animalized, eroticized, and naturalized in a culture that devalues women, animals, nature, and sexuality. We can also examine how persons of color are feminized, animalized, eroticized, and naturalized. *Finally, we can explore how nature is feminized, eroticized, even queered*. (italics added, Gaard, 1997, p. 119).

Of significant interest is Gaard's last sentence pointing to the possibility of queering nature that I will discuss later in this essay.

Continuing the call for a queer ecofeminism, Catriona Sandilands (1997) wrote, "Mother earth, the Cyborg, and the Queer: Ecofeminism and (More) Questions of Identity." As I have been discussing, at the "root" of the queering discussion is a need to de-center categories. Sandilands (1997) states:

> In short, what epistemic and ontological coherence does the category [woman] hold that is not a site of the problem itself? These questions are neither flippant nor academic: for feminism, the reliance on the category "woman" both signals a problematic support for a gendered solidity that is the product of power-laden, discursive "othering" and smacks of a blindness to the process of social construction. (p. 20)

Sandilands continues by questioning ecofeminist reliance on ideologies that interconnect/ tie nature to women stating that:

> The ecofeminist assertion that women and nature are somehow "connected" can then become an ironic statement of joint subversion; in resistance to (but located within) hegemonic narratives, the idea of women's "naturalness" can be taken up as a performative questioning of the solidity of both. If "women" are connected through statements of women's biological essence to a "nature" that is radically unstable, then queering "nature" can be expanded to embrace the failure of "woman" as a (heterosexualized) coherent identity. If "nature" is connected through feminization to a "woman" that is not coherent, then the gendering of nature calls attention to its own unrepresentability. (parenthesis in original, Sandilands, 1997, p.35)

In addition to responding to the essentialist bind challenging ecofeminist ideology, queering of ecofeminist theory works towards a de-centering of the category "woman." Moreover, it points out that if "nature", as unstable, is tied to women, then "woman" as a category is non-existent. Sandilands continues this concept of "queering" ecofeminism by stating that:

> Queering any woman-nature affinity is thus vital to maintaining recognition of the space between the lives of actual women and the discourses in and through which ecofeminists act politically; embracing impossibility, playing with parody, is thus a political guard against reproducing a woman-nature connection that might be taken too seriously (Sandilands, 1997, p.36).

To queer ecofeminism de-stabilizes Plumwood's (1993) solid identity assumptions allowing ecofeminists to theorize in the "gap between life and construction" (Sandilands, 1997, p. 37). Finally, Sandilands (1997) states "The next step, it seems, is to argue for a 'nature' that does not reproduce (strategically or otherwise) the totalizing claims to 'identity' that have tended to plague many ecofeminist discussions" (p. 29).

Toward a Queering of Nature

Queer ecofeminism moves beyond the problem of essentialism. As I have discussed, one of the major goals of queering ecofeminist theory is that categories must be de-centered in order to attain environmental sustainability. Both Gaard (1997) and Sandilands' (1997) call to queer ecofeminism also points to the radical potentials of queering nature—to de-center nature's identity. As such, in this section of my essay I will trace out portions of Richard Rogers' (1998) essay entitled, "Overcoming the Objectification of Nature in Constitutive Theories: Toward a Transhuman, Materialist Theory of Communication" relevant toward conceptualizing a queer nature. Queering nature provides a way to continue the discussion Rogers began. Next, I will briefly explain queer theory and begin to examine how a "queer nature" might carve out a space for a dialogic view of humans and earth.

Transhuman Dialogics

"Nature" is a social construction that has been defined by humans, where humans are constructed with agency and nature is seen as passive (c.f. Merchant, 1980). The death of nature parallels the rise of Kantian epistemology that gave credence to several "constitutive" theoretical positions (structuralism, semiotics, dramatism) making language the primary structure mediating humans and nature (Rogers, 1998). Rogers states,

> While this move [to the constitutive view] relativized our knowledge of the world (since the structure and semantics of languages vary from culture to culture), it retained two pillars of the Kantian relationship between knower and known: the *separation* of humans from the world, and the *privilege* of 'correct' knowledge over the world…Constitutive epistemologies do not simply name our separation and control of the natural world, they create, value, and call for such a relationship. (p. 247-248)

Lincoln Houde and Connie Bullis (2000) add to Rogers' claim that constitutive theories require separation between humans and nature, arguing that when discussing human and non-human lifeworlds the "academe has not only been influenced by, but has also played an important part in authorizing this culture-nature hierarchy" (p. 150). As Rogers (1998) states "As long as nature is objectified and the nature/human relationship constructed as one-way—active humans giving meaning and order to passive nature—the implications of a radically materialist and dialogic theory of communication will remain obscured" (p. 247). As such, it is important that communication scholars work to include and understand how nature functions within human dialogues. Nature is most often left out of cultural human dialogues largely because it (nature) is constructed with an identity given to it by humans. As Rogers recognizes, "This repressed voice [earth's] exists in, around, and between humans and the 'natural' world, but we must learn 'how to listen otherwise than in good form(s) to hear what it says'" (p. 265). In short, constitutive materialist theory does not account for the natural environment as an active participant or subject and, in turn, nature becomes part of a muted group—it is ignored and as a result does not have its own voices or identities.

Can humans "listen" when power-over constructions dominate our ideologies and are enforced with our continued reliance on binary dualistic notions? Rogers (1998) states: "I believe objectification negates the possibility for dialogue. That which is quintessentially feminine in the dominant traditions of the Western world—call it nature, matter, physicality, body—has long been rendered irrelevant" (p. 249). In discussing nature and dialogue, it is important to note that the term dialogue is not used solely to refer to the exchange of utterances between two or more parties, but rather a dialogic relationship between humans and earth/nature. This dialogic relationship between humans and earth/nature must be re-instated in order to promote a shift within current systems of thought. In contrast, objectification—the denial of immanent value—lessens the possibility for nature to enter into human dialogues. According to Rogers, "Developing theories of communication which account for human immersion in the natural world, while simultaneously avoiding determinism, requires conceptualizing a transhuman dialogue" (p. 244). This type of theory

rejects the legitimizing of oppressive social frameworks because it seeks to include a theory that values life—immanence in all be-ings. Rogers attempts to articulate, "an alternative imperative, one that values life, that works to listen to 'nature,' 'matter,' and 'the feminine,' and that approaches them as participants in a dialogue" (p. 246). Particularly for those communication scholars concerned with vernacular discourses (Ono & Sloop, 1995) strong evidence for including nature in communication dialogues is clearly laid out by Heisenberg's uncertainty principle, but in reverse. Thus, "the observer not only affects the observed, but the observed (nature) affects the observer (humans) as well" (Rogers, p. 246). If an individual's "reality" is altered by their interactions with nature, theory that excludes this relationship will undoubtedly not depict all aspects of the rhetorical situation.

The turn to a transhuman dialogue with nature cannot happen by simply moving from idealism to materialism; as Rogers (1998) states, "this transformation requires recognizing the instability of the ideational/material binary itself" (p. 247). Western culture has given itself two options for understanding nature: nature is either fixed (essentialized) or malleable and insignificant (constituted) (Rogers, 1998, p. 261). Yet, as Sandilands (1997) states, "Chaos theory and other so-called postmodern sciences has been particularly influential in displacing the idea that nature (nonhuman or human) is governed by a series of constant laws that humans can 'discover' through the rigorous application of scientific method" (p. 30). While postmodern sciences have destabilized rigid "laws of nature" our ability to conceptualize a dialogic relationship with nature still has not been realized. "Nature" is still essentialized. Rogers ends his discussion by listing four criteria for a transhuman materialist theory of communication:

> The primary criteria for the type of materialist, transhuman, dialogic theory of communication I call for here might be (1) the resurrection of a place for natural forces, traits, and structures in communication theory while avoiding a return to natural determinism; (2) an affirmation that we humans are embodied creatures embedded in a world that is not entirely our own making; (3) a rehearsal of ways of listening to nondominant voices and nonhuman agents and their inclusion in the production of meaning, policy and material conditions; (4) the deconstruction of common sense binaries such as subject/object, social/natural, and ideational/material, and a reconstruction of relationships as dialogic: recursive, interdependent and fluid. (Rogers, 1998, p. 268)

Before conceptualizing how queering nature may satisfy these criteria, it is necessary to take a moment to briefly discuss queer theory proper.

Queer Theory

Historically, queer existed as a pejorative term; however, Teresa de Lauretis (1991) reclaimed and deployed "queer" as an organizing rubric for gays, lesbians, bisexuals, and transgender individuals. In referencing the title of her book, *Queer Theory: Lesbian and Gay Sexualities: an Introduction*, de Lauretis states, "The term 'queer' juxtaposed to the 'lesbian and gay' of the subtitle, is intended to mark a certain critical distance from the latter…" (p. iv). Use of the term queer allowed the queer liberation movements to avoid essentializing identity upon its members (Slagale, 1995). To this end, Annamarie Jagose (1996) states, " 'queer' is not simply the latest example in a series of words that describe and constitute same-sex desire but rather a consequence of the constructionist problematizing of any allegedly universal category" (p. 74). In short, queer theory examines the homophobic binary conception of hetero/homosexuality. In this light, queer theory turns our attention to heterosexuality as a "stable" construction of identity against which homosexuality is defined. Queer theory draws upon its post-structuralist "roots" emphasizing the pivotal role that language plays in the production of identities. As David Halperin (1995) states, queer is "*whatever* is at odds with the normal, legitimate, the dominant. *There is nothing in particular to which it necessarily refers*" (emphasis in original, p. 63). Of interest towards queering nature is the ability of queer theory to de-center universal identity and binary systems of thought. Discussing the "radical pluralism" of queer theory, Danne Polk (2003) states:

> Queer identity theory is ecological in that queering the cultural symbolic destabilizes the essentialist either/or dualisms of heterosexist logic and thus, opens up the possibility of a radical pluralism for the human species, a pluralism which is needed if alternative, more ecologically literate symbolic systems are to become possible. (p. 84)

The radical pluralism of queer theory offers many opportunities for de-stabilizing the Kantian relationship between the knower and the known, fracturing any singular identity linked to the term or human conception

of "nature." In turn, queering nature has the ability to work toward a transhuman materialist theory of communication.

Queering Nature

According to Houde and Bullis (2000), "A dialogic method helps to move beyond a persona of presenting one 'correct' worldview in a monovocal and authoritative discourse" (p. 153). As such, queering nature requires a polyglossic dialogic that destabilizes the ideologies enforced by the status quo. Rogers (1998) states, "A dialogic approach, one which acknowledges the interdependency of the entities involved in the sense that each is affected by the other, that each may come to know itself through interaction with the other, and that the boundaries between them are permeable" (p. 264-265). When one entity (humans) is defining another (earth), boundaries are not permeable and "true" dialogic interaction is not possible.

A worthwhile place to start envisioning what a queer nature might evoke is to revisit Halperin's (1995) "definition" stating that queer is "*whatever* is at odds with the normal, legitimate, the dominant. *There is nothing in particular to which it necessarily refers*" (emphasis in original, p. 63). First, "nature" *is* at odds with the "normal, legitimate, the dominant." Nature is perceived as Other and is positioned as outside the "normal, legitimate, the dominant." However, it is important to remember that what functions as Other is defined by the dominant system. For example, as much ecofeminist discourse has worked to illustrate, the dominant system has constructed nature as erratic, exotic, capricious, and feminine. Thus, the first step to queer nature is to deconstruct the idea that nature is a singular entity. Creation and validation of the "universal laws of nature" work empirically to restrict and confine the multiplicity of the "nature of nature." In this respect, queering nature ceases to essentialize nature's difference.

As mentioned previously, queer theory examines, critiques and questions the homophobic binary of hetero/homosexuality. In this sense, the preliminary aspects of queer theory can be viewed as de-centering the negative/positive relationship between the binary, exposing difference and deeming it "normal." Thus, queering should not be perceived as simply accepting the "negative" or non-status-quo side of the binary. Rather, if we move to a more "complex" level of abstraction, to queer involves challenging the very construction of a term such as "nature" viewed as a single concept. Rogers (1998) states:

> In developing an alternative theory, idealizing and essentializing "nature" must be avoided, in two senses: we must avoid conceiving of "nature" as a benevolent, caring entity, and we must avoid conceiving of nature as a singular entity of any sort—that is, conflating our *idea* of nature with the natural world. As Nietzsche wrote, *"one should not say 'nature is cruel.' Precisely the insight that no such central responsible being exists is a relief!" Nature "is" a multiplicity of forces and entities none of which we may ever know directly but which can nonetheless be a legitimate part of the communicative process*. (italics added, p. 264)

Thus, a queering of nature would empower us to articulate that *nature isn't*. There would no longer be a category that totalizes the forces we now call nature. Indeed, queering nature resists any totalizing framework and is indeterminate, multiple and contradictory, thereby perplexing the dominant paradigm. In this sense, queering nature functions as oppositional discourse. The ontology of "nature" is that it is multiple and this is what characterizes nature as queer. Queering nature "allows" nature to be multiple and fluid—not one single, stable entity. Moreover, the essential link between women and nature would collapse, as queer theory requires a resistance to essentialism and the binaries on which it is based. In this light, unhinging nature from women carves out a space for a relationship between "men" and "nature" (cf. Stearney, 1994).

The fracturing of a totalizing identity for nature and the erasure of the link between woman and nature can be accomplished by queering nature. This, in turn, works to speak into at least two of Rogers' (1998) criteria, as discussed previously. De-stabilizing categories such as that of male/female and nature/culture creates alliances and in turn there is no reason to distinguish between any and all entities, including nature. More to the point, nature *is always* becoming rather than dead matter. The imbalance of the human ability to order, categorize and discuss nature entirely on the basis of language as (human) symbolic interaction is addressed by queering nature. Overcoming the dominant construction of "correct" form(s) of communication begins to parse out how we might attempt to expand Rogers' insistence that a transhuman theory must include, "an affirmation that we humans are embodied creatures embedded in a world that is not entirely our own making" (p. 268). If language is not only defined by the symbols created and acknowledged by humans, other types of symbols might begin to resonate as the "voice(s) of nature."

Hearing the "voice (s) of nature" directly links to Rogers' final criterion stating that "a rehearsal of ways of listening to nondominant voices and nonhuman agents and their inclusion in the production of meaning, policy and material conditions" needs to be realized in order to have a dialogic relationship between "humans" and "nature" (p. 268). I contend that through queering nature we learn to listen and imagine nature differently. As Haraway (1992) observes, "Nature may be speechless, without language, in the human sense; but nature is highly articulate. Discourse is only one process of articulation. An articulated world has an undecidable number of modes and sites where connection can be made" (p. 324). From the standpoint of the critic, queering nature has possibilities to "validate" modes of communication not previously seen as "real" (human) discourse. Put another way, queering nature may allow room for communication scholarship to step out of linear designs, not only including different artifacts for study, but also infusing discourse with a more corporeal understanding. Haraway continues, "Nature is made, but not entirely by humans; it is a co-construction among humans and non-humans" (p. 297). Queering nature accounts for the interdependence of all entities while not essentializing their identities, moving toward a dialogic relationship between humans and more-than-human lifeworlds.

The "Wild" in "Artificial" Environments

This section attempts to articulate what a queering of nature, as symbolized by the concept of wilderness, might entail. The first step toward a queering of wilderness is to deconstruct the concept wilderness to allow room for the multiplicities of nature/wilderness to surface. Thus, a deconstruction of wilderness is necessary before humans can learn to speak (without words) and listen dialogically. My attempt to articulate a queer wilderness should not be interpreted as lessening the need to protect wilderness from destructive interests. Rather, I am interested in extending the multiplicities of natural wilderness into those areas historically thought of as urban or artificial in an effort not to order one form of nature over another—i.e. articulating a queer nature that both is a natural landscape and isn't.

Defining wilderness allows humans to articulate the ways wilderness should and/or can be used. The idea of wilderness has varied historically and is indeed a human creation (Cronon, 1998). According to William Cronon (1998), "For many Americans, wilderness stands as the last remaining place where civilization, that all too human disease, has not fully infected the earth" (p. 471). Using a queer lens, the binary of wilderness/civilization is problematic. This binary forces civilization to stand outside of nature and marks it as completely devoid of natural/wild entities, ignoring any dialogic relationships that may be present. The concept of wilderness thus acts as a container for certain natural entities while ignoring others. Additionally, what/who/it should be allowed into the container called wilderness is decided and defined by humans and through human organizational processes. In this light, defining wilderness in any particular way excludes other aspects of nature as less-than.

Historically, Western understandings of nature have been shaped by biological metaphors for wilderness as either barren or virgin territory. Far different than the wilderness experience metaphors of today, as late as the eighteenth century, "to be a wilderness then was to be 'deserted,' 'savage,' 'desolate,' 'barren'—in short a 'waste'…"(Cronon, 1998). Moreover, ideas of wilderness as sublime limited natural areas to those that could be counted worthy of human reverence. For example, the creation of national parks exemplifies the power of the human construction of wilderness to separate out which natural entities count as illustrating the interconnectedness of life on earth via vast landscapes and phenomenal views. Finally, the myth of the frontier permeated historical discussions of wilderness (cf. Cronon, 1998). These romantic notions of wilderness/nature enforce dualism, in turn halting the radical potential of conceptualizing a queer nature that is multiple and fluid.

The Netherlands as Illustrative Case

I would like to illustrate the problems of wilderness distinction by looking at the Netherlands. Urban natural areas are not seen as sublime, frontier or virgin territory but are they not still nature/earth? When the environmental movement views saving landscapes, seen as sublime, as their main type of success this should be seen as only solving half of the problem. What are the consequences if we have not yet come to understand that civilized or artificial nature is sublime as well? Can humans understand and experience nature if they don't visit vast landscapes such as Yosemite or Yellowstone? If we can only see and comprehend wilderness/nature in designated national parks what might we miss about becoming environmental stewards who value the interconnectedness of all be-ings in all landscapes? For example,

only those individuals who can afford to take time off from their jobs and have the financial resources to travel to these sublime landscapes would be afforded the opportunity to appreciate and experience wilderness/nature. This leaves out a large portion of the world's population form articulating natural dialogues. As Cronon (1998) states, "Wilderness gets us into trouble only if we imagine that this experience of wonder and otherness is limited to the remote corners of the planet, or that it somehow depends on pristine landscapes we ourselves do not inhabit" (p. 494).

If humans need vast landscapes with untouched wilderness in order to appreciate nature there would be an entire country devoid of this experience. This country is the Netherlands and if it were not for the engineering of nature, one third of the country would not exist. Polder is a well-known word in Dutch as it describes a piece of land that is completely surrounded by a dike for the purpose of protecting it against high waters (Dijkstra, 2001-2002). One third of the Netherlands lies below sea level. Let's turn to see what the tourist might encounter when looking under Netherlands and environment in the popular travel guide "Lonely Planet." The traveler is told to "Forget about wilderness in the Netherlands" (Lonely Planet, n.d.). "Mention plant-life in the Netherlands and most people think of tulips. Indeed these *cultivated* bulbs are in many ways representative of much of [the] country's flora in that they were *imported from elsewhere* (in this case Asia) then commercially *exploited*" (italics added, Lonely Planet, n.d.). So far, we understand that there is no wilderness in the Netherlands and that the flora has been "cultivated, imported from elsewhere and exploited," essentially spoiled by human contact. Because of these descriptions we are to understand that there is nothing natural in the Netherlands; the Netherlands is completely artificial and devoid of natural connections for the humans who occupy this landscape. The description continues to tell the reader:

> *Birds thrive* in the watery lands of the Netherlands and the *marshes and wetlands* are major *migration stops* for European birds. At various times of the year you can see gulls, terns, herons, and many more species. The white stork with its huge nest is *protected by numerous laws* and the population seems stable. Ravens and many other birds find food aplenty in the pastures and farms. Larger mammals are mainly found in small numbers in the national parks and reserves. These include deer, fox and badgers. Small mammals such as muskrats are common in the country and less *salubrious rodents* such as common rats find ample shelter in the cities with their many old and damp places. A variety of *fish species live in the nation's canals and estuaries*. *One of the most interesting species is the eel, which survives in both fresh and salt water and is common in canals, yet it would have been born from one of 20 million eggs laid by its mother at a depth of 250 meters in the Sargasso Sea off Bermuda*! White bream, rudd, pike, perch, stickleback and carp also *enjoy the canal environment*. There are *12 crustacean species in the coastal waters*, of which the common shrimp and the epidemic import, the Chinese mitten crab, are the most common. (italics added, Lonely Planet, n.d.).

I repeat, "Forget about wilderness in the Netherlands!" I have italicized points of interest from this passage to highlight aspects which a person could define as wilderness, or natural, wild landscapes of the Netherlands. Even the description of the common rat as salubrious illustrates the symbiotic relationship between humans and more-than-human nature as these be-ings thrive in human populated areas. The reader learns that the white stork is being protected by laws (a code indicating its "value") and that the eel thrives in the canals. Are these be-ings tame and not "wild" and does this matter? Moreover, this description does not include the Netherlands' 186 miles of coast, sand dunes and the mud flats popular for mud walking or "wadlopen" on the Wadden Sea (Holland, n.d.). Are these aspects of the Netherlands not natural? What makes this description of the Netherlands not wilderness? Even though tulips have been cultivated and rats thrive because of human garbage and the polder would not exist if humans had not reclaimed it with technology, arguing that these entities and landscapes do not contain any natural or wild qualities is counter productive for creating an ethics of environmental stewardship. When we refuse to acknowledge that nature is all around us because it has been defined in such a pristine manner we dismiss the interconnectedness of all be-ings, and negate the potential for human dialogics with more-than-human lifeworlds.

Interrogating Theory

Conceptualizing nature as destabilized identity is a necessary first step toward environmental sustainability. As Haraway (1991) states, "'Our' relations with 'nature' might be imagined as a social engagement with a being who is neither 'it', 'you', 'thou', 'he', 'she', nor 'they' in relation to 'us'" (p. 3). After we deconstruct how we have defined "nature" the "natural" we will need to begin to learn how to

articulate with nature in ways other than through speech. To this end it is important to note as Gilles Deleuze and Claire Parnet (2002) explain, multiplicity does not simply refer to the number of terms:

> It is not the elements or the sets which define the multiplicity. What defines it is the AND, as something which has its place between the elements or between the sets. AND, AND, AND—stammering. And even if there are only two terms, there is AND in between the two, which is neither the one nor the other, nor the one which becomes the other, but which constitutes the multiplicity. (p. 34-35).

The intersection of queer theory and ecofeminism suggests a number of issues to explore. How would queering nature broaden the possibilities for inclusion of non-human entities in communication practices and discourses? How might queering nature enable the inclusion of such practices within communication theory and rhetorical criticism? We have to look at the unique multiplicities of our relationships with more-than-human life words. Recognizing nature's multiplicities also refuses the idealization of one singular "nature" because our interactions with "nature" would then be understood as both sublime and disastrous.

In this essay I have argued that it is imperative we/scholars shift articulations and relations with non-human lifeworlds toward a queering of nature. It seems apparent that our new form of listening will be much like learning a new language that will take time to understand. And as with all change, it may induce some feelings of discomfort as we struggle to integrate our bodies with earth rather than continuing to force the separation between human and more-than-human.

Notes

[i] The concept of the "Other" includes all those beings that are subordinated in a powerless position, such as women and indigenous people.

[ii] Throughout this essay I will not capitalize earth or refer to *the* earth when possible in an effort to not objectify earth or single it out as one identity of "thing."

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Liberty & Justice for All: Why Promoting a Biocentric Ethic is the Best Philosophical Approach to Ensuring Wilderness Preservation

Carrie Packwood Freeman
University of Oregon

In the wake of the greatest mass extinction of species the world has ever known, creating effective environmental communication on behalf of wilderness preservation is critical. But what philosophical outlook should serve as the ethical basis for this communication? This essay builds a case for using a biocentric ethic as the basis for wilderness preservation efforts, claiming it would result in greater advancements in long-term protection of these environments (and all world species) than would a variety of more commonly-used, western anthropocentrically-based ethical outlooks. It includes an explanation of how the biocentric viewpoint provides more unconditional support for wilderness and is less vulnerable to human subjectivity, whims, scientific advancements, and economic needs. To structure the explanation, the author categorizes and describes the strengths and weaknesses of various human-centered ethical viewpoints on the wilderness, starting from the most anthropocentric (resource, recreational, ecological, and aesthetic/spiritual) up to the non-anthropocentric (biocentrism). It ends with a discussion on the challenges and opportunities for constructing biocentric environmental communication.

I remember I was sitting in a session entitled "Movement Priorities" at the national Animal Rights 2003 Conference in Washington, DC when I was confronted with the basic question "What should the animal rights movement's priorities be and why?" I quickly came to the conclusion that is ultimately serving as the basis for this paper: that we should protect wild habitat and species by promoting an alternative worldview where human animals embrace their connection to the animal kingdom and begin to inherently value nature. While my personal activist priority has always been the reduction of farmed animal exploitation through the promotion of a vegan diet, I surprised myself that day with a fairly quick and basic response in favor of habitat protection as the number one priority. But why? Because wild habitat and species cannot be adequately replaced, once lost, and time is of the essence as they are disappearing fast. And if I hoped for animals in captivity to ever be able to live happier, more natural lives (or for wild animals to continue to exist), then I must protect their homes so they have a place to live where they are largely free from dependence on and harm by humans.

But wilderness preservation is not only a priority for animal rights activists. Many other people across the globe (whether as part of other social movements or not) value preservation for many different reasons. In this paper, I would like to propose that the best reason to protect wilderness (and the most effective method for doing so) is one based on a biocentric ethic that views nature as *inherently* valuable instead of anthropocentric viewpoints that view nature as more *instrumentally* valuable. I hope to prove that using a biocentric ethic as the basis for our wilderness preservation efforts would result in greater advancements in long-term protection of these environments than would a variety of more anthropocentrically-based ethics. I will explain how the biocentric viewpoint provides more unconditional support for wilderness and is less vulnerable to human subjectivity, whims, scientific advancements, and economic needs than are human-centered viewpoints. To structure my explanation, I will categorize and describe the strengths and weaknesses of various human-centered ethical viewpoints on the wilderness, starting from the most anthropocentric ones (resource, recreational, ecological, and aesthetic/spiritual) up to the one I favor, a biocentric ethic. I will end with a discussion on constructing biocentric environmental communication.

Definitions

Biocentric (as in "biocentric egalitarianism" or "ecocentrism")

When I use the term "biocentric," I mean to support a worldview that does not perceive human interests as superior to or more important than the interests of other living things or natural objects, especially when these are viewed holistically as an interconnected, living ecosystem. Robyn Eckersley (1992) explains "ecocentric theorists argue that there is no valid basis to the belief that humans are the pinnacle of evolution and the sole locus of value and meaning in the world" (p. 28). Biocentrism is a fundamental principle of Arne Naess' deep ecology philosophy, which states that: human and non-human life is inherently valuable, with none being particularly more "worthy" than others; all beings and natural objects are interconnected as important parts of a whole ecosphere; and all life should be allowed to flourish. This value for non-human life exists regardless of its usefulness for human purposes (Devall & Sessions, 2003, p. 266). The basic argument of deep ecology is one that supports "caring about the earth not just as a means to our human ends but for its own sake" (VanDeVeer & Pierce, 2003, p. 651). While some may perceive biocentrism as anti-human, I do not see it so negatively. I see it as fully respecting nature and all living beings (including human animals) more equitably.

Anthropocentric

I use this term to represent a philosophy where humans are considered of inherently more moral worth than any other life form on earth, and therefore all human actions give higher moral consideration to human-centered interests and benefits verses any consequences to non-human life (which is a secondary concern, if considered at all). In deep ecology, anthropocentrism is seen as the dominant worldview (especially in Western industrialized nations) where humans feel a separation from, superiority to, and dominance over the rest of the natural world, and therefore can view nature as a resource whose primary value is instrumental, and therefore conditional (Devall & Sessions, 2003, p. 264). In brief, it is the common view that humans matter most, and it is in opposition to biocentrism. It currently sets the tone for most preservation or environmental policies in the United States.

Wilderness

I will use the term "wilderness" as defined as "an area of the earth substantially untrammeled or unmodified by human beings" (VanDeVeer & Pierce, 2003, p. 519). It is important that we don't indicate that humans are so separate from nature that they cannot visit or inhabit a "wilderness" area or that all human cultures are equally destructive (many aboriginal cultures live in harmony with nature as opposed to more industrialized and consumptive cultures). The distinction between wilderness and non-wilderness comes largely from the fact that true "wilderness" remains essentially unchanged by human intervention and often contains more genetic diversity than domesticated, human-constructed environments.

Basic Assumption about the Necessity for Wilderness Preservation

As mentioned in my introduction, I view wilderness preservation as a priority due mainly to the fact that humans are currently harming and destroying wilderness areas at a faster rate than ever seen before in centuries past (Myers, 2003). The damage done to wilderness, through the loss of habitat and genetic diversity, is often irreparable, and therefore cannot be reversed or fixed by human technology. While Julian Simon (2003) may believe that the supply of natural resources is infinite due to the remarkable capabilities of human ingenuity to adapt and invent new resources or more efficient uses of existing ones, I do not think this dependence on human technological solutions applies to wilderness preservation because wilderness area is finite, and the genetic diversity found there cannot typically be duplicated or restored.

Norman Myers discusses this concern for what he labels a "mass extinction episode," arguing that while extinction does occur in nature (loss of about "one species ever year or so" is normal), human activity is to blame for the current extinction rate being hundreds to thousands of times higher than it has ever been in hundreds of millions of years (Myers, 2003, p. 529). He has specific concerns for the ecological zone which is being depleted at the fastest rate, the tropical rainforests, since they are also the most genetically diverse ecosystems on earth, containing around half of all species. Myers feels we are causing damage so extensive that natural recovery and regeneration may not be possible, and even if it was, it could still take millions of years. The rich genetic diversity of ecosystems like rainforests, wetlands, coral reefs, and estuaries are

under human threat and require immediate protective action to reduce what Myers describes as "the greatest single setback to life's abundance and diversity" since life began four billion years ago (p. 533).

While we urbanites might view cities as the source of all *night-life*, wilderness ecosystems are the ultimate source of *all life,* period – the life source upon which all future generations of species are dependent.

Anthropocentricism and Biocentrism in the Environmental Movement

Every social movement operates along a continuum from more conservative and reformist to more radical and abolitionist. The environmental movement is no exception, and some have labeled the ends of the environmentalist continuum as "anthropocentric" verses "biocentric/ecocentric," respectively. In fact, Manussos Marangudakis (2001) says this bifurcation is inherent to the movement "since its date of official birth, Earth Day, 1970, green thought and social action has become increasingly divided between two fundamentally opposing trends" (p. 459). Robyn Eckersley (1992), who has categorized all ranges on this spectrum, also points out the commonalities both sides share, saying they are both emancipatory at heart and critical of the same types of environmentally destructive forces. She feels where they vary most is in their "ecophilosophical justifications" for their proposed alternatives (p. 29).

Eckersley developed a scale of environmental perspectives, consisting of five ranges from most anthropocentric to most ecocentric: resource conservation, human welfare ecology, preservationism, animal liberation, and ecocentrism. She further divided "ecocentrism" into three categories: autopoietic intrinsic value theory, transpersonal ecology, and ecofeminism. When Grendstad and Wollebaek (1998) empirically tested this spectrum (including the 3 variations of ecocentrism) to see where people ranged, they found that an anthropocentric "resource conservation" perspective received the lowest support, while "human welfare ecology" (just one ranking away) had the highest. But encouragingly, the general public seemed to be fairly supportive of *all* of the middle category perspectives (even ecocentric ones, especially autopoietic intrinsic value theory), and only failed to agree with the most anthropocentric (resource conservation) and most ecocentric (ecofeminism) categories.

While some may paint an unflattering picture of biocentric *activism* (particularly Earth First! direct action) as radical, unproductive and "irrational" (Marangudakis, 2001), other studies confirm Grendstad and Wollebaek's findings that biocentric *perspectives* on nature are not as radically uncommon or irrational in the eyes of the general public – especially not towards wilderness protection. For example, one study found the public is becoming more supportive of national forest policy evolving towards ecosystem (holistic) management-related principles. (Steel & Shindler, 1994). Another study, by Manning, Valliere, and Minteer (1999), found similar results when examining Vermont residents' values, ethics, and attitudes regarding management of the Green Mountain National Forest in Vermont. The authors found most respondents had attitudes that favored forest management for non-material benefits, including protection of ecological integrity. The authors contend that at least 60% of the forest management attitudes are significantly related to the respondents' values and ethics. The authors categorized national forests *values* into 11 types and environmental *ethics* into 17 types (which could conceivably run along a spectrum of anthropocentric to biocentric, although I would categorize the vast majority as anthropocentric).

The 11 forest values are listed here in order of their importance to respondents: aesthetic, ecological, recreation, education, moral/ethical, historical/cultural, therapeutic, scientific, intellectual, spiritual, and economic (p. 427). The "aesthetic" value of forests ranks the highest, and on my proposed spectrum, it is perceived as close to biocentrism. However, the second highest-ranked value in this study, "ecological," which might intuitively seem biocentric by definition, is unfortunately defined in anthropocentric terms here as "the opportunity to protect nature in order to ensure *human* well-being and survival" (p. 427). I contend that the only truly biocentric value included in this study is "moral/ethical," which, although it only ranked 5th out of 11, did receive a favorable mean score of 4.53 on a scale of 1 to 6 (ascending in importance). That means most people claim to have values that support a "moral and ethical obligation to respect and protect nature and other living things," (p. 427). Equally encouraging, the lowest-ranked value by far was "economic," indicating that most people did *not* value nature as a source of natural resources such as timber and minerals.

The 17 environmental ethics related to nature are listed from most anthropocentric/negative to most biocentric/supportive (and grouped into five categories):

(1) **Anti-Environment**: threat to survival, and spiritual evil.

(2) **Benign Indifference**: storehouse of raw materials, religious dualism, and intellectual dualism.

(3) **Utilitarian Conservation**: anthropocentric humanism, efficiency, quality of life, and ecological survival.

(4) **Stewardship**: religious/spiritual, future generations, God's creation, and mysticism.

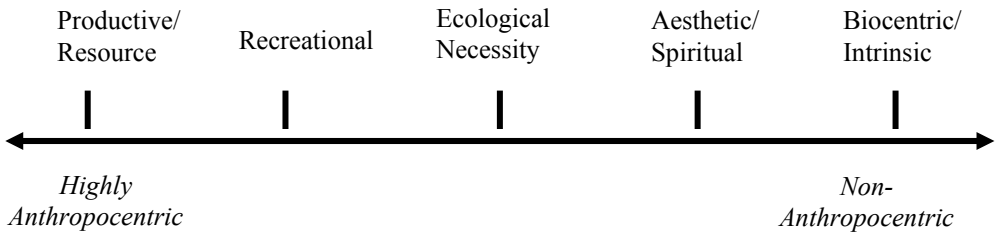
(5) **Radical Environmentalism**: humanitarian, animism/organicism, pantheism, and liberalism/natural rights. (Manning et. al, p. 428-429)

Survey results show the last three categories received the highest rankings and fewer people identified with anti-environment and benign indifference ethics. Although, a reliability issue with the survey from my estimation is that the ethics descriptions were not well-worded, and there were not a sufficient amount of choices that were highly biocentric. For example, none of the ethics listed were direct in saying that humans were animals and that we are not morally superior.

In support of ecocentrism, a survey by Hunter and Rinner (2004) reveals that "individuals with ecocentric perspectives place greater priority on species preservation relative to those with anthropocentric perspectives, regardless of species knowledge" (p. 517.) This suggests that environmental *perspective* is more critical to determining species protection than a person's level of *knowledge* or awareness about species and ecological issues. In support of my thesis, the authors feel their survey results imply that education campaigns to protect local species should expand to promote the bigger picture of ecocentric ethics like ecological integrity and biological diversity (and that people with anthropocentric views are the key audience to target).

With some of the background issues clarified, I will now expand upon the thesis of this paper – an exploration of why a biocentric ethic is preferred over anthropocentric ethics when it comes to preserving wilderness. To structure this discussion, I have constructed a scale of viewpoints for valuing wilderness preservation, ranked by varying degrees of human-centeredness. I based the categories off of concepts discussed in the "Wilderness & Forests" and "Constructing an Environmental Ethic" chapters of *The Environmental Ethics & Policy Book* (VanDeVeer & Pierce, 2003). I will discuss the strengths and weaknesses of each viewpoint, starting with the most anthropocentric and ending with biocentrism.

Scale of Human Valuation of Wilderness Areas



Productive/Resource Viewpoint

This viewpoint most highly values a wilderness area for what it has to offer in terms of "natural resources" for human consumption, such as oil, water, coal, diamonds, food/game, timber, etc. In some cases, preservation of the wilderness area assures continued abundance of these resources, as with trees and food/game animals especially. Economic factors primarily determine what is valued in this viewpoint. For example, jobs associated with the maintenance of the wilderness (forest service employees) or extraction of resources (fisherman or loggers) are factored in as an additional economic contribution.

The historical roots of this resource argument come from the sciences, such as forestry scientist Gifford Pinchot at the turn of the 20th century. He and other "conservationists" argued that America's natural resources existed for use by its current citizens, first and foremost. He states, "The first principle of

conservation is development, the use of the natural resources now existing on this continent for the benefit of the people who live here now" (Pinchot, 2003, p. 175).

While the resources gained are of benefit and use to humans and therefore give some wilderness areas a high instrumental value, the danger of this viewpoint is that the value of the wilderness area is precariously resting on its utility as an economic resource (and economic value ebbs and flows). If the resources become less valuable in the future (such as less dependence on oil or lower demand for fish), or are mismanaged by humans (such as overfishing or deforestation), the wilderness area is put in jeopardy of being destroyed because its value is lost in the eyes of the community. It may become perceived as more valuable as a purely commercial entity, such as land for cattle grazing or a new real estate development.

Former U.S. Forest Service employee, Perri Knize, explains in her article "The Mismanagement of the National Forests" the dangers of our government viewing the national forests as a timber resource because the Forest Service then gets rewarded for cutting down and selling trees instead of protecting the integrity of our forests (Knize, 2003). Knize contends that the private timber industry would be better off if the government got out of the timber business, and so would our forests and the local human communities.

Another weakness of the productive/resource viewpoint is that it places more value and importance on the individual resources themselves, and not as much importance on the other species that make up the ecosystem as a whole. This hierarchical and piecemeal valuation may cause mismanagement or neglect of "useless" species in favor of maximizing the resource object or species, causing undue manipulation of the natural environment and possible ecological imbalance (which ultimately threatens the area's future integrity). For example, natural predators, like wolves or seals, may be seen as competition for us in obtaining resources, so we may damage the overall health of the ecosystem by decreasing the numbers of these natural predators.

An analogy for the weakness of this non-holistic approach to resource management is how a farmer may claim he cares about the welfare of his cow because she is his livelihood, so it would not be in his best interest to harm the cow or let her get injured. However, since his main interest is to maximize economic benefits, he can treat the cow as a series of parts to be manipulated and exploited, not as a whole, sentient being with feelings and complex needs that go beyond the simple maintenance he provides of food, water, medicine, etc. He may choose to do things to her that are harmful to her mental and physical well-being, such as branding, overmedicating, fattening, or intensively confining her, so long as it ensures increased profits as the end result. Like the cow, a living ecosystem is likely to receive better overall care that is in its own best interest, if its parts are not commodified and seen merely as a means to economic ends.

According to "The Land Ethic," famous ecologist Aldo Leopold reiterates the need for a non-economic, holistic view of ecosystems. A basic principle of the land ethic is that it "enlarges the boundaries of the community to include soils, waters, plants, and animals" (Leopold, 2003, p. 216). He critiques the resource viewpoint because it reinforces human superiority over nature, which excuses privileges without supporting ethical obligations. He doesn't support valuing the land based on "economic motives" (p. 218) because not all of nature has economic value, so the resource viewpoint's protection is limited to only certain parts of the whole (or sometimes excluding whole ecosystems in and of themselves). As an ecologist, who sees the interdependence among all species in an ecosystem, Leopold fears a resource perspective does not support a healthy maintenance of ecological balance necessary to a survival of all wilderness (p. 219).

Recreational Viewpoint

This viewpoint has some similarities to the resources viewpoint, but it is less concerned with extracting physical resources from the wilderness and more concerned with allowing human access, enjoyment, and use of wilderness areas for leisure or recreational purposes (which can still cause environmental damage). The logic of this viewpoint is that if people are enjoying their access to these beautiful areas, they will be motivated to pay to preserve them for their own continued enjoyment.

At the end of her article, Perri Knize suggests that the national forests could pay for themselves much more effectively through recreational fees rather than through the current method of selling lumber. She explains that "only those who used the national forests would pay, and their fees would ensure that the forests were managed in the best interest of recreationists" (Knize, 2003, p. 542).

While I agree her suggestion is an improvement over the current management of national forests from a purely "productive/resource" viewpoint of logging, I feel supporting the national forests solely on a recreational basis is still problematic. Notice in her quote above, she admits that managing the forests as recreational sites shifts the management objectives and incentives from pleasing the loggers to pleasing the recreationists – hikers, hunters, skiers, etc. She did not state the management would be in the best interest

of the *forest itself*, which is where I feel it needs to be. By simply catering to recreationists' interests, the park management is then financially encouraged to increase and maximize the park's attendance and usage by the public. This increased human usage may be destructive to the plants and animals who also live in the forests. For example, park management may be under pressure to build more trails, roads, picnic tables, restrooms, cabins, lodges, golf courses, tennis courts, bridges, signage, etc. Additionally, management may choose to allow more intrusive types of recreational activities, such as dirtbikes, cars, motor-boats, firearms, and snowmobiles, which are very disruptive (and sometimes fatal) to plants and animals sharing the forest space. This concern can be extended beyond just forests to other wilderness areas such as coral reefs and rainforests who may also be compromised by increased diving, boating, hunting, camping, etc.

I am reminded here of Garrett Hardin's warnings about the "Tragedy of the Commons," which argues that given freedom of a common resource, people will do what is in their own best interest, but not necessarily what is in everyone's best interests for the resource's survival (Hardin, 2003, pgs 366-367). In this case, I believe individual recreationists may each use the park to their advantage without really knowing (or caring) how the collective effects of everyone's similar over-usage might negatively impact the wilderness area. Hardin warns that if we continue to view the parks as common areas for human enjoyment, they will cease to be of value to anyone (p. 367).

Additionally, when you consider the modifications that may be made to wild areas to tame them and make them more amenable for all types of tourists and human activity, it begs the question as to whether these areas will be compromised to the point where they are no longer truly "wilderness" areas, according to my definition in this paper. Therefore, I do not think that a recreational viewpoint will be in the best interests of saving wild areas, but in fact, it may jeopardize their integrity as they become molded into mere playgrounds for humans looking for an escape from urban confines.

In which case, under this recreational playground viewpoint, might wilderness areas be vulnerable to becoming analogous to amusement parks or zoos? For example, people come to zoos to experience the thrill and exoticism of nature through gazing at the "wild" animals on display. Arguably, in this artificial environment, zoo animals are not fully "wild" anymore and are not fully able to behave and enjoy life as they might in their natural habitat. In which case, the public *and* the animals are being cheated by a false experience. Similar to zoos, might wilderness areas also be molded into a Disney-esque "nature experience" on display for human amusement? I think since people want these kind of nature experiences, then smaller, less genetically diverse areas should be set aside, restored, or created for recreational purposes (like Central Park in Manhattan), but that true wilderness areas should be protected from extensive use and accidental degradation by humans for recreation.

Ecological Necessity/Interdependence Viewpoint

This viewpoint is based on scientific and ecological principles which reinforce the function of wilderness areas, specifically plants and trees, to maintaining the earth's ecological processes in balance so all life can continue to exist. For example, Knize states "the fresh air and clean water our forests produce are essential to our survival, because they are basic components of the food chains that keep all species alive," (2003, p. 540). She gives another example of the ecological necessity for old growth forests in claiming that "forests play a major role in the absorption and storage of carbon dioxide" (p. 540). She goes on to explain that cutting down trees, especially ones older than 200 years, releases large amounts of carbon dioxide into the atmosphere, which threatens climatic changes and increases risks of global warming (p. 540).

Since most Americans respect scientific knowledge (due to modern Enlightenment prioritization of instrumental reason over other ways of knowing), I think this ecological necessity/interdependence viewpoint makes sense to many and has merit at convincing the average citizen that the preservation of some wild areas are necessary to human survival, clean air, fresh water, and quality of life on earth. However, if the pubic is dependent on scientific research alone to tell us what wild areas are necessary and to what extent, we place the value of wilderness primarily in the hands of the physical science community and not our own conscience. Future research (whether valid or biased) may start to refute or lessen some of the claims of this ecological necessity stance, so that wilderness may be put at risk based on the whims of scientific theories fashionable at the time.

Additionally, we may find technological solutions to ecological problems in the future, so that it may be possible to simulate the beneficial role plants currently play in the environment, making wilderness areas less necessary to our survival. Or we might find suitable or more practical replacements (like the shrubs and trees in people's yards, human-made lakes, tree farms, etc). So, while I like this viewpoint from the

standpoint that it creates an interdependence between human and non-human life, thereby raising the perceived status and value of non-human life, its weakness is that it makes wilderness preservation vulnerable to future technological solutions by basing it on scientific research findings instead of an ethical standard.

Aesthetic/Spiritual Viewpoint

This viewpoint bases the value of wilderness and its need for preservation primarily on how its beauty and "naturalness" make it a sacred place where humans can benefit from being closer to God and reach a sense of enlightenment and personal spiritual fulfillment not available in more urban, man-made environments.

This popular viewpoint historically falls under the umbrella of the preservation movement, credited largely to John Muir, founder of the Sierra Club. Muir's spiritual viewpoint at the end of the 19th century was in direct opposition to Pinchot's conservation/resource perspective of the same time period. Muir saw the divine in nature and appreciated it for its beauty and inspiration (VanDeVeer & Pierce, 2003). His descriptions of nature's beauty are poetry in and of themselves.

I agree with Muir that wilderness is often beautiful and peaceful to be around, and it can serve an important role to rejuvenate us from our hectic, fast-paced urban lifestyles and reconnect us with our animal roots in nature (which is approaching aspects of a biocentric worldview). However, there is no guarantee that nature is always peaceful and beautiful. Sometimes it is harsh, unforgiving, dangerous, lonely, and uncomfortable. We might get to experience enlightenment watching a sunset over a stream one minute and get attacked by an alligator or mosquitoes the next. To value it solely for its exterior beauty or opportunities for a spiritual connection with all life is to disregard the other, more negative human emotions and responses it is also fully capable of producing.

Besides, aesthetics are highly subjective, and quite subject to fashion, trends or differences of culture and opinion. Some may find a desert "breathtaking" while others find it a "wasteland." Therefore, this aesthetic viewpoint does not adequately protect all wilderness from the whims of personal taste. Because many people are attracted to flowers, should we plant more flowers or favor flowering trees and plants in managing wilderness areas to maximize their appeal and ultimate protection? Bears, songbirds, tropical fish, eagles, pandas, dolphins, tigers, etc. are all examples of animals that many people seem to find beautiful or inspiring. Should we promote their ability to flourish over other, less appealing species, like eels, lizards, snakes, insects, crocodiles, rats, etc.? If we expect that nature must appeal to us, we may be inclined to modify it or cause ecological imbalance so we can experience what we consider to be the "best" aspects of it in pursuit of relaxation, inspiration, or spiritual fulfillment.

Additionally, under this viewpoint we may only protect certain ecosystems which we deem to be the most attractive and pristine, disregarding other genetically diverse, but "uglier," environments. For example, John Rodman asserts "aesthetic arguments are particularly plausible for arguing for the preservation of the Sierra or the Grand Canyons, but not with respect to saving the marshes and brushlands" (VanDeVeer & Pierce, 2003, p. 519).

Some people may not even ever get to see the Sierra or Grand Canyons anyway, so they may not be able to experience the benefits of the spiritual fulfillment or beautiful scenery this aesthetic viewpoint relies upon. Particularly, poorer, urban residents may not have the luxury of the time or money it may require to travel to a wilderness area. Therefore, large portions of the public may simply not be able to "test out" this viewpoint in order to adopt it. To value nature for spiritual benefits it could offer in our best interest assumes everyone is capable of enjoying this natural experience at all (or that they would feel the spiritual effects at all).

Biocentric/Intrinsic Viewpoint

This alternative viewpoint to anthropocentrism suggests that wilderness has intrinsic value that merits it for protection in its own best interest, regardless of any separate instrumental value that humans may place on it. While there are several different ethical viewpoints that could be considered here as non-human-centered (such as Eckersley's three ecocentric categories: autopoietic intrinsic value, transpersonal ecology, and ecofeminism), for purposes of simplicity in this essay, I am considering them all abstractly under one central viewpoint called "biocentric." I contend that the biocentric viewpoint as a whole is a stronger philosophical basis for protection of wilderness (and ultimately all species) than ones that promote wilderness preservation for some specific human benefit (however seemingly benign and non-invasive).

Throughout this paper, as I've described the various anthropocentric viewpoints, I've mentioned their multiple weaknesses. Often the reverse of these failings of anthropocentric viewpoints represents my argument in favor of a biocentric viewpoint. In summary, here is a review of the strengths of promoting a biocentric viewpoint to protect wilderness areas. Biocentrism is not:

- reliant on existence of continuing economic gains to determine worth of area.

- subject to whims of human subjectivity or preference (which are impossible to predict for the future).

- subject to the area having to meet certain "appealing" conditions/standards in order to be deemed pretty enough, safe enough, or comfortable enough to be worthy of protection by humans.

- reliant on every human's participation in wilderness areas to be deemed valuable to them.

- a compromise between trying to balance human overuse with protection when extracting natural resources or amusement from a wilderness area.

- competing with other aspects of the natural environment in an attempt to maximize resource extraction for our own use, thereby possibly compromising certain members of the biotic community in favor of others. Views wilderness areas more holistically and with more respect for how all species are interconnected and essential to the health of the ecosystem.

- subject to more control, manipulation, interference, micro-management or mismanagement of wilderness by people, which can compromise the natural integrity of the area.

- dependent on science to continue to reinforce the ecological necessity of these areas to sustaining human life on earth.

- vulnerable to future technological advancements that may serve to replace or substitute the scientific or economic benefits that the wilderness now provides.

- vulnerable to exploitation or destruction by those greedy individuals seeking short-term economic or recreational gains at the expense of the wilderness. Under a biocentric viewpoint, it is not somebody else's problem to protect wilderness areas from exploitation; it is everyone's ethical obligation.

Under any of the anthropocentric viewpoints, the wilderness areas are always vulnerable to some higher priority of use for human advantage. For example, when people are hungry, it would not seem "right" to deny them farmland because we want to have a forest in which to meditate or because we want to protect a single, endangered plant. Whereas, a biocentric view would not make it right to sacrifice the lives and homes of other species for our farmland. Or, to use a current, real-world dilemma as an example, if we are at war in the Middle East and do not want to be dependent on foreign oil to meet our energy needs, it would not seem "right" to deny limited and "careful" drilling for oil in the Arctic Refuge. As long as the major value of wilderness is anthropocentric in nature, our "national interests" will likely be seen to outrank any other reasons for preserving wild areas because ultimately the rights of other species come second to our own.

When it comes to competing interests between non-humans and humans, anthropocentric viewpoints always allow us the ethical flexibility (and loophole) to sacrifice non-human life to serve our higher-priority needs first. Under a biocentric viewpoint, even though there would still be competing interests, if non-human life were perceived as inherently valuable and not inferior, then those species would not always be at a disadvantage. We may be less willing to sacrifice nature in most circumstances (where we now might), and would be ethically obliged to try harder to come up with alternative solutions that would be a win/win for both human and non-human life.

By encouraging eco-friendly solutions and less resource-intensive lifestyles, a biocentric perspective could generate widespread benefits to *all species*, even humans, in addition to the animals, plants, and natural objects inhabiting wilderness areas. It is a holistic outlook with wide-ranging, holistic results for all life. Additionally, since biocentrism promotes basic and broad-based values of equality and justice, it has much in common with other social justice movements, and perhaps it would foster increased opportunities for environmentalists to collaborate on mutual projects with other movements (such as humane education projects with the animal rights and human rights movements).

Biocentrically-Informed Environmental Communication

Facing a Worthy Challenge

The challenge with, and some may say the main disadvantage to, the biocentric viewpoint is in how difficult it will be to get the public to adopt a non-anthropocentric viewpoint when that is currently not the dominant worldview and there are many powerful economic interests who work to ensure that it is not. And certainly, in this current atmosphere, it is challenging to ask people to value other life as they do themselves, when the concept may be perceived as threatening to the rights and advantages they currently perceive they have (or insulting to their religious beliefs). However, we have historically asked privileged, Caucasian, heterosexual, protestant, land-owning, upper class males to extend their moral concern to those humans of other genders, sexual orientations, races, religions, classes, etc (even when their religion was traditionally used to justify that discrimination). Although these changes once seemed revolutionary in scale, many are in different stages of adoption now (in some cultures) and have been progressing slowly but steadily over generations. Therefore, just because an ethical viewpoint seems like a "hard sell" at the time, if it is the right thing to do, it does not dismiss us from promoting it and laying that foundation for future change, despite today's obstacles.

Likely, many of the readers of this article may be biocentrists and agree with me in principle that wilderness areas should be preserved for intrinsic reasons. However, these same readers may feel it is simply impractical and irrational to expect the public to make a radical change in their worldview, and that failing to enact change would put wilderness areas at further risk. Many social movements face this same dilemma of whether or not to build their campaigns around more noble and authentic ideals or those more mainstream concepts that will play more easily to public sentiment (such as whether or not to "sell" vegetarianism based on ethical benefits or on human health benefits). I would argue that we do not want to become like political spin doctors who simply cater to opinion polls and say whatever we think will resonate with certain publics in order to get them on our side at the moment. I feel that while this may be an effective strategy for winning battles, it is not an effective strategy for winning the war (to use an inappropriate military metaphor).

Owning our Agenda with Integrity

Many opponents of environmentalism often try to scare the public by claiming that we environmentalists have hidden radical agendas. And, you know what, they are often right (even if they exaggerate and mischaracterize those agendas). Let's be media-savvy enough to set those agendas ourselves by owning up to them and framing them to positively express our honest values, as linguist George Lakoff promotes (2004). If we believe that environmental principles are truly more ethical and just than the material, anthropocentric concerns of many of our opponents, then we should not be afraid to be upfront and ethical in our promotion of these noble interests. When we dilute or distort our message to make it more palatable to the mainstream (like "Save the Everglades! It's a great place to picnic!"), we succumb to the dominant worldview and abandon our role as advocates for progressive change. We also underestimate the public, particularly the younger generation. If environmentalists do not educate the younger generations about the positive benefits of a biocentric ethic, there will be no hope of biocentrism ever achieving status as the dominant worldview in the future.

Maybe a biocentric worldview isn't quite as dauntingly out of reach as we think. Consider how many of the survey results revealed that people share a variety of positive environmental values, most of which are not exploitative, and some of which are already biocentric. Perhaps all we need to generate is a shift in perspective and priorities (by appealing to people's more noble sentiments), not a major overhaul requiring we drag people clear across the spectrum from one end to the other. Perhaps our challenge is less about gaining public consensus and more about doing a better job combating the anti-environmentalist corporate

noise machine that works to retain power over defining the discourse (Beder, 1998). Foucault described discourse as "the thing for which and by which there is struggle. Discourse is the power which is to be seized" (Foucault, 1990, p. 1155). As environmentalists, we have a responsibility to define environmental discourse, and liberate it from the anthropocentric confinements of Enlightenment notions of human superiority and progress (DeLuca, 2001). To do this, we will have to frame the discourse around the positive, compassionate, and just aspects of reverence for all life. We are the real "pro-lifers" in this debate and must communicate this mission.

Designing Biocentric Communication

While many scholars have proven the challenges social movements face in getting credible media attention against more mainstream powerful interests (Gitlin, 2003 & Ryan, 1991), that does not mean we should either water down our message or vamp it up with sensational tactics just to fit into this limiting and inequitable Western mass media dynamic. When Marangudakis trivializes Earth First! methods by describing them as ineffective and "irrational," (his excuse for supporting more anthropocentric environmental activism), I think he is remiss in assuming that all biocentrists inherently must employ radical or direct action strategies (although there is a natural, inevitable, and even "rational" place for that in any movement). We can still promote a radically different worldview without being overly "radical" or aggressive in our campaign tactics or message design. We can try utilizing some of the traditional strategies of our opponents (but in a more ethical way), such as funding think tank research, buying our own media outlets and producing our own media, reaching out to the younger generation, creating well-resourced networks, and seriously lobbying politicians (Beder, 1998).

However, since our message is alternative, it makes sense to protect it from distortion, reduction or cooptation by utilizing alternative cultural or communication outlets (not mediated through a third party). This may be accomplished through creating outreach campaigns which, although they may be specific to saving a particular wilderness area, are informed by broader biocentric perspectives (as promoted by Hunter and Rinner's study, 2004). The messages could then be communicated through: humane education, documentaries/films, books, art, music, theatre, pamphlets, spiritual outlets, lectures, web sites, advertisements, etc.

In conclusion, to promote this new outlook on the world it seems to make the most sense to reach out to younger audiences (including ones from conservative backgrounds). We cannot ignore the "red states" or arrogantly mischaracterize more conservative or rural citizens as incapable of embracing biocentric values, when in fact they have been shown to respond strongly to value-oriented messages, albeit more "traditional" ones (Lakoff, 2004). We have a positive value to sell. I believe young people, in both red and blue states, are the most ideal target audience to embrace this message because they generally are: more open to new ideas, looking to define their identities, less habitually ingrained in commercial interests, and more often intuitively connected to the natural world of animals and plants (as opposed to the material world). Since, generally, each new American generation tends to be a bit more socially-conscious than the previous, I hope our biocentric message of "liberty and justice for *all*" will increasingly resonate with each passing generation.

If we don't work to build a foundation for creating a paradigm shift to a biocentric worldview, despite the challenges, how will it ever be achieved?

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Mapping the Ideology of the Domination of Nature from Wilderness to Ecosystem, or, Defending Wilderness by Taking Rhetoric, Science, and Ideology Seriously

Pete Bsumek
James Madison University

This paper attempts to identify the key components of the ideology of the domination of nature, and show how they hinder attempts to transcend the rhetoric of wilderness. It does so by offering a series of aphorisms, and is more or less a rhetorical/ideological critique of the critique of wilderness and its simplistic and naïve uses of rhetorical theory. My goal is to demonstrate how the attempts to transcend the ideology of the domination of nature fail, in the hope of offering guidance for future wilderness advocacy.

Cronon's Invidious Attack on Wilderness:

The discourses of the environmental justice movement and post-modern theory converge in Cronon's (1996) "humanist environmentalism" to produce an invidious attack on the idea of wilderness, the myths of wilderness, the politics of wilderness advocacy and the possibilities of wilderness. Or, perhaps, Cronon mobilized these discourses for productive postmodern political and theoretical effect. Do the discourses use Cronon, or does Cronon use the discourses?

The Fruits of the Critique of Wilderness:

The critique of wilderness has produced two alternatives to "the received wilderness idea." The first alternative is scientifically derived. It champions replacing the idea of wilderness, and its corresponding strategies of wilderness preservation with scientifically grounded conceptions of biodiversity preservation and ecosystem management. This alternative is exemplified by Callicott (1994/1995) and Garber (1995) as they attempt to shift the rhetorical ground for environmental protection from wilderness preservation to ecosystem management. Their critique grants that wilderness is a social construct and attempts to regroup public land preservation and wildlife protection under the objective umbrella of the ecological sciences. Garber, a research biologist at the Sequoia and Kings Canyon National Park, summarizes this critical alternative:

> Wilderness has taken on connotations, and mythology, that specifically reflect latter twentieth-century values of a distinctive Anglo-American bent. It now functions to provide solitude and counterpoint to technological society in a landscape that is *managed* to reveal as few traces of the passage of other humans as possible. Contemporary wilderness visitors are just that. Unlike the hunters and gatherers who preceded them on the land, moderns who enter wilderness do so not to live on the land, nor to use it, but rather to experience it spiritually. The ecosystem is defined on its own terms, but this wilderness is a social construction. (Garber, 1995, p. 124)

The second alternative to the idea of wilderness is derived from postmodern conceptions of environmental ethics. This alternative seeks to transcend the mythical and ideological attributes of the concept of wilderness by positing a postmodern philosophy of wilderness. Advocates of this alternative, such as Max Oelschlaeger (1991) and Neil Evernden (1992), argue that all conceptions of nature are socially constructed. Nonetheless, they claim that this does not prevent us from making transcendental connections with nature or from deriving an appropriate environmental ethics from these transcendental connections. The following passage from Neil Evernden is offered as an introduction to this version of the critique of wilderness:

> It is perhaps not surprising that Thoreau's famous aphorism, "in wildness is the preservation of the world," is often misquoted as "in wilderness is the preservation of the world." For wilderness can be regarded as a thing, and as such, susceptible to identification and management. Wildness, however, lies beyond the objects in question, a quality which directly confronts and confounds our designs. At root, it is *wildness* that is at issue: not wilderness, not polar bears, not whooping cranes or Bengal tigers, but that which they as individuals exemplify. These creatures are "made of" wildness, one might say, before they are made of tissue or protein. But perhaps even wildness is an inadequate term, for that essential core of otherness is inevitably nameless, and as such cannot be subsumed within our abstractions or made part of our domain of human willing. (Evernden, 1992, p. 121)

Thoreau's Invidious Hoe:

It may be impossible to separate the words we use from the ideologies we live by, indeed, how can we know the dancer from the dance? Nonetheless, have we not gathered this weekend to do just that—to attempt to distinguish the dancer from the dance? Are not the very enterprises of theorization and criticism attempts to distinguish the dancer from the dance? Burke (1966) argues no trope can be truly holistic because even as a trope "selects" new meaning and moves an audience toward a new conception of "reality," it also "deflects" other potential meanings and moves the audience away from other conceptions of "reality." No trope, in other words, can "reflect" all of reality, or even the whole of one aspect of reality.

Thoreau in the "Bean field" chapter of Walden compares "the trope" to an "invidious hoe." On the one hand, it creates new reality (cultivating bean rows), while on the other it destroys old reality (wild nature), and eliminates the possibility of coexistence. Each turn of phrase is invidious for Thoreau because it pushed a particular conception of reality to the forefront, and thus eliminates the possibility of a communion of the "whole." Indeed, Thoreau even goes as far as to suggest that the real fruit of the invidious hoe is political conflict—in the bean field, each stroke of Thoreau's hoe is serenaded by the patriotism of the towns people who have assembled to support their troops and send them off to war in Mexico.[i]

Two ways to situate the critique of wilderness:

On the one hand the critique of wilderness is an extension of the critique of the ideology of the domination of nature. It is now commonplace among environmentalists, historians, and social theorists to begin the story of "the environmental crisis" with the emergence of the New Science, which replaced the Judeo-Christian cosmology of the "Great Chain of Being" with the rational, mechanistic world-view of modernity. Indeed, whether it is argued that the environmental crisis is the result of the misuse of science and technology, patriarchy, capitalism, or defective ethics, the root of the crisis is usually traced back to the confluence of social change that includes the emergence of capitalism, the emergence of liberalism, the reformation of Christianity, and the scientific revolution. In short, these critiques argue that it was the Enlightenment worldview—a world-view that separated "man" from "nature" and provided "him" with the logic of control and domination of nature—that has precipitated what many now claim is one of modernity's greatest failures, "the environmental crisis." Given this critique of the ideology of the domination of nature, it was only a matter of time before the idea of wilderness was put under the theoretical microscope, after all, wilderness, via myth and statue, creates a ridge divide between "man" and "nature," between "people" and "nature" and between "culture" and "nature." Does the critique of wilderness mobilize the critique of the ideology of the domination of nature, or does the critique of the ideology of the domination of nature produce the critique of wilderness?

On the other hand the critique of wilderness is a response to "calls" for environmental justice. Consider Stuart Marks' (1984) comment concerning the national park ideal in Africa, which is representative of what Guha (1989) calls a "third world critique of wilderness":

> Many Romantic and Arcadian ideas survive, promoted in the tourist industries of today. Materialistic Northerners have sought to preserve African landscapes in the only way they could, by separating them from daily human activities and setting them aside as national parks where humans enter on holiday… Wildlife protection, like other imposed policies, has always carried with it the implications of quasi military operations, and of sanctions (Graham 1973). It is my contention that for the West to persist in its support of preservationist policies that hold vast acreages of land hostage to its myths is to ensure their certain destruction through African needs and perspectives. (Marks, 1984, p. 5-6)

Given this context, it might be (somewhat cynically) assumed that the critique of wilderness is an attempt by a particular locus of power to adapt to a new political climate. Does the critique of wilderness provide the environmental justice movement with an effective political discourse, or does the critique of wilderness provide a co-optation strategy for the managers of "wilderness reserves?"

A third (scientific) context for the critique of wilderness:

It is impossible to separate the critique of wilderness from the emergence of the science of ecology. This is so because it is the science of ecology that teaches that humans are not distinct from nature, rather, people are indeed "natural" components of ecological systems. Consider for example Burch's words as he advocates a "open boarder" national parks model, which gives local peoples access to the economic resources of a park, "perhaps, instead of viewing Homo Sapiens as a noxious weed, our species may turn out to be an unappreciated wildflower" (Brechin, West, Harmon & Kutay 1991, p. 27). Indeed, how can we know, without the aid of ecological science, that local people are actually "wildflowers" contributing the ecological health of a park, and not "noxious weeds" overtaking an ecosystem?

Old School: Three components of the ideology of the domination of nature, or, Why changing the conception of nature is not enough:

Leiss (1972) argues that the many critiques of the ideology of the domination of nature are frustrated by two theoretical problems. The first is that the "idea of the mastery of nature—a phrase used interchangeably with 'domination of nature,' 'control of nature,' and 'conquest of nature'—presents extreme difficulties for theoretical examination" because these phrases are used so "loosely and metaphorically" that they are "rendered vacuous" (p. 12). The second problem is that both the adherents and critics of the ideology of the domination of nature operate as if they had "mastery" of the ideology. Leiss summarizes this problem as follows:

> Were it possible to penetrate the multiform guises of the problem and to distill a single statement of it from the vast literature in which mastery of nature figures so prominently, we might phrase it as follows: the cunning of unreason is revealed in the persistent illusion that *the undertaking known as "the mastery of nature" is itself mastered.* (p. 23)

This "cunning of unreason" is predominant in the rhetoric of the critics of wilderness. Indeed, it is my contention that the critics of wilderness fail to break from the fundamental assumptions of the ideology of the domination of nature, at least in part, because of an overly simplistic view of the ideology of the domination of nature: most notably, the assumption that the alienation of culture from nature is the root cause of the ideology of the domination of nature, and that this ideology can be transcended simply by creating new tropic conceptions of (an inclusive) nature.

If an overly simplistic theory of tropes prevents the critics of wilderness from creating truly inclusive conceptions of nature, then the failure of these critics to consider the instrumental elements of the ideology of the domination of nature explains why the fruits of their critiques are actually rhetorical extensions of that ideology. Leiss (1972) argues this point emphatically in the conclusion of his critique of the ideology of the domination of nature:

> Nor can serious philosophical thought hope to construct unaided a bridge to a better future. Nothing in the preceding exposition was intended to suggest that a different concept of nature could provide a cure for the problems under discussion there. The prospect of such a solution arises periodically in philosophy and is apparently irrepressible, but it is inevitably frustrated. (p. 174)

Three components of the ideology of the domination of nature, or, Why the ideology of the domination of nature is also a domination of people.

Component 1: An abstract and universal conception of humanity. According to Leiss (1972), "precapitalist societies share almost universally a common feature, namely, a reliance on various 'naturalistic' categories as a basis for social organization, distinction of rank, the allocation of work, maintenance of political domination, and so forth" (p. 181). This is not to say that all precapitalist societies adhered to the same principles of "natural order." Leiss and Williams (1980) argue that it was not the break from this pre-capitalist social order that precipitated the ideology of the domination of nature; rather,

it was the form that the break took (in Europe) that precipitated the ideology. Clearly, domination existed within pre-capitalistic social orders. However, Leiss distinguishes the experience of "being dominated *by* nature—that is, by external standards grounded in nature" from the experience of domination that exists in a society that has "expectations of achieving domination *over* nature" (p. 186). He sums up this distinction as follows, "domination by nature sustained the power of particular social strata; domination over nature has conventionally been conceived as the winning of power for the species as a whole" (p. 186). In other words, the ideology of the domination of nature is not only ushered in by Bacon and Descartes' "radical break" (the shift from being dominated by nature to believing that nature could be dominated), but it is also precipitated by the idea that nature will be dominated by and for all of humanity.

This conception of an abstracted and universal humankind makes sense only within the religious context in which it was conceived. Leiss (1972) argues: "the Baconian formulation of the idea of human domination over nature, which became the *leitmotif* of subsequent thought down to the present, is consistent only in a *religious* context" (p. 188). Bacon's own conception of dominion was profoundly indebted to the Judeo-Christian tradition. Indeed, one aspect of Bacon's rhetorical brilliance was his ability to redefine the notion of dominion over nature within that religious context.

According to Leiss (1972, 1990), in its religious context, "dominion over nature is *a priori:* man's portion of it is the gift of God rather than his own accomplishment. And this is related to another condition, namely, the unity of the species which inherits Adam's prerogatives" (p. 188). There are two problems with the secularization of these assumptions. The first is that it postulates an "active agent" that "could shape a passive material substratum according to the dictates of its utterly unhindered will" (Leiss, 1990, p. 79). Leiss (1990) calls this the "notion of an individed will" (p. 80). The second, is that "domination of nature, conceived as a possession of power *over* nature by the human species as a whole, is an idea which makes sense only in relation to absolute separation of spirit (God) and nature in Judeo-Christian theology—and thus is an idea which cannot be secularized without losing its internal harmony" (Leiss, 1972, p. 188).

The problem with the secularization of Bacon's assumptions is that the "universality that is implied in the concept of man—the idea that the human race as a whole, united within the framework of a peaceful social order and finally determining its existence under conditions of freedom—remains unrealized" (Leiss, 1972, p. 122). Indeed, the lack of a unified will makes such prospects "utopian" at best and mystifying and co-opting at worst. This is because "dominion over nature is wrongly represented [by Bacon and his followers] as an achievement that will bind together a bitterly divided species; conversely, the abstract idea of man (in the phrase "man's conquest of nature") hides the fact that the actual agents in the process are individuals and societies in violent conflict among themselves" (Leiss 1972, p. 189). The implication of this, Leiss argues, is that:

> If the idea of the *domination* of nature has any meaning at all, it is by such means--that is, through the possession of superior technological capabilities--some men attempt to dominate and control other men. The notion of a common domination of the human race over external nature is nonsensical. (Leiss, 1972, p. 123)

Component 2: An abstract and universal conception of nature. Another concept that is instrumental to the ideology of the domination of nature is the abstract and universal concept of "nature." According to Leiss (1972), two conceptions of nature emerged in conjunction with the rise of the New Science and modern life. "Corresponding to the two spheres of human activity in modern life are two worlds of nature: intuited nature and scientific nature, the experienced nature of everyday life and the abstract-universal, mathematized nature of the physical sciences" (pp. 135–136). To understand the ideology of the domination of nature, we must distinguish one conception of nature from the other.

According to Leiss (1972), "the customary practice of employing the terms mastery, domination, power, and conquest interchangeably" is an "obstacle" to accessing the role that science plays in the ideology of the domination of nature (p. 119). The term "mastery," Leiss suggests, best reflects the relationship between science and nature. For him, the practice of science is a "mastery" of nature, not a "domination" or a "conquest" of nature. In contrast, he argues, the "concepts of power and domination, which do not make sense with respect to scientific knowledge itself, may be quite appropriately employed in connection with the technological applications of scientific knowledge" (p. 121). In other words, he argues technological applications create relations of domination, while science merely enables technological applications.

However, for Leiss (1972), this does not mean that science does not play a significant and instrumental role in the ideology of the domination of nature. Rather, it means that there is an "ongoing dynamic relationship between" two different forms of mastery over nature (p. 119). The first form is mastery of scientific knowledge, the second is "mastery over nature as a phenomenon related to the structure of social conflict in the modern period" (p. 118).

There are many variations of science even within the field of ecology. Science, then, is an instrument of domination only in the sense that it can potentially be used to create instruments of domination over nature. However, it can also be utilized to create instruments of "subservience" to nature, or perhaps instruments designed to manage nature. Leiss' (1972) conception of science as an instrument for the human mastery of nature is quite similar to Lyne's (1990) conception of the relationship between science and rhetoric. For Leiss, science provides people with the ability to "master" particular natural phenomenon; how that mastery is put to use determines whether or not it constitutes a form of "domination." Leiss argues that the error often committed by those who present "the scientific mastery of the world as a pragmatic enterprise is that [they] leave the realm of human goals and purposes unanalyzed. It simply is not sufficient to show that the scientific investigation of nature and its technological applications occur in an operational framework. The decisive question is, in what *specific* social context is it operational" (p. 117). Thus, like Lyne, he suggests that the way science negotiates with ideology determines its impact in the social realm.

For Leiss (1972), these negotiations and the social context of the New Science is found in the second form of the mastery of nature: "the mastery over nature as a phenomenon related to the structure of social conflict in the modern period" (p. 118). This second form of mastery is not the kind of mastery that comes from "scientifically understanding" the "deeper structures of reality," but rather from the age-old attempts of some people to gain mastery over nature's resources for their benefit in the "life-world." Leiss argues that it is this kind of "mastery of nature" occurring in the "life-world" that reshapes the scientific mastery of nature into an instrument of the ideology of the domination of nature. He states: "mastery of nature as the outcome of scientific rationality operating in the domain of scientific nature, when it is translated into the mode of mastery in an essentially different domain (practical action within the natural environment), cannot and does not preserve its character intact" (p. 141). Thus, Leiss concludes his critique of an abstract and universal conception of nature as follows: ". . . nature *per se* is not the object of mastery, that instead various senses of mastery are appropriate to various perspectives on nature. If this proposition is correct, then the converse is likewise true, namely, that the mastery of nature is not a project of science *per se* but rather a broader social task" (p. 146).

The fruits of the critique of wilderness revisited:

One significant problem with the distinction that Leiss draws between "the life-world" and "science" and the conception of distinct realms in which mastery of nature occurs is that the life world, especially in the age of ecology, is experienced through and mediated by the scientific realm. Life-world experiences of nature are mediated and disciplined by particular scientifically informed visions of nature. Yet, particular rhetorical inventions are the moralizing and disciplining instruments of these kinds of scientific discourses. In this sense, Leiss' mobilization of Husserl's distinction between the realm of science and the life-world is very useful because it helps us see that the "practices of domination" are not an essential part of science. Rather the "practices of domination" are a part of the rhetorical inventions that are always and already awaiting linkage to scientific claims. These kinds of linkages are unavoidable. As Leiss (1972) argues with regard to the ideology of the domination of nature, "mastery of nature considered as scientific rationality submits to the conditions that define mastery of nature in the prevailing historical and social world" (p. 142).

The rhetorics of the alternatives to wilderness embody the concept of an abstract and universalized nature by confusing the first order of mastery of nature with the second order. The alternative rhetorics of "ecological management" commit the same error that Leiss attributes to Bacon and his followers. These discourses assume that the mastery of nature in the "scientific realm" will overcome the problems that are attributed to the mastery of nature in the realm of the "life-world." In other words, their analyses of the problems of social inequality do not adequately address the social and historical contexts in which the domination of some people by other people occurs. Similarly, the rhetorics of the "postmodern philosophy of wilderness" base their arguments on abstracted and universal conceptions of "nature." Even as they critique the dualistic assumptions of modernist science they attempt to replace its "mathematical" conception of science with new and "more accurate" descriptions of nature. In so doing, they fail to

distinguish the different realms in which the mastery of nature occurs. Thus, even as they argue for a "submission" to nature (as in the case of Oelschlaeger), or a new relationship with nature (as in the case of Evernden), they ignore the social and historical contexts of domination that exist in the life-world. In other words, people will always, out of necessity, master nature in the life world (whether by figuring out where, when and how to hunt and gather, or by figuring out how to extract, collect and utilize resources for energy, or by organizing genuinely sustainable societies). The relevant questions then become; how, by whom, and for what purposes are life-world resources identified and distributed?

Component 3: An abstracted and universal conception of the human subject. The conception of an abstracted and universal "human subject" also plays a significant role in the propagation and continuation of the ideology of the domination of nature. Leiss (1972) argues that this abstraction is related to the secularization of Bacon's conception of dominion. He states:

> The static image of human domination over nature that was derived from religion is inadequate in a secular context because it presents the subject or agent (man) as actively commanding an object (nature) with neither subject nor object undergoing any essential change as a result of the activity. (p. 190-191)

Citing Marx, Leiss argues, that "in human history a reciprocal dialectic is at work: 'By thus acting on the external world and changing it, [man] at the same time changes his own nature'" (Leiss 1972, p. 191). However, Leiss argues, this "conventional image" of the human subject "obscures the second element indicated in Marx's perceptive statement" (p. 191). He continues:

> When Bacon envisaged a revolutionary science and technology that would 'shake nature in its foundations,' he failed to understand that at the same time the related conditions of human behavior would be transformed no less dramatically. . . . The static representation of the agent was responsible for fostering the illusion that the activity through which the mastery of nature would be pursued was itself "mastered" that is, under rational control from the outset. (p. 191)

In short, the human subject as constituted and positioned by the ideology of the domination of nature is the "pre-ideological" subject of modernity: the rational centered individual.[ii]

The fruits of the critique of wilderness and the pre-ideological subject:

At first glance the discourses of the critics of wilderness seem to run counter to this ideological assumption. The postmodern philosophy of wilderness, for example, is based on the premise that a new conception of nature will create a new human subject. Evernden (1985, 1992) and Oelschlaeger (1991) are especially clear on this point. Evernden, for example, evokes Buber's contention that the "I" in an I-Thou relationship is fundamentally different from an "I" in an I-It relationship. Similarly, Oelschlaeger argues, that "postmodernists place far greater emphasis on communities and collaborative discussion than on individual judgment" (p. 9).

However, notions of the pre-ideological subject sneak back into the ontology of the scientific alternative of conservation biology and the postmodern philosophy of wilderness. This can be seen in their respective theories of rhetorical invention. In the case of the scientific alternative, it is assumed that "science" has access to "unmediated" truth from which a "pre-ideological" (non-ideological) alternative to wilderness can be crafted. Similarly, the postmodern philosophy of wilderness assumes that "immediate experience" or sensual experience" of nature is "pre-ideological," and that rhetorical and ideological "mediations" of experience only occur in the "reporting" of the experience

Ideology, science and rhetoric:

I do not mean to suggest that each and every experience of nature, including scientific discovery, is completely ideological. I am suggesting that there is *a part* of each and every experience of nature that is rhetorical, and that these rhetorical components are necessarily ideological. In this sense, the linkage between rhetoric and science (or sensory experience) is a matter of *degree*, not a matter of *is or is not*. In other words, to some degree or another, the sensual and scientific experience of nature is rhetorical. Moreover, this is not to say that there is not a qualitative difference between the methods of science and the arts and techniques of rhetoric. They are clearly different modes of inquiry. Nonetheless, the "scientist," the "rhetor," and their "objects of inquiry" can be socially and rhetorically constituted in many different

ways, and are so constituted to some degree or another before, during, and after inquiry. To assert or assume otherwise is to reify a fundamental assumption of the ideology of the domination of nature.

Rhetoric and ideology:

How can we know the dancer from the dance—rhetoric from ideology? No doubt, all rhetoric is ideological in the sense that it caries with it the historical baggage of history, and more importantly because it is governed or disciplined by what Charland (1987) calls "constitutive rhetoric."[iii] Conversely can it be said that all ideology is rhetorical? On the one hand it most certainly is. After all, what else could produce an ideology if not rhetoric? To follow another line of reasoning, where else would we look for ideology except in the rhetorical inventions of the past and the present? Surely then, both rhetoric and ideology are profoundly material. On the other hand, what are the consequences of assuming that ideology is synonymous or reducible to rhetoric? I propose instead that we follow the lead of Aristotle and entertain the proposition that the relationship between rhetoric and ideology is best understood as a matter of "degree," and not as a matter of "is or is not." In other words, just as there is an ideological component to all rhetoric, so too is there a rhetorical component to all ideology.

Following in the theoretical footsteps of Burke and Althusser, Charland bases his theory of constitutive rhetoric on two ontological assumptions. First, building on the "radical edge of Burke's identificatory principle," Charland (1987) assumes that the ontological status of an audience is constituted textually.[iv] Second, he assumes that the process by which alternative "persona" are "entered into and embodied" by an audience occurs through what Althusser calls "ideological interpellation."[v]

This theory of constitutive rhetoric also distinguishes ideology from ideolog*ies*. Ideology is omni-historical. Ideolog*ies* are historical. In the first case, subjects are spoken and written into existence via rhetorical acts. "Interpellation occurs at the very moment one enters into a rhetorical situation, that is, as soon as an individual recognizes and acknowledges being addressed" (Charland 1987, p. 138). Thus, the subject is always and already interpellated in the omni-historical sense, and the ontological and existential status of the subject is "ideological."[vi] Ideology, in this sense, is not an abstract or false notion, it is material. This is because ideology, through a representation of an imaginary relationship, becomes the space within which all practices (which are material) take place.

If ideology is omni-historical and describes the ontological condition of all subjects, then ideolog*ies* are historical. They are historical because different ideologies constitute particular identities and particular "real conditions of existence." While individuals are always and already "subjects" in general, their particular positions as subjects are historical. Identity is changeable.

In a sense, one could say that various ideologies compete for the hearts and minds of individual subjects via (constitutive) rhetoric. Rhetoric may have the power to constitute subjects in particular ways, however, this does not mean that these same subjects cannot be reconstituted. For example, subjects who hold dominion over nature might be reconstituted as the subjects of an ecological whole. In other words, individuals come to "know themselves" as particular kinds of individuals through the processes of identification and interpellation, which are always and already delivered via rhetorical acts. From this perspective, rhetoric is always and already constitutional and ideological in both the omni-historical and the historical sense. This is not to say that all rhetoric is constitutive of ideology. Rather, it means that all rhetorical inventions are either (uncritical) extensions of a previously constituted ideology, or they attempt to offer newly constituted ideologies.

Charland (1987) argues that subjects come to know themselves and are positioned as historical actors via a two-step process.

> First, audience members must be successfully interpellated; not all constitutive rhetorics succeed. Second, the tautological logic of constitutive rhetoric must necessitate action in the material world; constitutive rhetoric must require that its embodied subjects act freely in the social world to affirm their subject position. (Charland, 1987, p. 141)

Rhetoric can constitute and interpellate subjects in new and unique ways because it plays upon ideological contradictions. Charland explains: "to be an embodied subject is to experience and act in a textualized world. However, this world is not seamless and a subject position's worldview can be laced with contradictions. We can, as Burke puts it, encounter 'recalcitrance'" (p. 142). This kind of recalcitrance, or experience of contradictory subject positions, Charland argues, affords the possibility of the emergence of newly constituted subjects. He states: "successful new constitutive rhetorics offer new subject positions

that resolve, or at least contain, experienced contradictions. They serve to overcome or define away the recalcitrance the world presents by providing the subject with new perspectives and motives" (p. 142). Thus, Charland argues, "The process by which an audience member enters into a new subject position is not one of persuasion. It is akin more to one of conversion that ultimately results in an act of recognition of the 'rightness' of a discourse and one's identity with its reconfigured subject position" (Charland 1987, p. 142). Paraphrasing Burke, he concludes, "an 'ideology' is like a spirit taking up its abode in a body: it makes that body hop around in certain ways; and that same body would have hopped around in different ways had a different ideology happened to inhabit it" (p. 143).

Rhetorical (topical and tropic) invention, ideographs and ideology:

Topical rhetorical inventions tend to work with the established topics of a culture. That is, they tend to be colonial in that they extend a previous way of knowing or being into the frontier of new experience. Conversely, tropical rhetorical inventions tend to bring new understanding to what was previously experienced, and in that way create new experience out of old experience. In either case, the possibilities of rhetorical linkage, which is made possible by rhetorical playfulness, are always and already linked to rhetorics of the past, and in this way are linked to ideologies. Could it be that all constitutive rhetoric is tropic (which is not to say that all tropic inventions are constitutive)?

Successful tropic inventions (of the constitutive nature) tend to become ideographs. As McGee (1999 [1980]) argues, ideographs are by nature conservative—most often serving as an ideological limit, or to "rein in" a new constitutive rhetoric. This is so because there are multiple ideologies, which in part accounts for the variety of ideographs in any given culture. One, for example, may transcend a gender identity/identification (femininity), but that does not mean that one has transcended a national identity (American). In fact, as history demonstrates, one may have to mobilize a national identity in order to transcend a gender identity—"it is un-American to deny me opportunity."

Ecological modernization and the ideology of the management of nature: A fourth context for the critique of wilderness:

The combination of science and rhetoric—that is, the (rhetorical) mobilization of the scientific discourses of ecology by the critique of wilderness, or, perhaps, the (rhetorical) mobilization of the critique of wilderness by the scientific discourses of ecology—produce particular "ideological effects." In either case, is it fair to suggest that the critique of wilderness acts as a strategic extension of the ideology of the domination of nature because it is (topically) grounded in the components of that ideology? Hajer's (1995) map of the discourses of postmodern environmental policy-making, the discourses of "ecological modernization," helps illustrate why this is so.

Charland (1987) identifies three *ideological effects* of a constitutive rhetoric. The first is the process of constituting a "collective subject." The second is the "positing of a transhistorical subject." The third is that it "demands that the subject act in accordance with their identity." The first of these ideological effects, Charland argues, is "in Burke's language, an 'ultimate' identification permitting an overcoming or going beyond of divisive individual or class interests and concerns" (p. 139). This effect is produced by a rhetoric of classification in which a subject comes to identify itself with a particular social group. Such identifications include nationality, gender, ethnicity, race, social class, etc. In the case of the discourses of ecological modernization, the collective subject is constituted as a member of the whole of humanity, just as was the case with the constitution of the subject in the discourses of the ideology of the domination of nature. However, the subject of the discourses of ecological modernization is also identified as a part of an "ecological whole." Moreover, the subject is constituted as a member of an ecological community that is imperiled and at risk. Hajer (1995) remarks, "if there is one image that has dominated environmental politics over the past twenty-five years it is the photo of the planet earth from outer space" (p. 8). This photo, he continues, "is said to have caused a fundamental shift in thinking about the relationship between man and the nature" (p. 8). Hajer continues:

> The image of the planet evokes sentiments that help to create and sustain a perception of a common global ecological crisis, which implies shared values and common interests. As such it functions as a symbolic umbrella, as an inclusionary device, that constitutes actors as joint members of a new and all-inclusive "risk community." (p. 14)

The second ideological effect, a transhistorical subject, "offers a 'consubstantiality,' to use Burke's expression, between the dead and the living" (Charland, 1987, p. 140). This too is a kind of rhetoric of classification, but in this case the linkage is not across social space, but across social time. The subject position of "American" does not, for example, disappear with the passing of any particular generation. Similarly, the rhetorics of ecological modernization constitute "humanity" across time as the subjects of an ecological world. An example of this can be found in the field of environmental history where it is now commonplace for historians to explicate the ways that societies throughout history have mixed their labor (including symbolic constructions of nature) with nature to produce societies and nature. Indeed, these environmental histories enable the critics of wilderness to "know" that "true" wilderness did not exist when Europeans landed on the shores of the Americas.

These two ideological effects, taken together, constitute a subject that is linked across social space and time. Just as American subjects are constituted across gender, class, racial and ethnic, generational, and historical differences, so too are the global subjects of an "ecological world" constituted across all other differences. This is not to say that all the people of the world have been successfully interpellated by the discourses of ecological modernization; rather, it is to say that the advocates of the alternatives to wilderness (along with the members of most Western societies) have taken up this subject position.

The third ideological effect, the demand that the subject act in accordance with their identity, suggests that "subjects within narratives are not free, they are *positioned* and so constrained. All narratives have power over the subjects they present. The endings of narratives are fixed before the telling. The freedom of the character in a narrative is an illusion, for narratives move inexorably toward their *telos* (Charland, 1987, p. 140).

The discourses of ecological modernization assume that there is an integral and abiding connection between people and nature. Even as this distinction reifies abstracted and universal conceptions of "humanity," "nature, " and "subjectivity," it nonetheless offers a (re)constituted subject position. The telos of these discourses is found in the cultural ethos that constitutes the motives of its subjects. For example, Leiss (1972) suggests that the "telos" of the ideology of the domination of nature cannot be attributed to its reliance upon the scientific mastery of nature; rather, he argues that the enlightenment project of the new science was transformed by a "society whose ethos was the domination of nature" (p. 114). Similarly, Hajer's (1995) explication of the discourses of ecological modernization suggests that the enlightening potential of the critique of the domination of nature, in the form of the critique of wilderness, is being transformed by an ethos of *management*.

From wilderness to ecosystem, or, How to change an ideology without "effecting" ideological change:

The ethos of management that characterizes the discourses of ecological modernization is distinct from the ethos of domination in two important ways. First, the discourses of ecological modernization are reflexive in character; that is, they take it upon themselves to address and manage the "risks" that have been caused by industrial society and its ideology of domination. Second, the discourses of ecological modernization assume that the "limits of nature" must be respected. In other words, instead of "bending nature to the will of man," as Bacon advocated, these discourses assume that people must bend their will to nature. Hajer's critical project provides the context for distinguishing the ethos of domination from the ethos of management.

Indeed, it would be wrong to simply suggest that the alternatives to wilderness are merely extensions of the ideology of the domination of nature, for while these alternatives are built upon assumptions that are central to the ideology of the domination of nature, they also represent a break from that ideology. Most notably, they are concerned with creating social institutions, ethical systems, and policies that respect and "submit" to the limits of nature (and that attend to justice claims). In this sense, they are examples of an ideology of the *management* of nature. Callicott and Nelson (1998) present an excellent example of this management ethos in the following utopian vision, which is a synthesis of the alternatives that were spawned by the critique of wilderness. They state:

> We envision, first, the creation of a global system of scientifically selected, designed, managed, and interconnected biodiversity reserves; complemented, second, by support for those traditional peoples who are doing so to continue living symbiotically with their non-human neighbors in free nature, and also support for people like Turner and Synder who are attempting to harmoniously reinhabit free nature; and third and finally, a commitment on the part of everyone else to the development of ecologically sustainable economies. This represents, of course, a utopian prospect—an ideal. Utopian

> thinking has been a mainstay of Western philosophy from Plato on. In the context of human ethics, Aristotle, Plato's successor in the Western tradition, observed that we are more likely to go right if we have a target at which to aim. The same seems true to us in our effort to get beyond the received wilderness idea. (Callicott and Nelson 1998, p. 20)

Callicott and Nelson may be right that "we are more likely to go right if we have a target at which to aim;" however, we should not be above reconsidering the ideological components that constitute "ourselves" as we take aim.

Ironically, Callicott and Nelson's ideal or utopian vision is an after-Edenic story, very similar in structure to the one that Bacon invented to help usher in the ideology of dominion. Indeed, Callicott and Nelson's utopian vision is quite similar to the one Bacon describes in the New Atlantis. Both envision a scientifically informed and managed society. The main difference being that instead of using science and technology to reclaim the "dominion" over nature that was lost in the Garden of Eden, as Bacon attempted, Callicott and Nelson attempt to regain the organic "harmony" that was displaced by Bacon's ideology of dominion. Both are based upon a scientific "mastery" of nature and both envision a future world of political harmony where all of humanity benefits from the "mastery of nature." One perspective uses mastery for the technical (and social) domination of nature (and people) as it pursues the needs, wants, and desires of (particular) people. The other uses mastery to prescribe appropriate techniques for assenting to nature's limits and for the technical (and social) management of risks that are produced as (some) people fulfill their needs, wants, and desires. The ideology of the management of nature turns out to be an ideology of domination.

Thoreau's invidious hoe revisited:

The scientific and (postmodern) ethical alternatives to wilderness that have resulted from the critique of wilderness run with the grain of the ideology of the domination of nature, and, for all practical purposes, extend that ideology (topically) into new terrain. It is easy to see why the advocates of these alternatives thought that they could "trope" their way out of the ideology of the domination of nature with new inclusive terms. However, as Leiss' explication of the components of the ideology of the domination of nature illustrates, with every inclusive stroke of the hoe, with every holistic stroke of the hoe and with every truthful stroke of the hoe comes division. In addition, in the "age of ecology" every attempt at inclusion, holism and truth is mediated by the discourses of ecology, which are always and already linked to (the) ideology (of management) via rhetoric.

It has been suggested that the real problem here revolves around the issue of voice: in finding ways (and forums) in which meaning (the definition of problems as well as the definition of solutions) can be negotiated (Hajer 1995). There can be no doubt that the sincere negotiation of meaning is necessary, but it is not sufficient to get us beyond the ideology of the domination of nature. A Sufficient alternative will also require a hearty critique of ideology, which will necessarily require the acceptance of ideology, imperfection, and compromise. Given this context for the Great New Wilderness Debate, we may be best advised to work within the ideographic constraints of the idea of wilderness. After all, are not the tropic linkages (one to another) more important with regard to the negotiation of meaning than the attempt to side step debate by creating a whole new row to hoe?

Notes

[i] See, Golemba, 1990, pp. 198-203.

[ii] As Leiss points out, "in Bacon's conception there is a presumption of an *a priori* link between the increasing control of nature and a complementary element of self-control in human behavior which would guide the social applications of newly gained powers" (p. 192). Unfortunately, this self control never materialized, in part because the ideology of dominion was divorced from its religious context and in part because of the way that the abstracted and universal concepts of "humanity," "nature," and "the self" were mobilized by various rhetorics.

[iii] Indeed, only in a theoretical perspective, such as Foucault's, which has done away with the concept of ideology (replacing it with the equally abstract concept of "power") could it be argued that all rhetoric

is not ideological. Nonetheless, even in a theory like Foucault's, rhetoric is implicitly linked to the governing logic of a broader discourse, or a discursive formation.

[iv]Charland states: "Burke moves towards collapsing the distinction between the realm of the symbolic and that of human conceptual consciousness. From such a perspective we cannot accept the "giveness" of "audience," "person," or "subject," but must consider their very textuality, their very constitution in rhetoric as a structured articulation of signs. We must, in other words, consider the textual nature of social being." (p. 137)

[v] Quoting Althusser, Charland argues: "Althusser describes the process of inscribing subjects into ideology as "interpellation.": I shall suggest that ideology "acts" or "functions" in such a way that it "recruits" subjects among the individuals (it recruits them all), or "transforms" the individuals into subjects (it transforms them all) by the very precise operation which I have called *interpellation* or hailing, and which can be imagined along the lines of the most commonplace everyday police (or other) hailing: 'Hey, you there!'" (p. 138).

[vi] Charland explains: "Audiences are, to use Althusser's famous phrase, "always already" subjects. This is to say that if we disregard the point at which a child enters language, but restrict ourselves to "competent" speakers within a culture, we can observe that one cannot exist but as a subject within a narrative. The necessity is ontological: one must already be a subject in order to be addressed or to speak. We, therefore, cannot say that one is persuaded to be a subject; one is "always already" a subject." (p. 141)

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Reconceptualizing Dialogue in Environmental Public Participation

Jennifer Duffield Hamilton
University of Cincinnati
Caitlin Wills-Toker
Gainesville College

Public participation scholars have called for dialogue and collaboration among participants as a mechanism for overcoming environmental conflict (Daniels & Walker, 2001; Fiorino, 1989). This trend raises an important question, however, about the ways in which we envision dialogue. In this paper, we follow a recent move beyond a reliance on consensus based models in public participation by developing an approach that not only incorporates agreement, community, and collaboration, but also allows for disagreement, inequality, and difference. We present a new approach that relies on the insights of Mikhail Bakhtin to reconceptualize dialogue as something that moves between convergence and divergence all the time, rather than something that progresses toward a natural end state of agreement. This understanding of dialogue is made possible when the participants engage in a dialogic discourse, one in which they are willing to embrace differences, generate new meanings, and engage in an open-ended dialogue that is not resolved by a given decision. Such dialogic qualities should supplant assumptions of consensus, equality, openness, and rational deliberation currently underpinning participation forums designed to meet Habermas's vision of the public sphere.

Beginning with the proliferation of federal environmental policy in the late 1960s, researchers and policy makers have struggled to find a place for the values and judgments of citizens in decision-making. However, the goal of incorporating public perspectives into decisions that were increasingly scientific understanding proved daunting (Fiorino, 1990; Vaughan & Seifert, 1992). Early or "traditional" methods of public participation worked to exclude the public (Juanillo & Scherer, 1995; Katz & Miller, 1996; Waddell, 1996). Processes such as public hearings and review-and-comment periods did little to incorporate citizen input and either excluded citizens or facilitated a unilateral flow of information from scientific experts and decision-makers to citizens.

In response, researchers and practitioners began turning to more direct approaches in the early 1990s (Fiorino, 1990; John & Mlay, 1999; Juanillo & Scherer, 1995; Renn, 1992). These new methods created stakeholder groups or advisory panels that would meet in workshop or discussion-type forums. They were praised as the "two-way" communication desperately needed to ensure public input into environmental decisions (Juanillo & Scherer, 1995; Killingsworth & Palmer, 1992; Webler, 1995). Key among these approaches was the notion of dialogue. Some conceptualized dialogue according to the public sphere theorized by Jurgen Habermas and subsequently developed as a forum based on democratic values of equality, openness, rational deliberation, and consensus. This perspective dominated much of the research because it promised not only interactive communication, but also incorporation of public comments into decision making through consensus (Bohman, 1997; Gastil, 1993; Gutmann & Thompson, 1996). Yet, in practice, democratic norms often proved difficult to achieve in an American political climate characterized by division, exclusion, disagreement, and self-interest (Button & Mattson, 1999; Edelman, 2001; Gastil, 1993). Processes were considered failures if they did not achieve these goals or they were easily co-opted by project sponsors who used stakeholder groups to disguise their ultimate authority (Farrell, 1999; John & Mlay, 1999; Spyke, 1999; Wills-Toker, 2005). Recognizing these shortcomings, critics argued that

applying consensual ideals to a divisive political context was unworkable (Mouffe, 1999; Wills, 2001; Young, 1998).

At the same time, other researchers have argued the need for approaches that explore both differences and similarities among perspectives in the process of collaboration (Daniels & Walker, 1996, 2001; Ingham, 1996; Young, 1998). These scholars argue that dialogue is a mechanism for bringing various perspectives into conversation with each other rather than for resolving differences through consensus-building (Glover, 2000). By acknowledging dissensus and difference, these approaches address critiques of the previous perspectives.

In this paper, we follow this move beyond a reliance on consensus based models in environmental public participation by developing a theoretical perspective that not only incorporates agreement, community, and collaboration, but also allows for disagreement, inequality, and difference. We present a new approach that relies on the insights of Mikhail Bakhtin to reconceptualize dialogue as something that moves between convergence and divergence all the time. This understanding of dialogue is made possible when the participants engage in a dialogic discourse, one in which they are willing to embrace differences, generate new meanings, and engage in an open-ended dialogue that is not resolved by a given decision. These qualities make dialogue a suitable guiding concept for a process where agreement and cooperation are necessary and disagreement and difference are inevitable (Glover, 2000; Tuler, 2000).

We begin with a discussion of the trend toward dialogue as a mechanism for overcoming limitations of early public participation models. Next, we discuss the theory of deliberative democracy that guides consensus-based approaches to environmental public participation and its theoretical critiques in order to make a case for a dialogic perspective. Then, we explore Bakhtin's concept of dialogic discourse and consider qualities of dialogue that are important for public participation in order to develop a theoretical construct of dialogue for the environmental public participation arena.

Public Participation and Dialogue

Environmental public participation programs have developed over the last several decades in an atmosphere described by Laird (1989) as a "decline in deference" or public alienation and distrust of government institutions. In response to increased administrative decision-making authority and reliance on scientific experts for decision inputs, citizens have become "increasingly reluctant to defer important decisions to institutional elites" (Laird, 1989, p. 543) and have attempted to get involved in environmental decision making. According to Hendry (2004), one of the "defining innovations" of the National Environmental Policy Act (NEPA) was "its emphasis on including the public as consultants in federal agency decisions" (p. 99). Since this landmark legislation public participation has been envisioned in environmental legislation as review-and-comment periods and public hearings held at specific points in the decision-making process.

Public hearings, however, became forums that structurally excluded the citizens by being held at inconvenient times or consisting of single citizens facing panels of highly specialized experts. Unversed in technical understanding and language, those who could attend often felt that experts and decision makers did not value their judgments and found it difficult to provide any input considered meaningful. The process of receiving written public comments during designated periods and then incorporating them in final decision documents likewise proved to be exclusionary since decision makers were not required to directly address citizen comments. As such, public hearings and comment periods represent what Katz and Miller (1996) describe as a "two-way process [that] occurs on one-way streets" (p. 128). Agency officials inform interested citizens and correct misperceptions and gaps in knowledge (Bostrom, Fischhoff, & Morgan, 1992). Citizens provide comments on pre-defined problems and proposed solutions. Little new understanding is produced as each simply asserts the validity of their perspective.

Scholars and practitioners alike have recognized the limitations of such techniques and have advanced a variety of models that attempt to improve traditional public participation. Drawing on democratic theory, some have done so by arguing the need for direct forms of participation that enable participants to "co-determine" decisions with agency officials (Fiorino, 1996, p. 201) rather than simply react to expert assessments. In an article that has been highly influential in this literature, Fiorino (1989) advanced a set of criteria that outlined such co-determination including direct participation, participation on an equal basis, face-to-face interaction over time, and the ability to share in decision making. Communication scholars in turn have attempted to improve participation by contrasting a "one-way" transfer of information from

experts to citizens with a "two-way" exchange of information and values that creates a role for citizen knowledge in decision-making (Juanillo & Scherer, 1995). Rather than reproduce existing meanings, these scholars argue that public participation is a rhetorical process, a process of social construction and negotiation of knowledge in which participants influence one another and produce new meanings (Graham, 1997; Katz & Miller, 1996; Rowan, 1994; Waddell, 1996). Finally, public participation studies have increasingly focused on opportunities to develop learning and analysis of complex technical issues in interactive group settings as a way to improve early participation models. The "collaborative learning" approach developed by Daniels and Walker (1996, 2001) as well as Laird's (1993) "participatory analysis" emphasize the importance of collaboratively defining problems and evaluating possible solutions as participants engage in mutual learning and an exploration of values.

Broadly speaking the notion of a community dialogue has been embraced as a remedy to traditional decide-announce-defend methodologies that incorporates the goals just mentioned of direct participation, the open formation of meaning, and group learning and analysis. These community dialogues are being accomplished through public workshops, roundtables, or advisory groups that allow participants to learn about and discuss the issues and to interact over an extended period of time (Fiorino, 1990; Katz & Miller, 1996; Waddell, 1996). For example, citizen advisory boards increasingly are seen as a model for improving public participation (Lynn & Busenberg, 1995; Vari, 1995). They create ongoing interaction among "relatively small groups of people in intensive, and often consensus-based, collaborative processes" (Beierle, 2002, p. 739). Evaluation data has found that more intense efforts such as citizen advisory boards and collaborative learning workshops, which are based on extended dialogue, improve decisions (Beierle, 2002; Blatner, et al., 2001). Despite these advancements in dialogue-based formats, critics argue that the role of power in group processes has been largely ignored in participation studies (Santos & Chess, 2003).

This trend raises an important question about the ways in which we envision dialogue. Throughout this literature scholars agree that public participation processes require diverse points of view to be heard and to interact. The goals of that interaction (i.e. consensus or understanding among relative points of view), however, lead to different views of dialogue. In the sections that follow, we discuss Habermas's view of dialogue which has served as the model for civic deliberation in early attempts to overcome one-way forms of participation and which fulfills a goal of building consensus reflective of the common good among equal citizens. A different view is advanced in the work of Mikhail Bakhtin who envisions dialogue as recognizing and sustaining multiple and, at times, conflicting perspectives simultaneously without reducing their complexity. It is this understanding that inspires our reconceptualization of dialogue in environmental public participation in the final section.

Deliberative Democracy

A definition of dialogue as rational deliberation continues to be immensely popular despite critiques that they are grounded in ideals that are unrealistic for the American political forum. Such critiques provide a rationale for a broader view of dialogue.

Much work in democratic deliberation begins with Jurgen Habermas' popular notion of the public sphere as a model for public argument. He theorized that a forum of like-minded citizens debating equally in an open public arena provided the most authentic representation of public opinion. Issues of power and money appeared minimal as the force of the best argument guided deliberation (Habermas, 1992). Through rationally motivated debate, individuals transcended personal interests and reached a mutual understanding of the general public will which was ultimately established through consensus (Habermas, 1992). The final decision captured the essence of public opinion.

Many political theorists quickly recognized the potential of deliberative qualities as guiding ideals for contemporary public deliberation. These deliberative democratic theories tend to be extremely fragmented; however, they remain united by the basic goal of identifying procedures for a fair deliberative process that enables political decisions to be "considered legitimate expressions of the collective will of the people" (Hauptmann, 1999, p. 2) as well as by some procedural requirements. First, equality among citizen participants is required for deliberation (Bohman, 1997; Button & Mattson, 1999; Gastil, 1993). Equality means that participants are free with no external or internal coercion (DeGreiff, 2000). Every individual has an equal opportunity to join the group and to "be heard, to introduce topics, to make contributions, to suggest and criticize proposals" (p. 3) and to shape or alter group policies.

Second, discussion among equal participants must be free and open. Deliberation is free and open if "group members have equal and adequate opportunities to speak, neither withholding information nor verbally manipulating one another, and are able and willing to listen" (Gastil, 1993, p. 6). Arguments are based on "general principles" (Mendelberg & Oleske, 2000, p.170) rather than those of personal self-interest. As deliberators follow this rational process of offering their perspective, proposing ideas, and making compromises based on the better argument, their opinions come together to form a "collective will, a joint intension" (Richardson, 1997, p. 338).

Finally, all agree that the end result of the deliberative process should be some type of decision that fixes the general public will. For some deliberative theorists, consensus is the best decision making method. According to Barber, in a consensus decision, citizens come to "common agreement on an issue, values, or the direction of a future course of action" (1984, p. 611). No objection results in a consensus decision (Mansbridge, 1983). Gastil contends that this type of decision-making is most suited to deliberative groups since it ensures that every member has an equal input into decision-making, and provides the "surest safeguard against the unequal distribution of power" (1993, p. 51). Others contend that voting and bargaining are also possible decision methods (Dryzek & Braithwaite, 2000). Habermas accepts negotiating and bargaining as long as they are precursors to rationally motivated consensus. Regardless of whether the decision is by consensus or majority, proponents agree that deliberative decisions are more rational, more representative, and more acceptable to the citizenry (Dryzek & Braithwaite, 2000; Mendelberg & Oleske, 2000) making it a very attractive model for public participation researchers.

Despite the attractiveness of the deliberative ideal, critics continue to assert that it is impractical and unrealistic (Bohman, 1997; Chambers, 1996; Gastil, 1993; McCombs & Reynolds, 1999; and Spragens, 1998). First, opponents contend that equality among participants is nearly impossible to achieve due to "asymmetries of power and expertise within the structures of modern, bureaucratized politics" (Button & Mattson, 1999, p. 610). Gastil (1993) contends that knowledge and seniority-based hierarchies will emerge and produce power inequalities. The feasibility of open and free deliberation is another ideal that is questioned. McLeod et. al recognize that even if every participant has an equal chance to speak, "there is no guarantee that all views will be accorded equal attention and fair representation" (1999 p. 767), making the decision process closed to some perspectives. Asen (1999) argues that difference in knowledge and communication style will actually facilitate exclusion of participants. As a result, any sense of public opinion that emerges is unrepresentative and according to Murray Edelman, simply a "comforting illusion" (2001, p. 83). Consensus as a concept is also considered impractical since it requires complete agreement and the American political climate is inundated with conflict and diversity (Mansbridge, 1983). According to Hauser (2004), in the face of such conflict, "rationally warranted consent" (p. 9) can rarely be reached. Instead, Mansbridge points out that insistence on consensus leads to "conservative stalemates, unhappy compromise, or acquiescence under social pressure" (Mansbridge, 1983, p. 263).

As these critics pointedly identify, the reality of the American political arena makes a deliberative approach ill-suited as the primary model for public political discussions. In environmental public participation, commonality and decision making are necessary; however, the qualities of exclusion, diversity, disagreement, and inequality that are inherent in public discussion must be considered as well. A number of democratic theorists push us to pursue a model for civic engagement that allows for not only agreement and cooperation, but also disagreement and conflict. According to Hauser (2004), the identification of such a model is the "central issue confronting the current discussion of civic engagement" (p. 13).

Dialogic Discourse

We believe Mikhail Bakhtin's theoretical insights regarding a dialogic discourse offer the beginnings of a model that recognizes rather than denies a role for difference and diversity in civic dialogue and participation, and thus the beginnings of a model capable of overcoming a primary shortcoming of public sphere models. One critic noted, Habermas' view of "a procedural rationality at the heart of the public sphere, [serves] as an exclusionary and impoverished normative ideal that shuns much of the richness and turbulence of the sense-making process" (DeLuca, 1999, p. 21). We argue that adopting a Bakhtinian perspective overcomes this by focusing on public participation *as sense-making* rather than as a set of democratic procedures or ideals. Bakhtin's perspective accounts for difference and conflict among

perspectives as natural and necessary aspects of the process of dialogue, rather than as conditions to overcome with correct procedures for democratic deliberation.

For Bakhtin, a person makes meaning by recognizing the Other and seeing him/herself from the perspective of, relative to, yet distinct from, that otherness. Each person is situated within a particular circumstance and dependent on an "Other" and the condition of being related to the other to grasp the whole of that circumstance. Bakhtin (1981) calls this *"simultaneity"* or a condition in which the Self and the Other exist as simultaneous, yet distinct.

Bakhtin assumes that there are two types of discourse: one capable of recognizing and responding to Otherness and one that is not. A monologic discourse privileges a single perspective, reduces complexity, and fails to recognize or openly suppresses "otherness." It is an authoritative discourse that insists on its adoption and imposes meaning on a listener. Monologic discourses "assume no other selves beyond their view of the normative self" (Holquist, 1990, p. 52). In contrast, a dialogic discourse is one in which multiple perspectives interact as participants recognize and respond to the viewpoints of others and develop an understanding of how they relate. A dialogic discourse is "relativized, de-privileged, aware of competing definitions for the same things" (Bakhtin, 1981, p. 427). "Heteroglossia" is the concept Bakhtin develops to describe this quality not just among people in an interpersonal exchange, but among what he called "languages" or patterns of thinking and understanding. Bakhtin (1981) writes:

> all languages of heteroglossia…are specific points of view on the world, forms for conceptualizing the world in words, specific world views, each characterized by its own objects, meanings, and values. As such they all may be juxtaposed to one another, mutually supplement one another, contradict one another and be interrelated dialogically. (Bakhtin, 1981, pp. 291-292)

The languages come to "interanimate" one another and co-exist as they become relativized: "When cultures are closed and deaf to one another, each considers itself absolute; when one language sees itself in the light of another, 'novelness' has arrived" (Bakhtin, 1981, p. 430).

Glover (2000) has argued that Bakhtin's writings form "a theoretical foundation for a rhetoric of diversity, a dialogic rhetoric in which different points of view can interact within a single piece of discourse" (p. 38). Such a rhetoric, according to Glover, would include multiple languages or heteroglossia, provide the opportunity for them to come into contact with each other and interact, and remain open-ended. Likewise, Tuler (2000) writes: "recognizing 'otherness' and 'multi-voicedness' can be important to recognizing and respecting the legitimacy of different values, points of view, and interests that a search for 'harmoniousness', 'sharedness' or 'mutuality' could undermine" (p. 13). The emerging call for an understanding of difference and conflict in public participation processes is addressed in the following section using Bakhtin's understanding of a dialogic discourse.

A New Approach: Dialogic Public Participation

Bakhtin's perspective illustrates the importance of cooperation *and* conflict, similarity *and* difference to the process of dialogue. In this section we argue that dialogue should be reconceptualized as a process that moves between convergence and divergence all the time, rather than a process that moves toward a natural end point such as an alignment of perspectives or consensus on a course of action. As part of this process, divergence and conflict play a role in dialogue, rather than being viewed as the condition for dialogue to overcome. We argue the importance of three characteristics to such a dialogic public participation: 1) embracing difference; 2) generating new meanings; and 3) engaging in an open-ended dialogue.

Embracing Difference and "Multi-Voicedness"

Within our view, dialogue takes place when participants orient to the other in their talk and when that talk retains differences or "multi-voicedness." Many scholars have made clear the importance of the Other in Bakhtin's view of dialogue (Holquist, 1990). For Bakhtin, dialogue takes place when a person orients to the other in their talk and recognizes one's self from the vantage point of the other. This process should lead to the "interanimation" of one another's perspectives in which a speaker is able to echo the voices of other perspectives within their discourse regardless if they are in agreement. Importantly, this process does not lead to the development of a new unified perspective that reflects what has transpired among participants because any such effort at creating unity rather than retaining differences would be authoritative or monologic in nature. It should entail a "multi-voiced" rather than "single-voiced" quality.

Cissna and Anderson (1994) describe this quality as "mutual implication" saying: "dialogue is a process in which speaker and listener interdepend, each constructing self, other, and their talk simultaneously" (p. 15). Ingham (1996) suggests a process of exploring differences rather than similarities, saying "community members must develop a consciousness of rhetorical stance, of how citizens stand in relation to each other, given their viewpoints" (Ingham, 1996, p. 200). She calls this process the "recognition of dissensus," arguing that when dialogue is thought of in this way, it is a process through which participants are "identifying with each other, by establishing stances in relationship to each other" (p. 202). The collaborative learning approach developed by Daniels and Walker (1996, 2001) similarly conceives of dialogue as a process in which participants discover and understand the relationships among their viewpoints through group learning. Participants are: "defining the problem and generating alternatives [that] makes for meaningful social learning as constituencies sort out their own and others' values, orientations, and priorities" (Daniels & Walker, 1996, p. 73).

According to Hauser (2004), citizens must recognize differences between their own ideas, arguments, and the rhetorical styles and those of others. They also must go beyond simply recognizing these differences to recognize others' comments as "legitimate contributions to the deliberative process" (Hauser, 2004, p. 9). This does not mean that citizens must accept the ideas, arguments and opinions of others. In fact, they will rarely "find one another's reasons as acceptable as their own" (Hauser, 2004, p. 9), but they must at least consider others' discourse as valid and important. Young (1998) describes this as "openness to unassimilated otherness" (p. 246) and offers an ideal, a "politics of difference," which would acknowledge and "accept this distance without closing it to exclusion" (Young, 1998, p. 238). Tuler (2000) argues that, rather than this ideal, current public processes "often have a one-sided emphasis on 'common ground' and 'mutual understanding'. With this view, however, diversity, difference, conflict, and incompatibility are at risk of getting lost in our understandings of dialogue and discourse" (p. 13).

Here, we propose a view of dialogue as a process in which participants learn to recognize and retain multiple perspectives and to understand differences and-relationships among them as the context for public participation. When we accept that there are differences that will not be assimilated, a view of dialogue emerges that includes incompatibility and dissensus as part of the process of orienting to one another.

Generating New Meanings

Another key quality of Bakhtin's dialogic discourse is the potential for new meaning creation through interaction and struggle among discourses. For Bakhtin, recognizing the perspective and differences of others fosters a dialogic discourse when it enables participants to overcome the tendency to authoritatively impose their meanings on a listener. Bakhtin distinguishes between authoritative and internally persuasive discourses. Official discourses such as the talk of policy or technical experts or government officials tend to be authoritative and monologic in insisting on their perspective. In contrast, an internally persuasive discourse enters into a struggle with other such discourses, and through this struggle openly creates meaning. Its goal is to invite meaning rather than impose it. This ability to generate new meanings is essential to a dialogic approach to public participation.

To generate new meaning in the context of environmental public participation, citizens need to be competent communicators. Walker and Daniels (2004) promote communication competence as a necessary component of discursive interaction and mutual learning. Hauser (2004) likewise contends that any civic dialogue requires citizenly competence. Although such competence includes the ability to listen with respect to the comments of others, it is primarily the ability to articulate one's position in a manner that invites response. Citizens must make conscious choices of how to clearly manifest and settle their position in an argument that is capable of being engaged as a thinking device (Ingham, 1996; Tuler, 2000).

Tuler (2000) defines thinking device statements as those that attempt to actively understand and to create new meanings. These statements invite reflection and generate discourse. An example of such a comment is when a speaker "expresses . . . critical reflection on the meaning of a prior utterance by more deeply questioning implications, assumptions, [and] contrasting points of view" (Tuler, 2000, p. 8). These utterances do not act as authoritative statements that function to transmit existing meanings among participants. Authoritative comments that either support the claims of others or undermine the claims of others tend to shut down debate and cancel further reflection. According to Bakhtin (1981), such utterances would be monologic because they try to limit the degree to which the comment can be used as a thinking device. In contrast, utterances that generate new meaning provide reasons for agreement or disagreement and invite reflection with questioning.

The intermingling, interaction, and struggle of such generative statements work to produce new meanings among people. This process is more than a simple chain of utterances and counter-utterances, but rather a process of interanimation where utterances influence the meaning of other utterances. In this sense, it is a process of collaboratively generating meaning, yet it is often characterized by conflict and struggle between various positions and utterances. This approach to meaning creation is more suited to the American civic forum than one that promotes complete rational agreement or pure conflict and struggle because it recognizes that interaction and collaboration are possible, but that the discursive process is often difficult and can be characterized by conflict (Burke, 1984; Edelman, 2001).

Engaging in an Open-ended Dialogue

The final quality we have identified as key for a dialogic public participation is open-endedness. For Bakhtin, a dialogic discourse involves an *ongoing* struggle among differing perspectives that have become relativized and de-privileged as they orient to one another. If such a dialogue were resolved by a given decision or the building of consensus, it would become monologic. It would represent a single-voiced account of what transpired among participants, a provisional authoritative discourse that would then be displaced by another when the next decision is made. As Cissna and Anderson (1994) make clear, a dialogic discourse is not interested in orchestrating a specific outcome or end product.

This begs the question of how a dialogic discourse can operate in an arena that inherently involves decision-making. Scholars who advocate a role for dissensus in public processes nonetheless recognize the need to decide on a course of action to move forward on a given issue and answer this question by arguing for decisions that fully recognize differences among points of view. In keeping with Bakhtin's perspective, for example, Glover (2000) argues:

> Through a clear delineation of relative points of disagreement, differences that are not meaningful within a particular decision-making context can be easily identified and discounted, clearing the way for a decision based upon a shared knowledge and understanding of where all parties stand on substantive issues. (p. 51-52)

Decision-making in the context of dialogic participation, therefore, would not be based upon consensual common ground; rather, decisions would be based upon a full recognition of the diversity of views since participants would respect differences and new meanings would be generated as discourses struggle and collide. The open-ended exchange among perspectives would not be resolved or ended by a decision, rather the dialogue among them would continue and endure beyond any given decision point. A dialogic discourse is never resolved. Its goal is to produce a quality of dialogue and understanding among participants rather than to produce agreement on a course of action.

The dialogic public participation we advocate, therefore, does not consider a decision to be the goal of the process. In keeping with Ingham (1996), the goal is connection not equilibrium among diverse perspectives. With this goal, a decision is one step in a continual process of connecting and orienting to one another. This thinking is in line with scholars who have identified a view of participation as an end in itself rather than a means to reach a given endpoint such as a decision (Hamilton, 2004; Kasperson, 1986). It is this characteristic of open-endedness that allows dialogue to move between convergence and divergence and consensus and dissensus. When public participation is dialogic, there is an ebb and flow in the conversation in which issues emerge and are decided or resolved, but the engagement of diverse perspectives aware of each other and the relation among them continues and is brought to bear on emerging issues and decision points.

Jane Mansbridge (1983) makes a similar point in her critique of deliberative ideals. She contends that in order to be productive, any public dialogue must pay careful attention to the participants, their goals, and the political context so that it can successfully "shift" (p. 291) back and forth between cooperative and adversarial communication. She recognizes the need for decision making that promotes common interest and consensus as well as decision making that recognizes difference and allows for the airing of conflict. However, she also recognizes that a reliance on deliberative ideals in American public argument has made such shifting difficult. In dialogic discourse, the ebb and flow of discourse gives participants the ability to shift back and forth between recognition of agreement in decision making and recognition of difference in conflict.

Discussion and Conclusion

In this paper, we outlined a theoretical model that not only incorporates agreement and collaboration, but also allows for disagreement, inequality, and difference as a new way of conceptualizing dialogue in environmental public participation. This new approach relies on the teachings of Mikhail Bakhtin to reconceptualize dialogue as including moments of convergence as well as divergence in a process of continually orienting and establishing perspectives. Here, we have outlined this understanding of dialogue as possible when the participants embrace difference, generate new meanings, and engage in an open-ended dialogue in relation to one another. Such reconceptualization has implications for environmental public participation.

As with other approaches that attempt to outline structures or rhetorical qualities for public participation, ours also can be critiqued on its idealistic, theoretical quality. We do caution that this approach is not a cure all and may not be possible in all circumstances. Although we do agree that it can be considered an ideal, it is a much more realistic theory than one that requires either deliberation and consensus or agonism and dissensus.

From the beginning, the purpose of conceptualizing and theorizing about public participation in environmental decision making has been to craft some type of space for the voice of lay citizens. Traditional one-way mechanisms such as public hearings and comment periods were problematic because they often failed to achieve such input and led to the dominance of a technocratic perspective in decision making. The authority of one voice in a dialogue makes it monologic. While consensus-based processes seemed to offer a way to overcome this dominance by including members of the public equally with decision makers in rational and open debate, they proved unrealistic for the American political arena and were many times considered failures because discussion did not easily follow this structure and did not produce the consensual outcome intended. Sometimes they even resulted in the dominance of the decision makers' perspective (Wills-Toker, 2005) making the discourse, again, monologic. Some scholars argue that this attempt to overcome technical dominance with democratic procedures has reduced communication to fair procedural rules rather than recognizing the rhetorical functions in dialogue (Katz & Miller, 1996; Rowan, 1994). The sense-making process that is a part of public participation is not sufficiently accounted for in current participation theories and models.

The dialogic discourse that we propose helps to overcome many of the shortcomings of these past approaches. First, in dialogic discourse, perspectives interact, struggle, and collide. The result of this process is interanimation or multi-voicedness. Thus, dialogic discourse ensures the influence and intermingling of perspectives. If this type of discourse occurs in environmental public participation, it inevitably will result in the incorporation of public views in the environmental discussion to some degree. Second, dialogic discourse contains the potential for new meanings to be generated. In turn, it ensures that one perspective will not dominate others. If this does occur then the discourse becomes monologic. Finally, the goal of dialogic discourse is not an end product like consensus or conformity to a formal structure. Instead, the goal is the creation of understanding and meaning. Therefore, using dialogic discourse as the foundation for public participation allows us to reframe participation as sense-making rather than as a set of democratic procedures. It is a quality of discussion focused on orienting to one another's perspectives that may, at times, produce convergence and decision making but, unlike other methods, the discussion does not end there. It continues on through other moments of convergence and divergence. Therefore, whether a decision is reached on a particular issue or whether a process follows a formal structure does not determine its success.

In essence, we are proposing new goals and new functions for a dialogic public participation. Such participation can not be limited to a particular forum or a specific time and place as other approaches identify. Instead, "it involves the multilogue of civic conversations across a variety of settings and through a variety of media" (Hauser, 2004, p. 11). In these various forums, the dialogues continue simultaneously. In order for the discourse to maintain a dialogic quality, it must continue past any conclusion or consensus decision. It also must never be used authoritatively in the political sphere to represent "the" voice of the public. For any indicator of public opinion can become a "rhetorical form in their own right by offering citizens an authoritative account of what their neighbors think" (Hauser, 2004, p. 7). In short, the voices of the citizens who participate in the environmental arena must be carried forward to interact dialogically with the voices of others in the American civic conversation.

There has not been sufficient discussion in the literature about the role of conflict in the process of dialogue. Here, we have argued for and attempted to begin such a conversation. Importantly, Bakhtin's

description of a continual struggle among multiple perspectives that is not resolved by a given decision considers a role for divergence rather than treating it as the condition for dialogue to overcome. Adopting such a view opens the possibility that dialogue can happen without fulfilling normative conditions for democratic participation and communication. Thus, dialogue can be reconceptualized to participants to move between divergence and convergence as they engage emerging issues, make decisions, and continue in an open-ended dialogue.

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Using Comparative Risk Surveys in Environmental Communication Pedagogy

Travis Wagner
University of Southern Maine

Using comparative risk surveys in Environmental Communication pedagogy has been successful in meeting specified learning objectives: understanding (1) the influence of socio-economic, political, and scientific factors in the social construction of environmental problems; (2) the role risk perception plays in defining environmental problems; (3) the multifacetedness of public and stakeholder perspectives regarding environmental problems; (4) the limited knowledge base of the general public regarding environmental problems; and (5) the challenge of conducting research to ascertain the validity of these assumptions. Although traditional comparative risk surveys are used to compare the perspectives of the public and environmental experts, this modified version compares ranking of local environmental problems by residents, businesses, and public officials. Based on three years of use, it has demonstrated to be a powerful pedagogical tool in Environmental Communication.

Environmental problems are the driving force in environmental policymaking (Fiorino, 1995). Integral to identifying, defining, and solving environmental problems is environmental communication. Communication is essential to provide the necessary information to differentiate an environmental condition from an environmental problem. As described by Kingdon (1994), there is a difference between a condition (or situation) and a problem. When society believes that action is warranted, a condition becomes a "problem." In the environmental arena, crucial to elevating a condition to problem status is the perception of risk; that is, what potential harm or injury might be caused by the environmental problem? If the risk is acceptable, it is not a "problem" and is merely a condition; however, if the condition presents an unacceptable risk, it becomes a problem necessitating action. Communication is instrumental in helping to provide meaning as to the degree or magnitude of potential risk (Plough & Krimsky, 1987). Public risk perception is important to study because of its political relevance (Karlberg, 1997). That is, there are great political, economic, and social stakes in defining something as a problem; some will benefit and some will lose depending on which and how environmental problems are defined (Kingdon, 1995).

According to Rochefort & Cobb (1994), cultural values, interest group advocacy, and scientific information shape how problems are defined. In the environmental arena, the construct of problems is much deeper because of the role of individuals' perception of risk of injury or harm as perception equals reality. Individuals do not maintain perception in isolation, but share their perception with others. Sharing perception gives rise to the social construction of perception (i.e., the creation of shared perception.) In addition to Rochefort & Cobb's (1994) list, risk perception also is shaped by politics, beliefs, personal experience, cognitive ability, economic factors, and disaster and fatality potential (Slovic et al., 2000). An especially important factor in the construct of public risk perception is the influence of the memorability of past events and the imaginability of future events. Thus, any factor that makes an event unusually memorable or imaginable, including heavy media coverage, could distort risk (Slovic, 2000).

The mass media plays an important role in social constructs of risk. As Karlberg (1997) stresses, most of what we learn about environmental issues is through the news. This is because the public relies heavily on the media for information about the environment (Ader, 1995). Mass media operates in a free market. The economic pressures, values, and formats are influential as the mass media identifies, frames, filters, defines, categorizes, and solves environmental problems (Anderson, 1997). Thus, the increasing larger marketplace of communication channels, with its spectrum of values orientation, further erodes rational constructs of environmental problems promoting increasingly diverging perspectives as to what is an environmental problem. Consequently, with the numerous influential factors and media channels there are

multiple valid interpretations as to whether an environmental condition is a problem. As Darnall & Jolley (2004) conclude, the general public, the scientific community, and environmental experts consider environmental risks differently.

In undergraduate environmental science education, based on personal experience teaching undergraduate environmental communication, the social construct aspect to environmental problem definition is initially difficult to grasp. It is especially evident with undergraduate environmental science majors trained to rely on "hard" data. Such concepts as uncertainty, values, cultural perspectives, and the dreaded politics, commonplace to social scientists, are often difficult concepts for those in natural science programs who may have not been trained in the social sciences. Yet, students need to understand that the problems that warrant public attention and response are not those generally defined by scientists as problems, but often are defined by the public and the media. A pedagogical challenge is how best to elucidate this construction aspect and advance its appreciation by environmental science majors within the confines of a single semester course.

Environmental Problem-Based Curriculum

The Department of Environmental Science (DES) at the University of Southern Maine is an unusual program in that while it emphasizes the interdisciplinary nature of environmental science, it also fosters the integration of environmental science with environmental policy and planning. In 2001, the department made a conscious decision to modify its curriculum substantially in order to strengthen student scientific comprehension and practical problem-solving skills; especially environmental problem identification and definition skills. DES received a grant from the National Science Foundation's Course, Curriculum, and Laboratory Improvement program to implement a new problem-based learning curriculum starting in the fall of 2002. Two major components of the new curriculum were the integration of thematic content throughout a new five-course sequence and the promotion of inquiry-based problem learning.

The problem-based approach focus of DES's new curriculum is implemented through a required five-course sequence. This course sequence is designed to expose students to the major activities performed by environmental scientists and policymakers investigating an environmental problem and designed to promote inquiry-based problem learning. Each of the five courses represents the learning processes that occur when researching, collecting, generating, analyzing, and interpreting data, and formulating conclusions about environmental problems. The first course in the sequence is Environmental Communication, which is required of all students in the spring of their sophomore year. Although this course has been part of the curriculum since 1994, its original purpose was to develop professional-oriented writing skills. By necessity, the Environmental Communication course had to be redesigned as its objectives changed substantially from its original form. In the spring of 2003, I unveiled a newly redesigned Environmental Communication course. The five primary objectives of the new course are to substantially increase student understanding of: (1) the influence of socio-economic, political, and scientific factors in the social construction of environmental problems; (2) the role risk perception plays in defining environmental problems; (3) the multifacetedness of public and stakeholder perspectives regarding environmental problems; (4) the limited knowledge base of the general public regarding environmental problems; and (5) the challenge of conducting research to ascertain the validity of these assumptions. There is a sixth objective, which is for students to select a specific local environmental problem to study in the remaining four courses in the sequence.

During the first half of the course, students conduct a series of writing exercises that focus on identifying, analyzing, and communicating various aspects of self-selected environmental problems (see Table 1). The intent of these exercises is to foster student interest in studying various environmental problems and eventually for them to select a specific local environmental problem for further study. Moreover, these exercises provide a crucial foundation for the second half of the course, which includes a major research component. Because the students are predominately environmental science majors, there was a conscious decision to incorporate a social science-based research module.

TABLE 1. Framework of DES's environmental communication course

Topic	Assignments	Outcomes
Communication Theory	Lecture and assigned background reading	Students are introduced to the basics of human communication theory
Environmental Problems	Students describe three environmental problems, explain why it is a problem, identify the empirical evidence indicating it is a problem, and describe interest in each problem	Students select three problems to examine Students are required to support empirically problem classification
Workshop: Conducting Literature Reviews	Students select a problem and conduct a mini-literature review using only peer-reviewed journals	Students select a problem Students are forced to conduct research beyond the Internet
Power of Communication	Students view the PBS video on "Silent Spring" In class, students answer series of assigned questions regarding the book and Rachael Carson	Students observe the potential power of environmental communication Students observe how communication can be used to prevent/promote change
Issue-Attention Cycle	Lecture and assigned background reading	Students study how environmental problems fade from public and media attention
Scientific Evidence	Students view the video: "Scientific Spin Doctors" In class, students answer series of assigned questions	Students see that scientists have values and can advocate positions involving the scientific debate on climate change
Risk Perception	Students select a problem and prepare a memorandum to a state agency. Students are required to state the problem, summarize empirical evidence, and present the likely public and business perspectives as to whether the problem is of sufficient concern to warrant state action	Students examine and summarize alternative perspectives on the construct of an environmental problem

Topic	Assignments	Outcomes
Risk Communication	Using an assigned case study on dioxin and poor risk communication, students must identify the most important concepts with regards to environmental communication (risk communication) and their impact	Students examine how poor risk communication—an information vacuum—can substantially alter the construct of an environmental problem
Mass Media and Environmental Science	In teams students produce a 150-second videotaped presentation of a selected environmental problem designed for a local television news report. Videos are shown and analyzed in class	Students gain insight into the challenges of presenting complex environmental problems through the mass media
CRS Project Introduction	Lecture and assigned background reading	Students learn the basics of survey design Students learn the basics of sampling
CRS Project Preparation	Students pilot test the survey instrument and subsequently submit a research proposal	Students learn the requirements of a research proposal
CRS Project Research	For two weeks students survey in the designated study area and ultimately prepare a final paper identifying local risk perceptions and discussing disparities in the perceptions	Students experience the challenges to conducting social science research
Course Conclusion	Students create a concept map depicting the influence of various factors on the construct of environmental problems	Students review and reflect on the various factors that influence the construct of an environmental problem and their relative influence

Comparative Risk Surveys

With the charge of increasing undergraduate learning of problem definition and the role of risk perception, the question arises as what is an efficacious pedagogical technique? One such promising technique is the Comparative Risk Survey (CRS); a technique to identify and comparatively rank environmental problems based primarily on risk perception. As such, CRS is a potentially ideal pedagogical method to achieve environmental communication learning outcomes, such as improving the understanding of what constitutes an environmental problem, comprehending how and why society perceives environmental problems differently, and understanding the role of communication in shaping these perspectives.

As an environmental policy analysis technique, comparative risk assessments, such as the CRS, have been instrumental in elucidating the schism between environmental risks perceived by the public compared to environmental experts. A CRS is intended to synthesize public concerns and expert opinions suitable for a decisionmaking technique primarily to ensure spending and programmatic activities are targeted appropriately (Konisky, 1999). Swaney (1996) defines the comparative risk assessment process as ". . . a policy application of risk analysis designed to provide a framework for systematically evaluating risk reduction programs and budgets for the purpose of ascertaining whether different approaches or different priorities might go further or faster to produce environmental improvements." Comparative risk projects

are conducted for a variety of reasons, including the involvement of the public in priority-setting and the incorporation of their concerns, to identify and rank environmental threats, to establish environmental priorities, and to develop strategies to ameliorate the risks (Konisky, 1999).

As a decision-making tool, comparative risk was launched in 1987 when the U.S. Environmental Protection Agency (U.S. EPA) published its comparative risk project in *Unfinished Business: A Comparative Assessment of Environmental Problem* (U.S. EPA, 1987). The U.S. EPA requested an external group of scientists to assess the comparative assessment approach and the resultant comparative rankings. The Science Advisory Board's 1990 report, *Reducing Risk: Setting Priorities and Strategies for Environmental Protection*, validated EPA's use of comparative risk assessment and risk-based decisionmaking (U.S. EPA, 1990). This report similarly concluded that public perception of risk was driving EPA activity more than reality. Public perception is a major factor influencing EPA's development and use of risk assessments. From a policy perspective, how the public perceives the risk, defined as the probability of injury or harm, of an environmental condition is far more important that the actual risk (Slovic, et al., 2000). Crandall and Lave (1981) posit that environmental decisions are motivated by a popular reaction to a perceived problem rather than by a problem that can systematically be addressed.

There are limitations to comparative risk projects. As concluded by Konisky (1999), U.S. EPA's *Unfinished Business* failed to change public perception of risk or lead to reallocation of resources within the U.S. EPA. Nevertheless, their utility proved alluring as dozens of comparative risk projects were launched across the U.S. In spite of subsequent widespread popularity, a sweeping paradigm shift in allocation of resources based on actual versus perceived threat has yet to materialize as public perceptions remain resistant to change. Moreover, as summarized by Moffet (1996), there are numerous critiques on the weaknesses of comparative risk methodology as a priority setting technique. These weaknesses include: limited scientific understanding of human and ecosystem functions, inadequate information base, inability to understand chemical interactions, the categorization of environmental problem belies their risk potential due to interconnectedness, and risk perception tends to unduly focus on death or injury.

There are many recognized limitations and weaknesses of the CRS as a rational planning tool in public policy; however, I argue it is valuable when used as a method to ascertain and understand the perspectives of various stakeholders towards local environmental problems. In this application, the CRS also becomes a crucial learning tool for students to understand how environmental problems are socially constructed as they seek to answer the who, what, where, and why of local environmental problems.

In the spring of 2003, the newly redesigned Environmental Communication course was unveiled. The five primary goals of the new Environmental Communication course are to substantially increase student understanding of: (1) the influence of socio-economic, political, and scientific factors in the social construction of environmental problems; (2) the role risk perception plays in defining environmental problems; (3) the multifacetedness of public and stakeholder perspectives regarding environmental problems; (4) the limited knowledge base of the general public regarding environmental problems; and (5) the challenge of conducting research to ascertain the validity of these assumptions.

An additional feature of the course is the inclusion of a research component. Because the students are predominately environmental science majors, the incorporation of a field-based research project was obvious; however, the research project would be social science-based. As discussed previously, traditional CRSs are used to compare and ultimately rank and compare perceived environmental problems between the public and environmental experts. However, I view this comparison as overly simplistic as it fails to account for the wider range of perception diversity. Thus, I modified the CRS to compare and rank-order risks of local environmental problems perceived by residents, businesses, and public officials. The addition of the third group, the business sector, is important to expose students to economically influenced perceptions.

Pedagogical Delivery of the CRS

In introducing the students to the CRS project, they are first presented with the following research questions:

(1) What are the environmental problems in the study area?

(2) What problems are perceived to be the least to most serious?

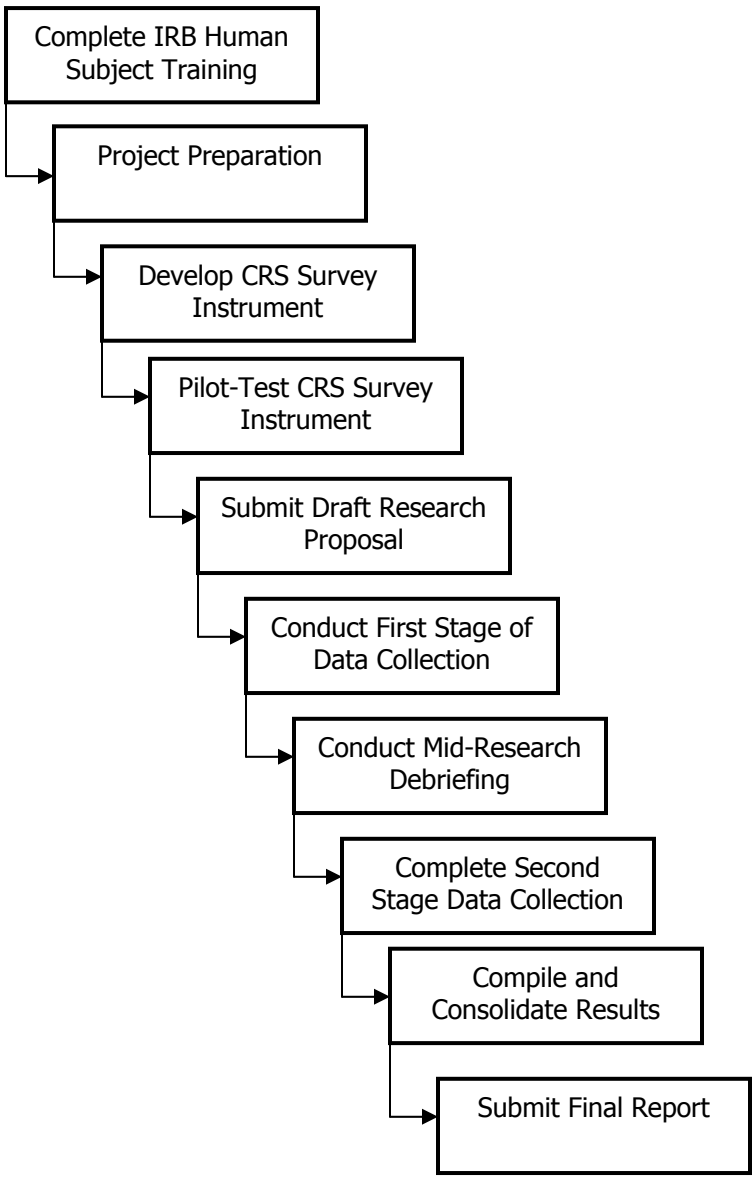
(3) How has this perception been shaped?

(4) How does perception compare amongst public officials, businesses, and the public?

(5) If it is different, why?

In addition to the preparatory steps summarized in Table 1, I use ten steps to conduct the CRS in my undergraduate Environmental Communication course as depicted in Figure 1.

FIGURE 1. Ten steps to conduct the CRS in an undergraduate environmental communication course



Step 1 – Complete IRB Human Subject Training

Because the study involves interaction with human subjects, in accordance with university institutional review board requirements and federal regulations, all students must complete specified training. The required training is provided through a free, web-based course sponsored by the National Institutes of

Health (NIH).[i] Students are required to submit a hard copy of the certificate of completion in order to participate in the CRS project.

Step 2 – Project Preparation

To prepare students for the CRS, preparatory reading on comparative risk projects is assigned (e.g., Konisky, 1999). A lecture is given on the basics of comparative risk, the steps in conducting a CRS, and background information on the study area. (A different town or neighborhood is selected each semester to survey.) This background information includes demographics, economic information, and industry profiles.

Step 3 – Develop CRS Survey Instrument

To prepare for developing the survey instrument, preparatory readings on survey construction, survey wording, and sample selection are assigned. A lecture is then given on sampling with numerous examples provided on the need and approach to random sampling. An entire class period is set aside for students to develop the survey instrument as a class project. (1) The first step is to brainstorm and develop a list of 20 environmental problems of likely local concern. After developing this master list, student discussion is facilitated to narrow the list down to 15 problems, which is followed by focusing on the proper wording of each problem. An example of a previously used survey form is shown in Figure 2. I make suggestions to use synonyms for some environmental problems for comparison. For example, global warming and climate change are often two problems listed in the survey but in different locations on the list. Other interesting comparative problems have included agricultural pesticides and residential pesticides, radon and indoor air quality, and ground level ozone and motor vehicle pollution. Additional tasks include selecting the order in which the problems appear on the list, wording of the invitation to participate in the survey, identification of additional data to be collected (e.g., source of news, gender, age), and the rank/ordering system to be used. The approach taken is to facilitate and guide the student's creation of the survey, but not dictate except only when necessary. This process also reduces ideological imposition onto the students that sometimes is associated with education in the environmental field (Fien, 2000).

Step 4 – Pilot-Test CRS Survey Instrument

Students are requested to pilot test the survey by selecting five participants. During the pilot test, students are instructed to not deviate from the survey, not explain the environmental problems, and not answer questions (this ensures the survey is truly pilot-tested and that students avoid educating the participants). A discussion board is created on the course's website for the exchange of student comments and observations regarding the survey. Following the results of the pilot test, class time is used to finalize the survey form. Also during this time, students are asked to volunteer as to the preferred survey sector (e.g., residents, businesses, and public officials). The class is generally divided with 50 percent of the students surveying residents and 25 percent surveying businesses and public officials. Volunteers are requested to serve as student sector leader. Their role is to coordinate sampling and data collection.

Step 5 – Submit Draft Research Proposal

Each student is required to submit a draft research proposal before conducting the CRS. Because major information sources are part of the assigned reading, their time spent on conducting additional research is minimized. And, salient background documents on the study area are put on reserve at the library. Students are required to follow a specified format for the proposal: Title, Introduction (i.e., what, why, and where), Methodology (i.e., how, who, and when), Data Collection Instrument (the survey), Proposed Analysis (i.e., how you will analyze your data), and References cited. The proposal is reviewed and handed back for revision and re-grading. This proposal subsequently becomes the first half of the final paper.

Step 6 – Conduct First Stage of Data Collection

The course normally meets twice per week, 75 minutes each class. During the research stage, students do not meet for a week and instead are required to spend the allotted class time conducting the survey sampling. In pairs, students are allowed to sample during any time of the week, but must sample for at least three hours during this phase.

FIGURE 2 Sample CRS survey instrument

Environmental Risk Survey

Hello, I am a student at the University of Southern Maine and I am conducting an Environmental Risk Survey of local citizens, businesses, and public officials. Could you please take a couple minutes to rank the following 15 topics according to the amount of risk they have on environment, 0 being of no concern and 6 being a high risk.

Environmental Risk	**No Concern**	**Low**		**Med**		**High**
Acid rain	0	1	2	3	4	5 6
Air pollution	0	1	2	3	4	5 6
Asbestos	0	1	2	3	4	5 6
Drinking water quality	0	1	2	3	4	5 6
Erosion/Stormwater runoff	0	1	2	3	4	5 6
Climate change	0	1	2	3	4	5 6
Groundwater quality	0	1	2	3	4	5 6
Lead in homes	0	1	2	3	4	5 6
Mercury	0	1	2	3	4	5 6
Noise pollution	0	1	2	3	4	5 6
Pesticides and fertilizers	0	1	2	3	4	5 6
Radon	0	1	2	3	4	5 6
Brownfields and soil quality	0	1	2	3	4	5 6
Urban sprawl and habit loss	0	1	2	3	4	5 6
Waste disposal	0	1	2	3	4	5 6

Please complete the information below as it applies to you:

Age: ___ 18-25 ___ 26-30 ___ 31-40 ___ 41-50 ___ 51-60 ___ 61-70 ___ 71+

Gender: ___ Male ___ Female

Level of Education: ___ High school graduate/GED ___ College degree ___ Graduate degree
___ Some college ___ Other _____

Number of years you have lived or been in involved with the Neighborhood:___

Is your residence/business rented___ owned___ other___?

Primary source of news: ___ Television ___ Radio ___ Internet
___ Newspaper ___ Friends/family ___ Other ___

Step 7 – Conduct Mid-Research Debriefing

At the end of the first week of sampling, students meet in the classroom for a project debriefing. Students are canvassed on stories, experiences, problems, observations, trends, and suggested modifications. General observations have included: the public officials' sector observes that it is a challenge to obtain public official participation; the business sectors note the challenges of finding the appropriate person at the business (the manager, the worker, and so forth); and the residents' group generally has the most colorful stories of interactions and meeting "unique" people. The students nearly always abandon their structured invitation-to-participate speech as it proves to be too lengthy and tends to scare people away from participation. Thus, students tend to become creative and alter their approaches to elicit participation. The remaining part of the class is devoted to discussing the problems of social science research involving human subjects and the non-validity of the results due to increasingly opportunistic

sampling, the inconsistent delivery of the survey, and students answering questions of participants resulting in education of the participant thereby skewing risk perception ranking.

Step 8 – Complete Second Stage of Data Collection

During the second and final stage, again students do not meet in the classroom and are required to conduct three additional hours of sampling during this period. Students are requested to continue coordination with their sector leader to compile and consolidate the survey results for the next class meeting.

Step 9 – Compile and Consolidate Results

A blank spreadsheet is created for results from the survey and posted on the course website. The completed dataset is subsequently posted and made available to students.

Step 10 – Submit Final Report

Students are required to submit a final report. Regardless of the sector the students sampled, they are required to report on all three sectors combined. Because of the corrected research proposal and class development of the results, students focus on the discussion, which requires them to answer the research questions: what are the problems of local concern, how are the problems ranked, what factors shaped the perception of the problems, and how do these perceptions and rankings differ among the three sectors?

Results and Discussion

Use of the CRS in Environmental Communication has occurred for three years (three semesters). The sixth objective of the course, for students to select a local problem for further study, is being met as all students must submit a proposal to study a specific, local environmental problem to complete the course.

The course appears to be successfully achieving the five remaining learning objectives. An important assessment of the CRS as a pedagogical technique is to examine the learning components of the project. That is, does it meet the criteria of a powerful learning experience? Fink's (2003) criteria for a powerful learning experience include that students are engaged in their own learning, there is an associated high energy level, and the process has important outcomes, which are all characteristics of the CRS project. Students are engaged at multiple points from developing the survey instrument, selecting the samples, collecting the data, and interpreting the data. Students need to have a high energy level as they interact face-to-face with residents, business representatives, and public officials. Finally, the outcome is important because many of the students live or take classes in the study area, thus they have a vested interest in the outcome, and, they tend to be passionate about the environment. Moreover, the direct relevance of their efforts consistently are tied to their future education and professional endeavors.

An important aspect of the CRS project is that the professor acts as a facilitator and a resource rather than a director. This is a desirable characteristic of problem-based learning; the student becomes the source of the course content through their own examination and analysis rather being told (Harper-Marinick & Levine, 2002). Because the perception of risk is such a complex issue, students need to experience rather than just study different perspectives. The CRS is an experiential-based pedagogical technique fostering a hands-on comprehension of perceptions. Although experiential learning often takes place within the classroom or on campus, the CRS's use of experiential learning takes place directly in the community. This requires students to come into contact with people of different socioeconomic classes, ethnic groups, and races. As Tomsen & Disinger (2002) found in their study of long-term persistence of learning outcomes with undergraduate environmental students, meaningful interaction with people in and out of the classroom was key in achieving significant long-lasting impact. Thus, as students seek to unravel the social construction mystery, they are forced to interact with many types of people that they may have little experience with. Because society is so multifaceted, students need to see different perspectives as a means to view complex issues as a whole (Newell, 1999). The experience presented by the field-based CRS provides a valuable opportunity for cross-cultural comparison of environmental perspectives. As Fink (2003) suggests, for students who can make the connection between classroom theory and real-world application, an important kind of learning has occurred, that of intellectual power. Because the CRS does not take place in the classroom, but in people's homes, offices, and businesses, the real-world application does not get any more real.

Pedagogical techniques are merely methods to increase the learning from a knowledge and retention basis. An additional important question then is not how the students learn, but what, from an environmental communication perspective, did they learn? Based on the three-years of experience with the CRS, students learn that the general public's knowledge of environmental problems is far less than expected. This, however, is not limited to the public, they also learn that the business sector and public officials generally know less about environmental problems than the students expect. Moreover, the students learn that there is wide variability of perspectives within each of these sectors such that one can not think of the public, the industry, or the public officials as a single perspective. Regarding public officials, students assigned to the survey them discover quickly that they can be difficult to contact, generally are reluctant to participate in surveys (especially if potentially controversial), and tend to be cautions with their answers.

Although the CRS is designed to train students in basic research, as a trained researcher, one is confronted with a difficult educator/researcher conundrum. While the primary goals of the CRS are to achieve the learning objectives and to be exposed to social science research, there is a problem. Given the student's limited experience level, the course's multiple learning objectives, and time limitations, the results of their research are grossly invalid. This remains the most difficult problem with the course and the current use of CRS; nevertheless, it provides an opportunity for them to learn about statistical validity issues.

After teaching Environmental Communication for 3 years, I have found that the use of CRS is helping to achieve the department's goals of active inquiry-based and problem-based learning. The overall experience provides students with new appreciation for the challenges and necessity of environmental communication. And, as future environmental professionals, students learn the importance of understanding risk perception, how it is constructed, and its role in defining environmental problems. However, the benefits are not limited to the students—an additional important benefit, albeit minor, is that the survey increases public awareness of local environmental problems.

Notes

[i] http://cme.cancer.gov/clinicaltrials/learning/humanparticipant-protections.asp

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Remediation Techniques, EPA Public Meetings and Democracy: Lessons from the Frontline

Ann D. Jabro
Robert Morris University
Jay D. Jabro
Northern Plains Agricultural Research Lab, ARS-USDA
Rainer Domalski
Manager, Remediation Projects, ROC

The American Chemistry Council initiated a public relations effort in 1988 called Responsible Care®, which invited members to initiate dialogue with their communities through the establishment of community advisory councils. On-going, informative, small group transactional communication assisted a chemical company positioned on the National Priority List to manage a public dialogue about a proposed amendment to a Record of Decision for the remediation of its Superfund site. Concerns were articulated during an Environmental Protection Agency's Public Participation meeting. Delicath's Principles of the Participatory Ideal (1999) based on Fiorino's (1990, 1996) earlier works form the theoretical foundation on which the application of these principles are presented. A specialty chemical manufacturing company's democratic approaches to public discourse to resolve conflict in environmental decision-making rendered public participation in environmental policy issues an opportunity for stakeholder groups to communicate effectively to reach their ultimate goal: preservation of the environment.

Introduction

In an effort to provide a forum for exchange of ideas and involvement in environmental decision-making, Senecah (2004) stresses the need for "voice;" or to communicate as partners in ways that have significance to the sender and receiver of the communication act. Walker (2002) explains that the public's ways of thinking and the manner in which they express their ideas impact both the process and outcome of the situation. The federal government prescribed a public participation process. However, the scales predominately appeared to be lop-sided, with one side weighing heavily on scientific information and the other side coming up light on ability to comprehend scientific information, which maintained a state of imbalance, and created dissatisfaction for the less scientific-minded side (Fiorino, 1990; Vaughan & Seifert, 1992). This lack of ability to voice remained a component of public participation for some time. Lynn's assessment of efforts by citizens to participate in public discussions regarding environmental decision-making captured the mood at the time.

> Citizen involvement in decisions regarding risky technologies, at least on the surface, seems at odds with the American trend toward…towards a professional ethos in which citizens are viewed as not being capable of understanding complex technical phenomena (Lynn, 1987, p. 359).

It should be noted that the public had limited access to formal decision-making mechanisms and while they desired to assist in determining the fate of their community, they appeared to be complacent for the most part. Those who sought a voice did so with trepidation. Cox (1999) contributed a detailed description of how the notion of public participation was nullified by the construction, manipulation, and promotion of the indecorous or "inappropriate" voice when individuals attempted to "stand" during a public participation

meeting. Researchers have determined that the early methods excluded the very public it sought to include (Juanillo & Scherer, 1995, Waddell, 1996).

One of the strongest advocates for equality of voices is the environmental justice movement, which has grown significantly and been an integral component in fostering principles of equality at all stages of decision-making from needs assessment to evaluation by all stakeholders. The establishment of the National Environmental Justice Advisory Council (NEJAC) and an advisory committee charged with injecting advice, recommendations, and serving in a consultative capacity to the administrator of NEJAC offers evidence of the domino effect with respect to the value of a person's or the public's "voice."

The NEJAC's mantra is that "voice in meaningful public participation is the hallmark of sound public policy and decision making" (NEJAC, 1996, es-iii). Thus, rather than attempting to express one's voice in a large group setting, a new approach to public participation emerged featuring advisory panels, stakeholder small group meetings, and more intimate opportunities for face-to-face dialogue designed to promote effective listening, reflective speaking and engaging in a conversation with myriad voices (Fiorino, 1990, John & Mlay, 1999; Juanillo & Scherer, 1995, Senecah, 2004).

The Public Participation and Accountability Subcommittee of NEJAC developed a Model Plan for Public Participation (MPPP), which details the recipe for the inclusion of all voices. Effort, energy, and enthusiasm have been expended to foster a two-way meaningful "conversation" during the public participation process with the ultimate goal of consensus (Killingsworth & Palmer, 1992; Juanillo & Scherer, 1995, Webler, 1995). However, other researchers suggest a collaborative process promotes identification and comprehension of similarities and differences between voices, which can lead to more effective decision-making (Daniels & Walker, 1996, 2001; Inhgam, 1996; Senecah, 2004; Young, 1998). Delicath (1999) summarizes the general perception of public participation.

> Contemporary mechanisms and processes of public participation rely on technocratic assumptions about communication, knowledge, and participation, all of which reinforce a conception of the public that leaves officials and experts with very little incentive to invite, assist, take seriously, respond to, or otherwise use (Delicath, 1999, p. 32).

Waddell (1995) crafted four models of public participation in environmental issues. Delicath's reference to technocratic assumptions refers to Waddell's Technocratic model, which supports that technical decisions are best made by technical experts, with no input from the public.

Delicath framed his Principles of the Participatory Ideal (1999) based on Fiorino's (1990, 1996) earlier works, the incorporation of the International Association of Public Participation Practitioners' (IAP2) core values for public participation, and with Walker's (1996) ideal of civic discovery. He conceptualizes that

> [T]he participatory ideal is best achieved when public participation practices allow for the direct participation of the public, enable citizens to participate on a more equal basis, promote civic discovery, create mechanisms for face-to-face interaction among stakeholders over time, and invest citizens with a role in decision-making (Delicath, 1999, p. 32).

Using Delicath's vision of participatory idea, we provide background on the American Chemistry Councils' public relations initiative, Responsible Care®, which was designed to motivate public participation. We establish the business practices that necessitated National Priority List identification and offer frontline observations regarding the practices utilized by a specialty chemical manufacturing company in central Pennsylvania after an Environmental Protection Agency's public meeting to amend the Record-of-Decision (ROD) guiding remediation activities at the site generated conflict. In essence, effective transactional communication where technical experts express their expertise while lay persons express emotions, beliefs and values to technical experts with effective listening and speaking generating shared meaning before a decision is rendered was demonstrated.

Responsible Care®: Private Communication?

The chemical industry comprises 2% of the gross domestic product, exports $91.4 billion annually, and generates 5.0 million jobs or more than 4% of the US workforce. An additional six jobs in the US economy are generated for every job in the chemical industry (Guide to the Business of Chemistry, 2004, p.6). While the government was struggling to determine how to provide a meaningful portal for public

participation, the chemical industry was also dabbling at public participation venues with their first attempt being exceptionally limited.

Chemical manufacturers under the guidance of the American Chemistry Council (ACC), formerly the Chemical Manufacturer's Association (CMA), designed and launched in 1988 a $5-million 5-year public relations effort for clean-up of the industry's image called Responsible Care® (McConville, 1992; Morrow, 1989). The effort can be directly linked to the work of Otto Lerbinger's (1986) Managing Corporate Crisis. The goal was to reposition the industry since Union Carbide's Bephol, India crisis internationally, and myriad domestic crisis tainted its image and wreaked environmental devastation and health havoc across the world. Daniels and Walker (2001) generate a typology of sources associated with environmental conflict complexity that includes: multiple parties, multiple issues, cultural differences, deeply-held values and worldviews, scientific and traditional knowledge, legal requirements and the presence of a conflict industry or any party, individual or organization – whose personal and/or professional interests are better served by the perpetuation of a competitive and conflictual approach to environmental policy. Chemical manufacturing sites tend to evoke all sources of the environmental conflict complexity typology based on the nature of the products produced. Other investigations involving chemical companies tend to focus on one or more of Daniels and Walkers' (2001) sources of environmental conflict.

During the first 10 years, the campaign's success was limited to promoting safer manufacturing practices by member companies. Public Participation in those days included a 15 member, non-industry public advisory panel (PAP) assisting with the effort, which focused on requiring companies to (1) continually improve their health, safety and environmental performance; (2) listen and respond to public concerns; (3) assist each other to achieve optimum performance; and (4) report its progress to the public (CMA Brochure, 1996). Of interest is the placement of the public and its role as a participant in business operations and public dialogue. For the most part, communication between the general public and industry was initiated by the public in limited public forums, usually protest, mediated coverage and in some instances, mutually agreed to civil dialogue. Realistically, the voices were heard by public relations experts, who designed campaigns to address or silence or discredit the voices rather than working toward a state of meaningful conversation.

Public discourse not a reality

Axelrod (2000) commented on the success of Responsible Care®, noting member companies "were moving toward improving environmental performance and working toward sustainability and socially responsible business practices, although few were communicating this information to the public for corporate gain" (p. 3). This accomplishment was formalized by the Keystone Center, an environmental education organization in Colorado, which bestowed the "Leadership in Industry" award upon the ACC in 2000.

Substantial Public Input

A July 2000 article "Responsible Care: New Connections" suggested Responsible Care® still had a way to go. In this article, Schmitt (2000) shares survey results from a study commissioned by ACC, which suggest a majority of respondents indicated the "*industry's assets as its benefits to society, including its products, and the Responsible Care® program outweigh its liabilities and associated risks*" (p. 38).

However, communicating with the public was a shortcoming identified by Responsible Care's national public advisory panel (PAP), which asserted that the program does not address the concerns of those residing closest to the plants. The group advised ACC to solicit and use insights from those specific communities (Fuller, Neilsen and Schmitt, 2000). Thus, an objective of the initial campaign was to initiate communication with stakeholders. However, the nature and scope of the communication was not adequately defined to reap the desired outcome. A more substantial dialogue with niche stakeholders was necessary.

New Meanings, New Behaviors

Heath (1993) explained that

> meaning defines the identities and prerogatives of organizations, people associated with them, and their relationships. Changes that affect businesses and non-profits result from calls, voiced in interpretive vocabularies, to constrain their prerogatives by displacing old meanings with new ones (p. 142).

The first shift by CMA to acknowledge the plight of Responsible Care® and community impressions of chemicals was changing its' name to the American Chemistry Council (ACC) in July of 2000. ACC rolled out a new and improved public relations strategy designed to promote the industry's success with risk reduction. It donned a new slogan, "better living through chemistry". The campaign targeted the general public and niche audiences, such as, policy makers and environmental groups. ACC proceeded cautiously about marketing member companies' environmental accomplishments because of the double-edged sword nature of the situation; a limited number of companies have achieved compliance with all of the Codes, and all member companies are at different stages in adoption of the Codes (Lavelle, 2000).

This industry, which currently is the largest exporting sector in the US can now boast that its facilities are 4.5 times safer than all other manufacturing industries combined, has reduced emissions by 58% from 1988-1997, while increasing production by 18%, has experienced 8% fewer process safety incidents since 1996.These tangible results are in part, due to the implementation of the Codes of Responsible Care®, which have guided business practices: product stewardship, pollution prevention, community awareness and emergency response, security, distribution, and employee safety.

We suggest that the industry needed to get its "proverbial house" in order before it could engage in meaningful, sustained, and accountable dialogue with diverse publics. This statement is reinforced with the ACC's latest positioning of the "public" in relation to the effort. *Ten guiding principles of Responsible Care also guide the now titled, "Good Chemistry at Work" manifesto, which identifies as its number one principle, "to seek and incorporate public input regarding our products and operations."* The other principles include the following:

(2) To provide chemicals that can be manufactured, transported, unused and disposed of safety.

(3) To make health, safety, the environment and resource conservation critical considerations for all new and existing products and processes.

(4) To provide information on health or environmental risks and pursue protective measures for employees, the public, and other stakeholders.

(5) To work with customers, carriers, suppliers, distributors and contractors to foster the safe use, transport and disposal of chemicals.

(6) To operate our facilities in a manner that protects the environment and the health and safety and environmental effects of our products and processes.

(7) To support education and research on the health, safety, and environmental effects of our products and processes.

(8) To work with others to resolve problems associated with our past handling and disposal practices.

(9) To lead in the development of responsible laws, regulations, and standards that safeguard the community, workplace, and environment.

(10) To practice Responsible Care® by encouraging and assisting others to adhere to these principles and practices.

According to the ACC's Guide to the Business of Chemistry 2004 Report, the definition of chemistry has evolved to include more of its perceived benefits to society.

> Chemistry – it's in everything and everywhere. By its very nature, the world and everything around us – air, water, the ground beneath us, the infinite number of things and technologies we use everyday, as well as our own living tissue – is chemistry in motion (p.1).

Thus, the Council acted on the recommendations of the public to promote its benefits to society, altered its public relations materials and began to expend more effort to promote public participation measures and

community advisory council activities. One company situated in central Pennsylvania initiated a dialogue with the public in early 1994 and learned that engaging in meaningful communication, actually listening to the voices in the community, can impact the company's ability to conduct business in the community.

Responsible Care® at the local level

Chemical industry practices for American Chemistry Council member companies are guided by the Codes of Responsible Care® (www.acc.org). The Community Awareness and Emergency Response (CAER) code suggests, but does not require, manufacturing facilities to communicate with community residents through the establishment of a community advisory council (Responsible Care Brochure). There is no research to date that explicates the nature and function of member companies' community advisory councils. However, observations by these researchers of other councils suggest that they have not been utilized to effectively promote participation and problem solving by the public.

RŰTGERS Organics Corporation

RŰTGERS Organics Corporation (ROC) launched a community advisory council (CAC) in 1995 and maintained the group until October of 2004; although the company closed its Pennsylvania plant on March 31, 2004. Twelve community residents, of which six were male and six were female, each represented a different interest in the community, were nominated by current members or responded to a media posting to serve on the Council. The facilitator interviewed all nominees and attempted to identify those individuals who represented the greatest concerns or who would be likely to "voice" community concerns and represent constituencies not represented for inclusion.

Throughout the many crisis and community engagements, the company relied on the insights and feedback from this group, which served as representatives of key stakeholder groups in the community (Jabro, 1997). Members of the CAC served three-year terms, which required attending bi-monthly meetings at the plant. CAC members also responded to annual audits regarding the value, credibility and information presented during the two-hour meetings. Without reservation, CAC members indicated the experience was productive, worthwhile and educational. A majority of respondents indicated that serving on the CAC altered their perceptions of chemical manufacturing in general and ROC in particular (Jabro, 2002).

Public Participation and Problem-Solving
Superfund Efforts

The Centre County Kepone Site consists of approximately 32.3 acres housing the Rutgers-Nease Corporation and a portion of the Spring Creek watershed. Rutgers Organics Corporation purchased the property in 1977 from Nease Chemicals. Nease manufactured as custom products kepone and mirex between 1959 and 1974. Earthen lagoons were used to manage onsite waste disposal in the early 1960's. Early in 1960, Nease was notified that a chemical odor was emanating from Thorton Spring. An investigation of the situation by the DEP indicated the lagoons were the probable culprit. As a corrective action, a concrete lagoon was constructed in 1962 and a year later an earthen lagoon was macadamized with asphalt. The treated water was then sprayed on an open grassy area at the southern end of the site. Later, tests confirmed that the spray field was impacting the water discharging at Thorton Spring. Years of government-directed remediation efforts didn't change the situation. Finally, the site was placed on the National Priority List.

The study area includes Thorton Spring and a portion of Spring Creek from the village of Lemont to the PA Fish Commission Benner Spring Research Station. The primary media of concern at the Site and Study area are contaminated groundwater, surface water, soils, sediments, and fish tissue which present both a carcinogenic and non-carcinogenic risk to human health. Benzene, 1, 2-dichloroethene, ethylbenzene, tetrachloroethane, toluene, trichloroethene, vinyl chloride, xylenes and mirex were the chemicals identified as contributing the most to potential future carcinogenic and non-carcinogenic risks. There were also potential risks to ecological receptors at the site and study area. Levels of mirex and kepone in the soil of the former spray field area, and sediments of the drainage ditch, Thorton Spring, and Spring Creek exceeded the criteria that EPA has determined are protective of ecological receptors.

This Superfund site is embroiled in clean up efforts at a cost of more than $17 million and dedicated manpower for more than 25 years (Smeltz, 2004). The clean up involves numerous steps that are monitored by the Environmental Protection Agency (EPA). The EPA also makes decisions about the cleanup method

and its implementation. The costs of the cleanup work, including EPA's labor costs and expenses, are paid by the party(ies) responsible for the contamination.

Steps in the Clean-up Effort

There are seven mandatory steps to remediate a site. The first step is a Remedial Investigation (RI) or a detailed study of the site to identify the type and extent of contamination, the possible threats to the environment and community and options for cleaning up the site. The second step is a Feasibility Study (FS), which is the screening and evaluation of potential cleanup methods. The third step is the Proposed Cleanup Plan, which describes the various cleanup options under consideration and identifies the option EPA prefers based on the information conveyed in the RI/FS. During this step the community is offered at least 30 days to comment on the Proposed Plan and is invited to a public meeting. The fourth step is the Record of Decision (ROD). This is the final decision as to what methodologies will be employed to clean up the site articulated by the EPA. The fifth step is the formal agreement between the EPA and ROC and established the legal, administrative and technical framework for the cleanup and is called the Consent Decree, The sixth step is the Remedial or cleanup design, which documents the cleanup method was designed to address site conditions with specific work areas and methods. The final step is the Implementation or Remedial Action where the cleanup commences and work is executed. During all phases of this process, the public is invited to comment, either at public meetings or via written or oral communication with the EPA. Further, all the documents compiled during each stage are available to the public via websites, libraries or local emergency planning committees (http://www.epa.gov/reg3hwmd/super/centcnty/menu.htm).

The cleanup plan was implemented in two phases. Phase 1 focused on groundwater remediation and phase 2 dealt with soil remediation. ROC awarded a contract to USFilter to implement the key components of the plan for Phase 1, which was supervised by the U.S. EPA and the PaDEP. Phase 2 dealt with soil remediation. ROC proposed an innovative alternate, Soil Vapor Extraction, which according to Pederson and Curtis (1991) is a well known clean up method that applies a vacuum to the unsaturated soil or soil that is groundwater free to induce the controlled flow of air and remove Volatile Organic Compounds (VOC) from the soil. A vacuum blower and a system of vertical or horizontal extraction wells installed to a desired depth is how the typical SVE system is installed. The vacuum induces a controlled flow of air, and removes volatile and semi-volatile organic compounds. Gas leaving the soil containing contaminants may be treated to recover or destroy the contaminants.

This SVE plan was not a part of the 1995 Record of Decision, which detailed soil excavation of those sites that exceeded EPA's cleanup standards for Kepone and Mirex. SVE was not included in the plan because technology and cleanup alternatives weren't as advanced at that time. ROC performed SVE field tests from 1995 through 1997 and prepared a Focused Feasibility Study (FFS) comparing the effectiveness of SVE vs. soil extraction. The work was reviewed and approved by the EPA, the PaDEP and the EPA's Office of Research & Development. SVE was determined to be more effective and cost efficient. As a result of this information, ROC requested a change in the Record of Decision to allow for SVE and limited excavation (removal of soil) that has Kepone and Mirex concentrations exceeding the EPA's cleanup standards, which does not alter the initial plan detailed in the Record of Decision.

The Public Meeting

EPA held a public meeting on August 28, 2000 regarding the proposed change in the Record of Decision for Phase 2 of the cleanup activities at the plant. EPA's presentation about the proposed SVE process was not as factual or neutral as it should have been to alleviate participants' perceptions that the government had already "bought in" to the new process. While it supported the process based on data, its presentation could have been more information-oriented than persuasive.

Identification of Public Concerns

A barrage of negative and inaccurate feedback surfaced. The feedback was identified as: 1) Kepone is the main public health threat; 2) SVE will not remove Kepone; 3) Soil remediation standards were loosened by the EPA; 4) The proposed changes saved ROC money at the expense of public health; and 5) SVE will not work; other technologies would be more protective. CAC members, who attended the public meeting, urged the company to more accurately explain the proposed changes.

The community at large perceived the cleanup efforts much differently than did the community advisory council and the company. The CAC's suggestion that the company refresh the community's

memory regarding the entire Superfund cleanup process was critical to the success of SVE. It became apparent that CAC members learned about the progress associated with the cleanup on a regular basis. Their "insider" on-going knowledge privileged the group to understand the entire cleanup process and ask follow-up questions. However, the general public was exposed to information that appeared sporadically in the local media, often without a historic context. Thus, the company and the CAC agreed that the five key concerns should be addressed using an information dissemination campaign.

The Plan

Four stakeholder groups were targeted: public officials, community groups (schools, universities, civic and environmental groups), neighbors residing within a one-mile radius of the plant, and the media. Three key points were addressed: 1) EPA has monitored the research and approved SVE as an acceptable means to aid in the cleanup of the site. 2) Kepone and Mirex can be removed only with soil excavation, but volatile organic compounds can be evacuated from the ground and made airborne using SVE. The contaminated air flows into a burner that reaches 1,600° F, which releases fully cleaned air. 3) The site will not be cleared until all impacted areas are clean.

Information letters were sent to elected public officials detailing the history of the site and the present request for SVE as a remedial alternative. Presentations and discussions of the cleanup effort and ROC's proposed SVE effort were made all over the county. Fortunately, the manager of remediation projects, Rainer Domalski, Ph.D. enjoyed public speaking and welcomed any and all opportunities to discuss the clean up effort. A special edition of the *Neighbors* newsletter was devoted to the entire clean up effort. It stated in a message to the neighbors, "the CAC has advised us that we need to better explain the cleanup process underway at our plant" (Jabro, 2000, p. 1) and presents the entire history of the National Priority List (Superfund) designation to the present. The newsletter is user-friendly with simple explanations of the various processes and visuals to accompany the discussion of the clean up efforts. Members of the media were provided tours and given unlimited access to Dr. Domalski. The company received a plethora of electronic and US mail recognizing them for the effort they expended to inform the public about the entire process. They were thanked for clarifying the issues in an understandable manner.

In March 2001, the Environmental Protection Agency issued an amendment to the 1995 Record of Decision, which allowed Soil Vapor Extraction as a cleanup alternative at ROC. The vacuum system was put in place in February of 2003 with 27 wells aerating the ground consistently and transforming the contaminants to the vapor state, which are then burned at 1,600° F.

Discussion

Public Participation in environmental decision-making is critical. However, those who appear to be at odds are often "outed" or their voice is presented as indecorous or "inappropriate" when attempting to "stand" for their concerns. Great strides in academic research on the nature of and impact of voice, dialogue, conversation, consensus and compromise have been made regarding the nature of the interaction. Other research areas have focused on the context and nature of the interaction. Instead of minimizing the divergent, opposing voices, RŰTGERS Organics Corporation was prompted by its CAC, an eclectic group of environmentalists, fishermen, homemakers, to not protest the disagreement, but to instead inform and educate. In essence to use the conflict as a mechanism to establish dialogue, to acknowledge that the voice or voices were heard and demonstrate the company's willingness to have other voices heard to reach a state of mutuality.

Delicath suggests the participatory ideal is best achieved when

(1) Public participation practices allow for the direct participation of the public.

(2) Enable citizens to participate on a more equal basis.

(3) Promote civic discovery.

(4) Create mechanisms for face-to-face interaction among stakeholders over time.

(5) Invest citizens with a role in decision-making (Delicath, 1999, p. 32).

Based on the aforementioned strategies employed by ROC to address the concerns expressed by community residents regarding the amendment to the ROD, we concur with Delicath's assessment of a participatory ideal.

Further, the establishment and maintenance of the company's CAC would not have been a component of this dialogue if the American Chemistry Council hadn't been receptive to public voices that disapproved of their public relations efforts. ACC suggested that member companies initiate dialogue with their communities and the communities asked for their voices to be heard and acknowledged. Thus, we suggest that more research needs to be conducted on the nature, scope, and quality of the relationship established between community advisory councils and chemical manufacturers. Is ROC's CAC typical of all chemical companies' CAC's? Do CAC's offer advice and feel they have a voice in business practices?

Interestingly, chemical companies seldom looked to their communities for support based on years of one-way communication practices. As a result of maintaining sustained, on-going transactional communication, more voices were heard, face-to-face, over time, by a company charged with and found guilty of contaminating the group's beloved environment. Thus, civic discovery in the marketplace of ideas diminished conflict and the best idea appeared to emerge, albeit a technology linked to environmental cleanup.

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Myth as Political Rhetoric: A Look at the Discourse of Stewardship in the Healthy Forest Initiative

Judith Hendry
University of New Mexico

The year 2002 was one of the worst fire seasons in modern history. Through the smoke a national debate emerged which challenged existing forest management policy and resulted in the Bush administration's Healthy Forests Initiative. This essay examines the mythic themes appropriated by Bush in his speeches in support of the HFI and the view of forest stewardship that the myth-driven rhetoric constructs--a view that reinforces anti-environmental, anti- regulation sentiments, restricts public involvement in forest management, and constructs an ultimately self-defeating definition of humans' relationship to the natural world in which "good stewardship" and "good economics" are conflated.

The year 2002 was one of the worst wildfire seasons in modern history as over 7.1 million acres were consumed in fifteen states, killing 23 firefighters, destroying thousands of structures, causing tens of thousands of people to evacuate their homes, and exceeding $1.6 billion fire suppression. Through the smoke, a national debate over fire policy emerged which challenged the current forest management policy and resulted in the Bush administration's Healthy Forests Initiative (HFI). As part of this initiative, the Healthy Forests Restoration Act (HR 1904) was signed into law on December 3, 2003.

The dominant discourse of the national debate and the resulting shift in forest policy merits the attention of communication scholars on several fronts. First because as prominent public discourse, it serves as a staging ground for the rhetorical construction of the dominant cultural view of humans' relationship to the natural world. The intellectual grounding for understanding nature and humans' place in it is not the product of an extant or pre-existing natural world. Rather it is a product of the way we culturally define and talk about it—it is a thoroughly social construct. Nature, as Cronon (1995) suggests, "far from being the one place on earth that stands apart from humanity, is quite profoundly a human creation—indeed the creation of very particular human cultures at very particular moments in human history" (p. 69). National public campaigns, such as the one conducted by George W. Bush in support of the HFI is one such "particular moment" from which our perceptions of the natural world emerge.

As political discourse, it merits attention because it is the staging ground for environmental policy--a place from which the laws and regulations that govern our actions toward the natural world emerge. Because of the far-reaching social, political, and ecological implications of environmental policy, critical scrutiny of the cultural constructions that ground the dominant discourse and the resulting policy is essential.

An examination of the mythic themes used in the discourse of the HFI provide one such means of critically scrutinizing these cultural constructions. Myths define humans' relationship to the natural world through the expression of the social values that ultimately define political realities. As Bennett (1980) suggests, myths "are the fundamental models of society that give practical meaning to values and beliefs….In the absence of formal political ideologies (a notable characteristic of American politics), political myth and rituals guide the processes in which policies are made and public opinion is formed" (p. 167).

Although a number of scholars have explored the role of myth in public argument (e.g. Balthrop, 1984; Bennett, 1980; Braden, 1975; Edelman, 2001; McGuire, 1987), few have examined the role of myth in shaping and reinforcing perceptions of the natural environment and humans' relationship to it. There are, however, a few noteworthy exceptions that merit attention.

Retzinger (2002) examined how mythic themes of Jeffersonian agrarianism are used in popular films to shape our understanding of the natural environment—a view which "ultimately clouds and confuses the relationship of agriculture to the environment or capitalism" (p. 57). Retzinger concluded that the use of myth in popular films serves to reproduce rather than question the status quo of agricultural practices and reinforces the subordination and exploitation of both women and the land.

Peterson and Horton (1998) looked at the mythic themes (mythemes) of stewardship that emerged through ranchers' discourse surrounding disputes of private property rights versus habitat preservation for endangered species. They identified three widely shared characteristics of good stewardship that surfaced through their interviews with the ranchers: common sense, independence, and a unique human-land connection. They argued that common ground among ranchers, environmentalists, and government resource managers could more effectively be reached by drawing on the shared sense of stewardship embodied in these stewardship mythemes.

This study serves to advance our understanding of the role of myth in the construction and maintenance of the dominant view of humans' relationship to the natural world as well as its influence on political thought and action. Specifically, this study examines how mythic themes are appropriated in political discourse to ground a view of "common sense" stewardship that is consistent with and supports the political agenda of the rhetor. In this case, it is a view of forest stewardship that is constructed and reinforced through George W. Bush's speeches in support of the Healthy Forest Initiative and the Healthy Forests Restoration Act of 2003. This essay further discusses the inherent contradictions and paradoxes in the mythic discourse and the resulting construction of stewardship as defined through forest policy and management directives.

The speech transcripts used in this analysis included Bush's speech at Central Point, Oregon on August 22, 2002; his remarks at a press release in the White House East Garden on May 20, 2003; his speech at Inspiration Rock in Summerhaven Arizona on August 11, 2003; his speech at Camp Sherman in Redmond, Oregon on August 21, 2003; and his remarks at the signing of the Healthy Forests Restoration Act at the Department of Agriculture in Washington, D. C. on December 3, 2003. These speeches comprise the bulk of Bush's public campaign to promote the HFI and span a geographically broad range of audiences.

"Common Sense" and Myth in the Rhetorical Context

Phrases using the words "common sense" or "makes sense" are so prevalent throughout Bush's speeches in support of the HFI that it conspicuously emerges as a major motif of his strategic rhetoric. In the five speeches analyzed, the phrase "common sense" was used 21 times and the phrase "makes sense" was used 12 times. The following excerpt from his speech at Central Point, Oregon illustrates how these phrases are used as rhetorical appeals in his speeches:

> We need to make our forests healthy by using some c*ommon sense*. We need to understand if you let kindling build up, and there's a lightening strike, you're going to get yourself a big fire….We've got to understand that it *makes sense* to clear brush. We've got to *make sense*—it *makes sense* to encourage people to make sure that the forests are not only healthy from disease, but are healthy from fire." (italics added, Bush, 2002)

In their study of ranchers' discourse, Peterson and Horton (1998) found that "common sense" was a recurring mytheme in the discursive construction of stewardship. This view of stewardship privileges the individual's practical experience of working and living on the land as "the most legitimate way of knowing" (p. 175). Vico (1968) presents a view of common sense that goes beyond individual experience. As a practical resource for understanding, common sense provides what Vico (1968) terms a "*sensus communis,*" or a means of "judgment without reflection shared by an entire class, an entire people, an entire nation, or the entire human race" (para 142).

In the absence of lived experience, myths provide the practical resources of shared understandings that ground the "*communis sensus."* Since most people have not actually lived the experience of forest management, myth provides the interpretive schema from which to make sense of the proposed forest management policies—a means of instantaneous judgment without reflection.

One of the reasons for myth's potency as a rhetorical instrument is that the "truths" contained in myth are composites of cultural beliefs, values, and experiences that operate at the deepest level of cultural understanding and, as such, are rarely subjected to critical reflection. As Balthrop (1984) explains,

> The understanding that such myths contain constitutes the essence of the culture itself and is the "taken-for-grantedness" or the last step in the infinite regression beyond which members of the culture cannot go in their attempt to justify or explain. The truths contained in such understandings cannot be expressed discursively and are accepted because they "are." (Balthrop, 1984, p. 342)

Myths, in defying critical examination, serve as an enduring and unchallenged model for applying cultural beliefs, values, and experiences to political thought and action. By embracing myth, a persuader establishes pathos with the faithful by appearing to be a person of common sense and goodwill (Braden, 1975). Conversely, those who would dare to question this "sacred well of culture" (Weaver, 1964, pp. 11-12) are often characterized as irrational, lacking common sense, or even malevolent. "The assumption" as Balthrop (1984) explains, "is that expressions of truth based upon cultural ideals will be as obvious to others as to those who accept them. When such statements are either not accepted—or worse yet—disputed, one begins to attribute not error but malevolence to those attacking" (p. 344).

A number of myths inform "common sense" with regards to humans' relationship to the natural world. Among the most influential are the agrarian myth and the frontier myth. The principle narrative of the agrarian myth, as described by Donald Worster (1991) is the story about a simple ordinary people moving into an extraordinary frontier land, "turning it into the garden of the world" (p. 8) and there creating a peaceful productive life free of the depravity and contaminating influence of urban civilization.

Emerging from the agrarian myth and reinforcing its cultural ideals was the frontier myth advanced and popularized by Frederick Jackson Turner (1947). This self-flattering vision of the American past extolled the virtues of the courageous settlers who endured the hardships of the wilderness frontier to create a uniquely American form of democracy where equal hardship and opportunity leveled the playing field for all. According to Turner, this was not merely a colorful phase of American history, it actually shaped and defined America's character. The frontier brought forth and molded the rugged individualists who conquered adversity on the strength of their own self-reliance. Unassisted by government intervention and unencumbered by the external restraints of Eastern power elites, the frontier provided an untapped source of material riches for improving one's lot in life.

The contradictions in logic and paradoxes inherent in the agrarian myth and the Turner thesis have been explored by numerous critics (e.g. Coontz, 1992; Limerick, 1988; Limerick, Milner, & Rankin, 1991; Nash, 1967/2001; Worster, 1991). Worster (1991), for example, discusses the "unresolved contradictions of innocence" of the agrarian myth of the garden portrayed as a place to escape the depravity and contamination of industrialization and urbanization. Paradoxically, as Worster points out, the pioneering era quickly evolved into "a new open-ended period of expanding technology and enterprise that had no limits in sight…We might call it the myth of the world of the Camber of Commerce, for whom the West will be unfinished frontier until it is one with Hoboken, New Jersey…" (pp. 12-13). Although logic demands that you cannot have it both ways, the agrarian myth has held together because "it did not follow the rules of logical discourse, instead it was a song, a dream, a fantasy, that captured all the ambivalence in a people about their past and future" (p. 8). Rowland (1990) suggests that "…myths possess a unique power to symbolically 'solve' social problems not possessed by other symbolic forms because rules of discursive logic do not apply in mythic story. In fact, in myth, inconsistent events may both be true" (p. 103).

Scholars engaged in mythic criticism are admonished to avoid the colloquial view of myth as a popularly perpetuated fictitious story or falsehood. Indeed, the cultural ideals and deeply held values expressed in myth are products of both historical realities and popular beliefs "joined together in a continuous circle, moving back and forth in a long halting, jerky, interplay" (Worster, 1991, p. 7). Yet the critic must also keep in mind that, as Vico suggests, myth stems from its formation through feeling and "makes into 'truth' what it feels in the world" (cited in Verene, 1991, p. 152). Once this "truth" attains "common sense" status, it is difficult for the community to recognize its origin and the fact that it is, as Campbell (1997) describes, "an error-prone system of belief" (p. 203). Appeals to these deeply held "truths" can serve as a means of blinding the community to the contradictions inherent in the logic of the myth. In the case of political rhetoric, failure to recognize these contradictions can lead to flawed policy decisions as the sins of the myth are visited upon the policy.

The following analysis examines three recurring mythic themes employed by Bush in his speeches in support of the HFI. The themes are grounded in influential myths of the Western culture and serve as the underlying, unquestioned "truths" or "common sense" from which the audience enthymematically fills in the unspoken premises of the political argument. Viewed through the cultural lenses of mythic themes,

Bush's arguments in favor of the initiative would appear to be "common sense." Yet, when held up to critical scrutiny, the contradictions and paradoxes inherent in the assumptions of the grounding myths and the resulting policy directives come to light.

Mythic Theme #1: Nature as the Savage Beyond

The western frontier wilderness, as described by Turner (1947), was "the meeting place between savagery and civilization" (p. 1), creating a dividing line between that which was beyond and that which was within. As the wilderness became less remote and geographically distant, the savagery beyond of wildfires became an indiscriminate enemy of civilization. Pyne (1995) notes that the damaging fires of American history typically erupted during periods of rapid transition. As the settlements progressed in an "omelet of scrambled jurisdictions…not only the mix [buildings and wildland fuels] but the process of mixing made the compound volatile" (p. 270). Modern day settlers who wish to escape the depravity of urbanization by living in the urban/wildlands interface must likewise face the increasing risks of the savagery beyond in the form of wildland fires—an enemy to be vanquished at all costs.

This view of fire is reinforced by the popular cultural icons of Smoky Bear and Bambi. For over 50 years, Smokey has been the authoritative voice of fire prevention warning the American public of the devastating effects of forest fires. At about the same time that Smokey was launched, the Disney Studios released *Bambi* sending a powerful anti-fire message to generations of children.

Throughout his speeches in support of the HFI, Bush repeatedly draws attention to nature's savagery and its threat to human well-being, as demonstrated by the following excerpts.

Fire destroys homes and buildings:

> Last month, the people of this beautiful part of America saw the devastating effects of the Aspen fire, which consumed over 85,000 acres. It destroyed hundreds of homes and buildings….We saw the effects of a fire run wild, not only on the hillsides, but also in the communities, burnt buildings, lives turned upside down because of the destruction of fire. (Bush, 2003b)

Fires take human lives: "In trying to protect the natural resources and people affected by these fires, we lost 23 fire fighters, men and women who served their country with distinction" (Bush, 2003b).

Bush even goes so far as to characterize fire as "holocaust:" "We just toured two fires that are burning in the area. It's hard to describe to our fellow citizens what it means to see a fire like we saw. It's the holocaust, it's devastating" (Bush, 2003b).

Consistent with the notion of nature a savage is the veneration of those who battle wildfires. Bush's rhetoric elevates firefighters to mythic hero status—ordinary people who, with extraordinary courage and fortitude, combat the savage beast.

Firefighters are "brave" "fantastic" people: "I spent some time with the hot shot crews—this summer in California, last summer in Arizona, time in Oregon, Washington state. These are brave, brave citizens. These are fantastic citizens in the country. We're proud to be standing with them up here" (Bush, 2003d).

Firefighters represent the small town neighbor in a true democracy uncorrupted by the influences of the power elite in industrialized civilization: "I appreciate the sacrifice you all make to protect your neighbors. One of the things you learn about growing up in small town Texas or small town Oregon is that you learn to be neighborly. And the idea of people sacrificing to serve their neighbors is something that makes this country great" (Bush, 2002).

Thus, the wilderness, in providing equal hardship and opportunity for all, propels the brave frontier neighbor to hero status while fire described in such terms as "holocaust," "devastating," "lives turned upside down" constructs a view of fire as a categorically destructive savagery that must be combated or, as Smokey exhorts, prevented.

The HFI is directed primarily toward fire prevention through the implementation of "mechanical thinning" or the use of such things as chainsaws, chippers, mulchers, and bulldozers to remove biomass and reduce the fuel load. Under the HFI, "stewardship contracting" gives federal land management agencies the authority to contract with private or public entities in a labor-for-goods exchange. The cost of the service provided by the contractor (which includes such things as the removal of woody biomass in the form of trees, woody plants, limbs and so forth; and forest road and trail maintenance) is appraised against the commercial value of timber or other wood products extracted.

The "fire as enemy" mythic theme is thus used to construct a view of forest fire as "devastating holocaust" wherein "brave," "sacrificing," firefighters are elevated to heroic status as the rugged frontier

neighbors who risk their lives to keep the savagery beyond from encroaching upon civilization and destroying frontier homes and properties. The "common sense" approach to forest stewardship is the use of commercial contracting to create a more garden-like and less threatening savagery beyond.

Mythic Theme #2: The Independent Steward

One of the most enduring and endearing mythic themes of Turner's frontier thesis and the agrarian myth is the idea of independence. European settlers of the New World were "rugged individualists" who conquered adversity on the strength of their own self-reliance, unassisted by government intervention and unencumbered by the Eastern power elite.

Peterson and Horton (1998) in their examination of ranchers' discourse surrounding disputes over private property rights versus habitat protection for endangered species, found the notion of the independent steward to be a recurring mytheme in their discursive construction of stewardship. Independence from federal land managers allowed the ranchers to make wise stewardship decisions based on the "common sense" of their life experiences. Bush likewise draws on the independence theme and criticizes the independence-constraining influence of current environmental policies and regulations.

Bush's rhetoric repeatedly emphasizes the notion that our current environmental regulations and the environmentalists who use these regulations to oppose timber projects are responsible for hindering efforts to move forward with thinning projects. Current laws such as the National Environmental Policy Act and the National Forest Management Act require that federal land management agencies carry out environmental assessments in the form of environmental impact statements to determine the effects of a proposed action before that action can be taken. These laws also call for public scoping by which stakeholder input is gathered and incorporated into the decision-making process. Once a decision has been made on a proposed action, administrative and legal appeal processes allow citizens to challenge a decision made by a federal land management agency.

Bush frequently makes the claim that this regulatory "red tape" "bogs down" and "ties up" the process keeping urgently needed thinning projects from commencing, and are thus detrimental to forest heath. The following are examples of this frequently stated claim:

> "Laws on the books make it very difficult for us to set priorities, to listen to those who manage our forests and fight the fires, and to get after the thinning that is necessary to prevent catastrophic fires from occurring in the first place" (Bush, 2003b);
> "And we have a problem with the regulatory body there in Washington. I mean, there's so many regulations and so much red tape, that it takes a little bit of effort to ball up the efforts to make the forests healthy. And plus, there's just too many lawsuits, just endless litigation" (Bush, 2002);
> "… current law makes it too difficult to expedite the thinning of forests because it allows for the litigation process to delay progress and projects for years and years. (Applause.) That's a problem. And those delays, the endless litigation delays, endanger the health of our forests and the safety of too many of our communities" (Bush, 2003c).

Those who support environmental regulations are likewise implicated in the indictment, portrayed as well-meaning but sadly misguided: "The forest policies of the past operated to discourage efforts to thin forests. And unfortunately, well meaning people proposed—put policy into place that made the health of the forests at risk, not better off" (Bush, 2003b).

Bush calls on Congress to pass legislation that would expedite the environmental review process allowing proposed thinning projects to go forward without the "delays and endless litigation" brought on by environmental regulations and those who impose them. His rhetoric is vague about what this means precisely in terms of policy retrenchment, but he carefully refrains from deliberate censure of democratic decision-making, another of our most cherished mythic themes. Bush repeatedly emphasizes the idea that the citizen input processes that are currently in place will remain. Citizens will be heard, but not allowed to tie it all up. "We'll speed up the process of developing environmental assessments", says Bush, "while considering the long-term threat that fire susceptible forests pose to endangered species. We'll make sure that people have their voice, but are unable to tie it all up" (Bush, 2002).

According to Bush, people will have the right to litigate as long as it doesn't stop policy from going forward:

> There's just too many lawsuits, just endless litigation. (Applause.) We want to make sure our citizens have the right to the courthouse. People ought to have a right to express themselves, no question about

> it. But there's a fine balance between people expressing their [sic] selves and their opinions and using litigation to keep the United States of America from enacting common sense forest policy. (Bush, 2002)

Voices objecting through administrative appeals will likewise be heard before getting on with the planned action:

> We're expediting the administrative appeals process so that disputes over projects are resolved quickly. In other words, not everybody agrees with thinning, there will be objections. But we want those objections heard, of course—every citizen needs to hear [sic] a voice—but we want the process to work quickly so we can get on about the business of saving our forests. (Bush, 2003b)

Although in none of the speeches reviewed does Bush specifically detail how the process will be expedited while still allowing for citizen input and legal and administrative appeals, he solicitously maintains the mythic sanctity of democratic processes. Yet, at the same time, he denounces them as practices that "tie it all up" and "keep the United States of America from enacting common sense policy" and makes no attempt to reconcile these contradictory ideas.

Under the proposed legislation, hazardous fuel reduction activities would become "categorical exclusions" and, as such, would not require an analysis of the environmental impacts of the proposed action through an environmental impact statement (EIS). As it currently stands, if no EIS is created, there is no mechanism for citizen input and there can be no appeal, thereby significantly restricting public oversight and participation in the decision making process.

Under the HFI, oversight is restricted and the stewardship of public forest is privatized as the "common sense" approach to forest health. Unimpeded by restrictions imposed by government regulations and the power elite, the rugged individualists survive and prosper in the wilderness garden using the common sense of their practical experience to manage the frontier land. This view of stewardship is further sanctioned by another mythic theme applied extensively in Bush's rhetoric which extols the value of nature as commodity.

Mythic Theme #3: Nature as Commodity

Another tenet of the Frontier Myth advanced by Frederick Turner (1947) is the idea of the superabundance of wilderness resources. The frontier provided an untapped source of material riches and a mechanism for improving one's lot in life by utilizing the superabundant wealth of the wilderness. This image of the West as a land of limitless bounty there for the taking of the hardy has had profound and lasting effects on the way succeeding generations viewed natural resources. As Shabecoff (1993) suggests, "The belief that the New World is a cornucopia that cannot be emptied continues to dominate our habits and our economic system despite clear evidence to the contrary" (p. 12). The corollary construction of nature as commodity is, as Cronon (1995) suggests, "…a construction so comfortable that it seems utterly commonsensical, universal, and natural to those who inhabit it—no matter how problematic its consequences may be" (p. 40).

Bush repeatedly appeals to the comfortable construction of nature as commodity, going even so far as to argue that good forest policy is good economic policy. Bush offers several rationales for conflating economic concerns and forest health. The first is that it costs a lot of money to fight fires, as Bush points out: "…in order to have a healthy economy, we've got to have a healthy forest policy. I mean, if you have good forest policy, it will yield to a better economy. (Applause.) After all, the fires that have devastated the West create a drag on the economy. It costs money to fight these fires" (Bush, 2002).

Bush also ties the loss of property as a result of forest fires to the economy: "It means people lose property. There's opportunity lost. No, good forest policy not only is important for the preservation and conservation of good forests for future generations, it's good for our economy" (Bush, 2002).

A third rationale for conflating economy and forest health is that the "stewardship contracting" that the plan calls for will help to stimulate local economies: "Stewardship contracting—what that means is that private organizations or businesses will be able to do the necessary thinning, and they'll be able to remove small trees and undergrowth, and they'll be able to keep part of what they remove as partial payment. That seems to make sense to me." (Bush, 2003c)

As mentioned earlier, the "stewardship contracting" that Bush refers to in the previous excerpt gives federal land management agencies the authority to contract with logging companies to mechanically thin

the lands in exchange for the value of timber or other woody products removed from the public lands. Thus, through "stewardship contracting" a commercial deal is struck whereby the savagery is tamed while simultaneously allowing local economies to benefit from the superabundant wealth of the wilderness—an untapped source of material riches for improving one's lot in life.

Mythic Themes Translated into Policy

The myth-driven rhetoric in support of the HFI promotes Bush's political agenda as the "common sense" approach to forest stewardship. As previously discussed, the "truths" contained in myth serve as models for applying cultural beliefs, values, and experiences to political thought and action. The often unchallenged contradictions inherent in the logic of the myth become more readily apparent as they resurface in actual policy directives. The following discussion examines some of the inconsistencies and implications of the myth-driven directives of the HFI and the Healthy Forests Restoration Act.

One of the mythic themes that Bush draws on is the notion of nature's savagery and its destructive force through wildfires. Few would challenge the claims that catastrophic wildfires are a destructive force and even the staunchest supporters of the "let burn" policy would agree that wildfires encroaching on towns and developed areas where human life and property are at stake should be repressed if possible. Its potential for inflicting harm to the urban/wildlands interface notwithstanding, raising fire to mythic proportions of a devastating "holocaust" narrows the range of legitimate public debate by precluding any discussion about the ecological benefits of wildfires that might inform the public about whether some fires should be allowed to burn on public lands.

For decades, public land management agencies have operated under a policy of immediate fire suppression—all fires out by 10:00 a.m. With improved technology, fire suppression techniques have become increasingly effective, changing the characteristics of forests and allowing unnatural conditions of fuel load to build up. The fundamental paradox of aggressive suppression policy, as opponents to this policy have long asserted, is that forest fires prevent catastrophic forest fires, the hottest and most damaging fires. As Carle (2002) states, "…fires are as essential to most of our wildlands as predators are essential to prey" (p. 259). Forests are biologically adapted to fires which not only reduce dangerous fuel loads, but also play a role in forest health and rejuvenation. Forest management policies that suppress wildfires cultivate catastrophic wildfires by curtailing the natural fire cycles of the ecological system.

Nevertheless, public land managers have adopted cautious and tentative prescribed burn and natural prescribed burn (commonly referred to as "let burn") policies. Their reluctance to use fire as a management tool is due, in part, to the criticism of this practice that gained prominent attention during the Yellowstone fires of 1988 where Park officials were vilified for their "callous indifference" to the fires (Smith, 1992). Park managers were criticized again in 2000 when a prescribed burn in Bandelier National Monument burned out of control destroying more that 200 homes and causing hundreds of millions of dollars of damage in Los Alamos, New Mexico (Melloan, 2000). This kind of worst-case scenario and the resulting media attention cultivates public skepticism of fire as a viable management tool. An extensive study of public perspectives on prescribed burns carried out by Shindler (1997) found that, in fact, a substantial segment of the public believe that all fires should be extinguished. Carle (2002) attributes this anti-fire sentiment to the fact that, "we have been inundated, all of our lives, with sensationalist news stories and inaccurate fire prevention propaganda that makes it hard for us to overcome a conditioned fear and hatred against wildfire" (p. 259).

Indeed, there are inevitable risks that must be carefully factored into any management decision with regards to prescribed or natural prescribed burns. Nevertheless, fire as a management tool is a critical component of catastrophic fire prevention as pointed out in the 2001 report of the interagency panel responsible for reviewing the National Fire Plan:

> The task before us—reintroducing fire—is both urgent and enormous. Conditions on millions of acres of wildland increase the probability of large, intense fires beyond any scale yet witnessed. These severe fires will in turn increase the risk to humans, to property, and to the land upon which our social and economic well-being is so intimately intertwined. (cited in Carle, 2002, pp. 247-248).

The second mythic theme employed extensively in Bush's rhetoric is the notion of the independent steward unencumbered by policies and regulations created and enforced by elitist outsiders. The West has a long tradition of anti-government, anti-regulation sentiments. Historian Stephanie Coontz (1992) points

out the paradox inherent in this mythic theme of the "rugged individualist" when she states, "It would be hard to find a Western family today or at any time in the past whose land rights, transportation options, economic existence, and even access to water were not dependent on federal funds" (p. 73). The irony of the anti-regulation, rugged individualist ideal is further illustrated through a recent investigation of government subsidies to the logging industry. Taxpayers for Common Sense, a non-partisan budget watchdog group, reports that from FY1998 through FY2001, taxpayers have provided more that $116 million in direct subsidies to the timber industry for the construction of logging roads (Taxpayers for Common Sense, 2002).

The view of forest stewardship promoted by the HFI does not categorically excoriate the regulatory processes currently in place (like the National Environmental Policy Act and the National Forest Management Act) and Bush adamantly upholds the stipulations in these laws that call for public input into public land management decisions. Citizens, according to Bush, "have a right to express themselves," and he insures his audience the "we want those objections heard." However, under the Healthy Forests Restoration Act, the "categorical exclusion" of thinning projects eliminates the appeals processes which, even if not implemented, serve as a means of ensuring that dissenting voices will be heard. Dissenting voices are relegated to voices in the wind in the absence of that power-leveling mechanism.

Environmentalists have, in fact, "tied up" and "bogged down" proposed timber sales. However, contrary to Bush's insinuations, these appeals generally involve issues other than thinning projects such as logging in old growth forests and endangered species habitat. A GAO report released in 2003 reported that only about 5 percent of the 762 proposed fuel reduction projects were delayed as a result of appeals (U. S. Government Accounting Office, 2003). Nevertheless, the discourse of the HFI has cast environmentalists as the elitist outsiders whose "endless litigation" has served to prevent "common sense" forest policy from being enacted.

The view of forest stewardship promoted by the HFI re-defines the role of public participation in forest management wherein the public is "categorically" excluded from the process while projects of private "stewardship contractors" are expedited, unconstrained by "red tape" and "needless delays." While it is possible and even probable that there are frivolous appeals and lawsuits "bogging down" the process, it nevertheless stands to reason that the courts and the administrative appeal process would serve to stop those projects that would, in fact, have significant negative environmental impacts. That was the intent of NEPA and its *raisoń d' être*. Although its implementation is sometimes cumbersome and costly, the potential for exploitation is greatly increased if public oversight is eliminated from the stewardship equation.

The third mythic theme prevalent in Bush's rhetoric is the notion of nature as commodity supporting the claim that good forest policy is good economic policy. At the core of the plan is the objective of creating private sector incentives to promote thinning projects. Paradoxically, promoters of the plan recognize that there is little commercial value in small diameter wood products. Assistant Secretary of the U.S. Department of Interior, Rebecca Watson, admitted in an interview in Montana that creating a market for these products is "not one of the pillars" of the HFI (cited in McKee, 2002, p. 1). Ironically, the plan allows for more fire resistant trees to be felled leaving in their wake smaller more fire-prone material as well as the highly combustible slash debris made up of the limbs, twigs, wood chips from the felled tree, thereby actually increasing the fire danger. (For an in-depth discussion of the relationship between logging and increased fire danger see Carle, 2002).

In light of this obvious inconsistency with the stated primary purpose of the plan, opponents are understandably concerned that the contract thinning called for in the HFI is a disingenuous means of promoting logging in national forests (see Environmental Media Services, 2002 & 2003; Hall & Hall, 2003; Hanson, 2002; Mall, 2002; Sierra Club, 2002). Indeed, it would be naïve to think that the industry special interests who lobbied heavily in favor of the Healthy Forests Restoration Act had their eyes only on the legitimate fire prevention need of thinning overgrown stands of unprofitable small trees and brush. As has been repeatedly demonstrated through federal land management policies of multiple use, a stewardship model which embraces both commercialization and forest protection will typically privilege the former over the latter (Scherff, 1999).

Conclusion

The cultural myths that support the view of stewardship constructed by the rhetoric in support of the HFI hold great seductive force in perceptions of what is true, right, or "common sense." The resilience of

myth lies in its grounding in the core beliefs, attitudes, values, and assumptions of the culture in which it is embedded. An essential condition for the continued existence of myth is that it must be accepted without critical reflection or questioning. Any attack on the myth or its core mythic themes is viewed as "an attack upon the moral worth and survivability of the culture itself" (Balthrop, 1984, p. 350). Those who dare to challenge are seen not merely as holding differing opinions about a particular policy or action, but as heretical dissidents assaulting the core cultural assumptions embedded in the grounding myth. This may account for the broad denunciation of environmentalists in their support of natural burn policies and opposition to logging in the national forests.

Perhaps at no other time in the history of the environmental movement have environmentalists and environmental regulations come under such strong attack from such a broad base of opposition. While environmentalists have long been the bane of the logging industry, the wildfire crisis has expanded the constituent base of opposition. While only a comparative few can directly identify with those who are involved in the logging industry, almost everyone can identify with the victims—human and otherwise--of forest fires. Unfortunately, this identification for most is more likely to be grounded in the mythical constructions of Bambi and Smokey than in an understanding of the vital role of forest fires in healthy ecosystems. Pyne (1995) emphasizes this when he states that "no iconography has emerged to argue the case for the legitimacy, utility, or necessity of anthropogenic fire;…no Smokey the Torch to advance the case of anthropogenic burning as benign stewardship of natural areas, no vision of fire as shield and filter" (p. 325).

Likewise excoriated through this mythical construction of forest stewardship are the environmental regulations and processes which give voice to legitimate opposition. While the democratic ideal of citizen participation is rhetorically upheld, the processes which allow for this are paradoxically de-legitimized as "red tape" and "endless litigation." Tenaciously held myth-based ideas of rugged individualists escaping the tyranny of Eastern power elites serves as a smokescreen, obscuring the role of well-funded and highly organized special interests in the politics of the plan and the tyranny of the Western power elites. As Worster (1991) points out:

> Though distinctive, the Western elites have followed the old familiar tendency of those in power, to become corrupt, exploitive, and cynical toward those they dominate. Power can also degrade itself, as it degrades others and the land, yet it commonly tries to conceal that fact by laying claim to the dominant myths and symbols of the time—in the case of the American West, by putting on cowboy boots and snapbutton shirts, waving the American flag, and calling a toxic dump [or a logging contract] the land of freedom. (Worster, 1991, pp. 21-22)

According to Balthrop (1984), "the greater the degree of tyranny granted to cultural forms, the greater limitations existing upon choices of appropriate expression and interpretation" (p. 350). Perhaps no myth holds as much tyrannical control over environmental policies and practices as the myth of nature as commodity whereby, as Bookchin (1974) states, "the most pernicious laws of the marketplace take precedence over the most compelling laws of biology" (p. 26). Privatizing forest thinning through economic incentives while, at the same time, restricting regulatory oversight is an infallible formula for exploitation.

Bennett (1980) suggests that one of the effects of myth on political thought and action is "the tendency of political institutions to produce and implement policies that embody stabilizing images of political order whether or not they have any impact on underlying social problems" (p. 176). The HFI is just such a myth-driven image of political order that supports and reinforces the prevailing view of humans relationship to the natural world—a relationship characterized by dominance and exploitation. Bush's rhetoric has drawn on prevailing mythic themes to support and validate a definition of stewardship that reinforces this human/nature relationship. When policy and actions are evaluated against the "common sense" of prevailing myth, the chances for any alternative discourse or political change not in keeping with these myth-countenanced options are severely limited. Critical scrutiny, in bringing to light the inconsistencies prefigured in the myth, opens the door for an expanded public debate of alternative perspectives that will inevitably lead to more ecologically sound policies.

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Economics, Environmental Advocacy, and Image Events

Michael S. Bruner, Ph.D.
Humboldt State University

This essay explores the extent to which DeLuca's work on image events and image politics can be applied to economics and complicated financial dealings related to the environment. The plan of this essay is to begin with an explanation of some relevant financial processes, such as a "leveraged buyout." The second section of the essay will address forms that image politics can take in the economic arena. Finally, the third section offers some suggestions for supplementing current work on image politics and the public screen with audience-centered factors.

> "With their image events, then, environmental justice groups are fighting an articulation of industrialism that understand progress (economic) as linked to the domination of nature, for the domination of nature involves not only the domination of external nature but the domination of other humans and the domination of one's own inner nature." (DeLuca, 1999, p. 58)
>
> Resistance must exist in multiple localities. (Deluca, 1999, paraphrase from p. 60)
>
> . . .to save a forest….is part of a chorus of opposition over the centuries to the costs of industrialism (Deluca, 1999, paraphrase from p. 163)
>
> Kevin Michael DeLuca, *Image Politics* (1999)

Introduction

Mr. Robert Manne, President, Pacific Lumber, recently told a national, radio audience: "The trend, if it continues, is we will be forced to lay off more people. We will be forced to close several facilities. And even in the worst instance, we will possibly be filing bankruptcy" ("All Things Considered," National Public Radio, February 28, 2005). Pacific Lumber made the threat of bankruptcy in the larger context of seeking approximately one dozen logging permits from the North Coast Regional Water Quality Control Board in Humboldt County, California. The company argues that it needs to cut more logs to survive. However, Catherine Kuhlman, the executive director of The Water Quality Control Board, approved only one-half of the permits, due to concerns about the Freshwater Creek and Elk River watersheds.

How ironic it is that the term *bankruptcy* should appear, again, in the same sentence as the name of the Pacific Lumber company. Twenty years ago, in 1985, MAXXAM, Inc., led by Charles Hurwitz, a prominent industrialist in Texas, engaged in a hostile takeover of Pacific Lumber with funds from a bankrupt savings and loan association, United Savings Association of Texas.

Using Pacific Lumber as a case study, I will explore some possible interrelationships among economics, environmental advocacy, and image events. In this essay there is insufficient space to address what have been called the *science* issues. For example, I will not discuss if the watershed problems are the result of "legacy logging" or current practice, and the extent to which increased water flow might improve water quality even at the rate of logging proposed by Pacific Lumber.

For many years, I have been interested in and have written about environmental advocacy and image events, such as the famous tree-sit in Humboldt County by Julia "Butterfly" Hill. I have come to the point,

however, where I see a pressing need to understand and explain some of the more obscure economic issues associated with environmental advocacy. One passionate commentator (www.jailhurwitz.com). argues: "One of the greatest techniques corporate criminals use is to make their crimes so complicated and so boring that the public and the prosecutors just don't want to deal with it" Therefore, in this essay I will touch on *bankruptcy*, *junk bonds*, and *leveraged buyouts*.

In addition, I explore another issue: To what extent can we connect DeLuca's work on image events to financial maneuvers in Texas and Humboldt County? Even more relevant to this essay than DeLuca's book, *Image Politics*, is his subsequent work with John Delicath on images as argumentative fragments and his work with Jennifer Peeples on "the public screen." My goal is to supplement current work with some audience-centered factors.

In some cases, resistance to industrialism is overwhelmingly visual. For example, the street demonstrations in Seattle against the World Trade Organization were image events of the first magnitude. However, I find it more difficult to find the visual in the charges brought by The Office of Thrift Supervision of the Department of the Treasury against MAXXAM, Inc., in the Texas savings and loan scandal of the 1980s. Which forms can image events and image politics take in the realm of financial dealings?

The plan of this essay is to begin with an explanation of some relevant financial processes, such as a "leveraged buyout" (see, for example, MSN's www.moneycentral.com). The second section of the essay will address forms that image politics can take in the economic arena. Finally, I will accept the invitation of DeLuca and Peeples: "The charge of the critic is to chart the topography of this new world." Just as they offer "the public screen" as a supplement to the "public sphere," I will offer a more audience-centered supplement to "the public screen."

Financial Processes

Pacific Lumber is a wholly-owned subsidiary of MAXXAM, Inc. MAXXAM was created in 1984 from Simplicity Pattern Corporation in a complex financial operation. Today, MAXXAM operates in three main industries: forest products, real estate development, and racing operations.

When Charles Hurwitz, the head of MAXXAM, decided to pursue Pacific Lumber in 1985, MAXXAM already was involved in financial deals with Drexel, Burnham, and Lambert. Drexel financed corporate takeovers and helped MAXXAM with the financing of the purchase of Pacific Lumber. According to one analysis (see, for example, www.multinationalmonitor.org), Drexel structured the financing to include a $300 million short-term loan from the Irving Trust Company and $450 million dollars of "junk bonds" from Drexel. At his point, let us pause to explain a "leveraged buyout" and "junk bonds."

A leveraged buyout (LBO) at root is a debt-financed transaction, aimed at taking control of a public corporation and making that corporation private. The debt typically is financed through a combination of loans and bonds. Because of the large amount of debt, the bonds often receive a low investment rating. These bonds are referred to as "junk bonds," and we will discuss them below.

The strategy was popular in the 1980s, when even large companies, such as *Nabisco*, were the targets. The success of a LBO depends on several factors. One of the crucial factors is the value of the assets of the company that is being bought out. Pacific Lumber was an attractive target, because it owned almost 200,000 acres of timber lands. Another attractive aspect of Pacific Lumber was that it had an over-funded pension plan, with a large amount of readily-available cash. For these and other reasons, MAXXAM made Pacific Lumber one of its LBO targets (another target was Kaiser Aluminum).

In many LBOs, the purchaser does not intend to run the target company. The LBO may be the first step in a plan to turn around and sell the target company. In the case of Pacific Lumber, however, MAXXAM held on. Not only did MAXXAM remain in the timber business, the new ownership decided to increase the logging operations.

One of the key problems in a LBO is the repayment of massive debt at high rates of interest. In fact, in twenty years MAXXAM has not retired a significant part of the debt incurred in purchasing Pacific Lumber. Quite to the contrary, MAXXAM has maintained a high level of debt and has continuously faced large interest payments. Robert Manne, CEO of Pacific Lumber, recently told *The North Coast Journal*: "I'm in financial default" (March 10, 2005, page 12). Apparently, Pacific Lumber sold timber bonds in 1998 to help refinance the debt left over from the LBO by Charles Hurwitz. In the summer of 2005, a $20 million dollar payment on those bonds is due.

The financial situation with respect to bonds, then, is quite complicated. Bonds were a factor in the 1986 LBO. New bonds appeared in 1998 as a way to address debt problems associated with the first round of bonds. Let us turn, then, to a brief explanation of "junk bonds."

Junk bonds is a term applied to bonds that have a low financial rating due to the poor credit quality of their issuers. A bond is similar to a stock. Both are a kind of loan. Buying a bond is similar to loaning money to the bond-seller. Bonds can come from a variety of sellers, including the U.S. Government. In return for your money, the seller pays you a fixed rate of interest over the period of the loan. However, bonds can be bought and sold at any time. One does not have to wait until the full term of the loan is reached. This flexibility makes it possible for bonds to go through several layers of transactions, such as refinancing.

Bonds are rated on their investment quality through the use of an alphabetical system, usually ranging from AAA (very high quality, low risk) to BBB (very low quality, high risk). Junk bonds typically are rated as BB or less. This low rating means that there is significant risk that the borrower will default. In light of this high risk, junk bonds typically pay high yields to investors. In our case study, MAXXAM attracted investment in its takeover of Pacific Lumber by offering investors a high interest rate. Subsequently, MAXXAM and Pacific Lumber have struggled to make these high interest payments on time. In the world of junk bonds, massive debt, and high interest payments the possibility of bankruptcy always exists.

To the average person, bankruptcy means that a person or a company "goes broke." One cannot pay one's debts. In today's financial world, however, it is more typical for "bankruptcy" to mean something like "reorganization." Under chapter 11 of the United States Bankruptcy Code, a company may restructure its finances and continue business operations. U.S. Airways, for example, continues to operate, even though it has declared "bankruptcy" under Chapter 11.

One rationale for Chapter 11 bankruptcy is that the value of the company to its employees and to society is greater than the value of the debt. Another rationale is that stockholders and creditors likely will get more money back if the company is allowed to operate than if the company closes and sells its assets. Sometimes a company is able to reorganize, develop a better operating plan, and re-emerge as a profitable business.

In our case study, Pacific Lumber has begun to speak of bankruptcy. The company argues that it needs to cut more logs to be viable. Skeptics say that the company either is bluffing, in order to win more logging permits, or that "bankruptcy" is simply another strategy of Charles Hurwitz to personalize profits while socializing costs (see the section entitled "Company bluff?, *The North Coast Journal*, March 10, 2005, page 12). These critics, such as attorney Bill Bertain, and Mark Lovelace, of the Humboldt Watershed Council, allege that Charles Hurwitz will let Pacific Lumber go bankrupt now or in the future, because the world of high finance is only indirectly connected to local residents and ancient redwood trees.

Environmental Advocacy and Image Events

With this analysis of financial processes as background, let us turn now to some of the strategies that might be available to environmental advocates. What forms can image events and image politics take in the realm of financial dealings? In this essay, I will focus on some strategies that have not received adequate attention. I will not revisit some of the better-known image events and image politics associated with the redwoods in northern California, such as Redwood Summer and Julia "Butterfly" Hill's tree-sit. The first strategy that I shall explore is a media version of the *ad hominem* attack.

Ad hominem attack

In rhetorical studies, the *ad hominem* argument is defined as a logical fallacy in which one attacks the person instead of the issues. However, over the years, some commentators have suggested that, under certain conditions, the *ad hominem* attack is not a fallacy. For example, if a TV evangelist offers himself up as a form of proof, as an authority, as a moral spokesperson for God, then it might be legitimate to attack the person, if the religious leader is engaging in immoral activities.

In our case study, environmental advocates are engaged in personal attacks on Charles Hurwitz as part of a larger campaign to stop the logging of old growth redwood trees. Hurwitz is vilified and demonized in many ways and through various media outlets. One of the most bold versions of these personal attacks on Hurwitz is www.jailhurwitz.com. This Web site actually offers a reward of $50,000 for "information

leading to the arrest, conviction, and jailing of corporate raider CHARLES HURWITZ." The Web site even encourages potential allies with the phrase "Happy hunting!"

Vilification, demonization, and media attacks on business and financial leaders are not uncommon in the current era. Michael Milliken and Iven Boesky became household names, because of their insider trading and dealings with junk bonds. In March, 2005, Martha Stewart, the object of many *ad hominem* attacks over her business activities and financial dealings, was released from prison.

I am in the camp that supports the use of a form of the *ad hominem* attack on persons engaged in questionable financial dealings, as long as the focus is on the person as a "corrupt" business leader. I define "corrupt" as engaging in illegal or unethical business activities, as well as financial activities that fail to take into account social costs. From this perspective, I don't wish to extend the *ad hominem* attacks into the areas of personal appearance and characteristics, family, or non-business affairs.

Victimology

For many reasons, I prefer to emphasize "survivors" rather than "victims." However, a focus on "victimology" is a second form of image events.

In the earlier struggle against logging on steep slopes in Humboldt County, the residents of the small town of Stafford were portrayed as "victims," when mudslides devastated their homes. More recently, an article in *The Los Angeles Times* led with the image of a victim, Christine Rising. She is described as someone "who lives on an $850-a-month government disability payment" and who has suffered because of a "heartless move by one of California's most powerful natural resource companies" (Reiterman, 2005). In the current struggle against excessive or non-sustainable logging in Humboldt County, residents in the Freshwater Creek and Elk River watersheds have been portrayed as victims. For example, *The North Coast Journal* describes Kristi Wrigley as a victim: "Her family farm on the North Fork of the Elk River has been ruined by Pacific Lumber logging upstream, she said. Her apple trees don't produce anymore and her water supply is trashed" (Sims, 2005, p. 10).

Victimology can be powerful, even overpowering, when magazine covers and photos show death and starvation. Environmental damage itself sometimes is fairly easy to portray, as in photos of clear-cutting. On the other hand, the human side of clear-cutting may be more difficult to portray. Some environmentalists escape this dilemma by taking a less-human centered approach to environmental advocacy. If the suffering of a bird, or a salmon, or a tree is acute, then we need to address the financial dealings that traumatize the ecosystem.

Direct Action

When Julia "Butterfly" Hill lived in the redwood tree *Luna* for two years, she was embodying a form of direct action. She was able to fuse her body with the body of the tree, in an effective form of visual rhetoric. She was able to speak for *Luna*, or let *Luna* speak through her. In this essay, I now ask: To what extent can direct action against economic and financial processes become an effective image event?

We could begin with an older example, the Red Army Faction, usually known as the Baader-Meinhof Gang. According to some commentators, The Baader-Meinhof Gang were the world's first celebrity terrorists. Coverage of the group was so ubiquitous that the story index of *Der Speigel* (Germany's equivalent of *Time* magazine) regularly listed a simple 'B-M'.

According to SATYA (March 4, 2005), "The Baader-Meinhof Gang didn't expect to achieve Revolution by themselves. They assumed their wave of terror would force the state to respond with brutal, reflexive anger; that the proletarian West Germans would react in horror as the true nature of their own government was revealed; and that factory workers, bakers, and miners would rise up and overthrow their oppressors. They assumed they would be the vanguard of a joyous Marxist Revolution.

For the purposes of the current essay, two points need to be made about the Red Army Faction. The first point is that direct action is viewed in three steps. The Baader-Meinhof Gang attacks industrialism. The police state responds. The public reacts against the state. The second point is that all three steps of direct action are overpoweringly visual, as well as subtle. For example, a case can be made that the police "WANTED POSTER" for members of the Red Army Faction had the unintended effect of elevating the status of women.

A more recent example of direct action provides useful insights into the linkage between economics and image events. William Cottrell, a Caltech graduate student convicted of taking part in a string of arson attacks on Sport Utility Vehicles (SUVs), was sentenced to eight years in federal prison Monday and ordered to pay $3.5 million restitution (*Los Angeles Times*, 2005, April 19, p. B3). Cottrell, whose name

became linked to the *Earth Liberation Front* (ELF), was accused of attacking Hummers and other SUVs with Molotov cocktails. He claimed that two other activists were responsible for the violence.

Attacking a Hummer with a firebomb certainly is visual rhetoric. A Hummer may be seen as a symbol of the excesses of capitalism. But the full depth of the image event is clear only when one realizes that the auto industry lobbied effectively to have SUVs classified as trucks, not cars. This classification made SUVs exempt from more stringent, fuel efficiency standards. The Hummer, then, is both a symbol of excess and a symbol of industrialism's ability to thwart legislation and regulation.

Muckraking

"Muckraking" refers to the ability of literary talents to "find dirt." Early examples of "muckraking" include the famous books, *The History of the Standard Oil Company* by Ida Tarbell (1904) and *The Jungle*, a 1906 novel by Upton Sinclair that prompted President Theodore Roosevelt to investigate meatpackers. In this essay, I have in mind not only books but video versions of muckraking.

When I think of current corporate activities and the options open to critics, I think of two powerful examples of image events and image politics. The first is a series of attacks on fast food, such as the book *Fast Food Nation* and the film *Super Size Me* (Documentary, U.S., 2004), produced, written, and directed by Morgan Spurlock. The second is Michael Moore and his series of documentary films. The films, especially, qualify as image politics in the financial and corporate realms and, as such, are relevant to the current essay by providing examples for what might be done in environmental advocacy.

Let us focus on an older film by Michael Moore, *Roger and Me*, because of its direct links to economics. As massive layoffs and plant closings devastate Flint, Michigan (Moore's hometown and the historic center of General Motors), Moore pursues Roger Smith, the CEO of General Motors. The film is a powerful form of visual politics, because of the clever juxtaposition of wealth and poverty, extravagance and suffering. However, the eviction scenes are chilling, because of the aloof, businesslike form of heartlessness that poorer people are forced to enact upon themselves.

From the perspective of this essay, especially noteworthy is the way that Roger Smith remains elusive. Financiers and the powerful seem almost immune to suffering. They certainly seem immune to accountability for the human cost of the their decision-making. Let us turn now to what stockholders might do to force accountability.

Shareholder Advocacy

According to Gordon Mitchell, writing in the *Hartford Courant,* the Sisters of St. Joseph challenged United Technologies (UTC) to provide information on the potential liabilities of being involved in space weapons programs. The strategy may encourage other stockholders to demand that the corporation publicly explore these issues in terms of a costs and benefits analysis.

An earlier era of stockholder advocacy brought us the concept of "ethical investing." For example, stockholders insisted that their pension funds could not be used to support apartheid. What we have now in the UTC example is a case where business principles (costs and benefits) are being applied to business decisions. It suggests that the principles of business might be linked in a supportive way to environmental image politics.

Showcase Trial and Courtroom "Media Circus"

Finally, we should mention in this essay the possibly constructive role of a televised "courtroom drama" for environmental advocacy. The "O.J. Simpson Trial" and the recent Michael Jackson trial are two, well-known examples of the courtroom media circus. What I envision in this essay is a media event consisting of a nationally-televised, popular trial, featuring well-known players and presenting some of the more accessible forms of financial misadventures related to the environment.

In Humboldt County, District Attorney Paul Gallegos has brought a suit against Pacific Lumber. However, the issue--falsification of data in obscure reports—is not likely to build TV ratings. [Note: A recent court decision in the case implies that fraud during "lobbying" is not illegal.} What is needed for impact in popular culture is a gripping trial, like the Scopes Monkey Trial, where complex issues can be portrayed in outline form. I am not arguing that the end justifies the means in calling for the oversimplification of complex financial processes. What I am arguing is that meaning is co-constructed. For too long, environmental advocates have permitted corporations to construct financial dealings as "complicated" and "boring." For too long, environmental advocates have deferred to attorneys and

accountants. What may be needed in our day is another Rachel Carson's *Silent Spring*, but thrown into a courtroom setting.

In summary, then, Table 1 presents six forms of image events that might be relevant to environmental advocacy in the realm of economics and financial dealings.

Table 1. A Typology of Environmentalism Image Events

Type of Image Event	**Example**
Ad Hominem Attack	jail Charles Hurwitz
Victimology	homeowner
Direct Action	firebombing Hummers
Muckraking	film Roger and Me
Shareholder Advocacy	UTC case
Showcase Trial / Courtroom "Media Circus"	Gallegos suit against Pacific Lumber

An Audience-Centered Approach to Visual Politics

McGee and others claim that, in the postmodern era, the source and the message have been replaced by the audience. Audiences are engaged in identity-formation and construct meanings out of fragments. Audience members are marked by difference. All of which has led to the fear that "audience" may be becoming too dominant as a concept.

My reading of the situation is that "audience" still is not given enough attention. For example, one could argue that, in portraying image events as argument fragments, the 1996 essay by Delicath and DeLuca locates image events in the category of "message." Even the powerful essay on "the public screen" by DeLuca and Peeples can be read as emphasizing "channel" over "audience." What I hope to do is to continue the work of this essay on "the public screen" by exploring what DeLuca and Peeples hint about in such audience-centered concepts as "distraction" and "new forms of perception," as well as the "tactile" nature of the audience's "immersion in a sea of images."

If we begin with Roland Barthes' (1977) work on images, we will recall that he submits "the image to a spectral analysis of the messages it may contain" (p. 33). This move hardly seems audience-centered, unless and until one considers that the process of signification can be located in audience and culture. Barthes divides signification into three parts: (1) the linguistic message, (2) the coded iconic message, and (3) the non-coded iconic message. Note that even the linguistic message has a connotational (audience-provided) level. According to Barthes, connotation imposes a second layer of meaning. The audience's connotations, however, are a complicated mixture of individual difference and social ideologies.

Turning to the noncoded iconic message , which Laurie Dickinson explains as "simply the literal 'what it is' of the photograph that we 'see' when we look at the image," it might be argued that individual *perception* would result in great variation.

Again, according to Dickinson's analysis, Barthes argues that attention must be paid to the composition of an image as a signifying complex and to the naturalizing role played in photography, where the exact replication of reality "naturalizes the symbolic message...innocent[ing] the semantic artifice of connotation" (p. 45). In short, even a "realistic" photograph is a "complex." According to David Beard, "The world of meaning is torn internally between the system as culture and the syntagm as nature" (p. 40). The audience is active in making the symbolic seem natural and in attaching layers of emotion.

Kress and Van Leeuwen argue against Barthes' theory of the image. They want to separate the visual from all linguistic connections. They read images as having three "metafunctions": the *ideational*, the *interpersonal*, and the *textual*. Without engaging this theory in great depth, I simply note here that the theory has important audience-centered components. For example, the *interpersonal* metafunction refers to the relationship among the producer, the receiver (audience!), and the image.

Kress and Van Leeuwen also claim that visual representation can be a *narrative* process: "The participants in the narrative structure are connected by an implicit or explicit vector that denotes the direction of the action" (Kress and van Leeuwen 1996; 56). From the perspective of performance studies, it is likely that audiences help to construct the narrative as part of their lived narrative, rather than mechanically retelling someone else's narrative.

Barry Brummett (1994) makes another contribution to an audience-centered approach to visual rhetoric (pp. 180-183). Brummett suggests that, from an audience point of view, images may be understood in terms of *voyeurism* (illicit watching is satisfying), *fetishism* (the object itself is satisfying, and/or *narcissism* (the identification with self is satisfying). An image of a tree sit, therefore, for some audience members could be a satisfying experience, because of a close personal identification with trees.

Hoffner and Levine (2005) add to our understanding of the audience's relationship to images. Writing in *Media Psychology*, they point to the connections among sensation-seeking, aggression, and the enjoyment of mediated fright and violence. Audience members high in sensation-seeking might enjoy fright and violence more. An image event featuring the destruction of property, then, might resonate more with these audience members. Although sensation-seeking research is not new in communication studies, scholars in the field of visual rhetoric may want to look at this body of work again.

Finally, I recommend that we take a close look at what DeLuca and Peeples refer to under the rubric of "distraction" and the "glance of habit." Their point is that actors today are experiencing new forms of perception and subjectivity. We hold many images, even as we focus on a particular image event. In fact, the word "focus" may be problematic. Perhaps in the 21st century world of media and social organization some actors do not "focus."

Space prohibits a full exploration of these issues here. However, it seems to me that one place to start is with the provocative claim that the "the glance of habit is *tactile*" (emphasis added). It seems to me that DeLuca and Peeples are correct. At the very least, the tactile metaphor liberates image politics from the tyranny of the visual!

Conclusion

According to DeLuca, we cannot turn to audiences to replace author and text: "Subjectivity is an effect of *difference*" (p. 144). We do not know how meanings will be created, because environmental activists and audiences are constructing themselves as they create meanings. In DeLuca's words, "The image events of 'War in the Woods' mean differently in a bar in Wyoming, a cafe in Seattle, a logging community in Idaho, a Sierra Club meeting in Washington, DC, a home in Iowa, and so on"(p.145).

In this essay I briefly discussed six forms of image events and image politics that might be appropriate for environmental advocacy against unethical financial dealings. In Table 2 below I now try to connect this typology to audience-centered factors and concepts.

It would seem that firebombing Hummers, to take one example, might be a break-through image in terms of motivating focus in the midst of distraction by the combination of powerful visual and tactile elements. The act might carry anti-capitalist connotations. The act might appeal to high sensation-seekers as well as to audiences who find voyeurism satisfying. This dramatic type of visual politics might fit with personal narratives of fighting injustice. At the same time, firebombing Hummers might be too violent an image for some audiences.

I am a bit uncomfortable in offering this quick and simple analysis. One reason for my reluctance is that I have not done justice to the notion that audiences are being interpellated or constructed by visual events. However, if I understand DeLuca and the postmodern turn in rhetorical studies, then these audience-centered ideas have as much validity as more traditional formulations of public argument.

DeLuca (1999) states his case in these words: "In short the discursive turn expands the possibilities and importance of politics *and* rhetoric. Within a discursive frame rhetoric becomes constitutive of any social or political collectivity" (p. 149). What I am suggesting is that rhetorical and social scientific analyses can combine to help us understand image politics and the public screen.

When it comes to the ancient redwoods of northern California, a consensus already has emerged that the ancient trees are sacred and, in and of themselves, are worthy of preservation. What we need immediately are effective rhetorical and political strategies to combat economic forces and financial dealings that choose to ignore that reality. We must find the right mix of image events to thwart the obscure financial processes of junk bonds, leveraged buyouts and bankruptcy.

Table 2 A Typology of Image Events From An Audience-Centered Perspective

Type of Image Event	Example	Connotation	Lived Narrative	Voyeurism Fetishism Narcissism	Sensation-Seeking	Tactile Glance of Habit
Ad Hominem Attack	Jail Charles Hurwitz					
Victimology	Homeowner					
Direct Action	Firebomb Hummers					
Muckraking	Film *Roger and Me*					
Shareholder Advocacy	UTC case					
Showcase Trial	Gallegos vs. Pacific Lumber					

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A Wilderness Fetish?: Performing Nature and Identity in Poland

Tracie L. Wilson
Indiana University

This paper examines the claim that the image of wild nature functions as a kind of fetish and explores how environmental groups in Poland use the concept of wilderness. Often manifestations of wilderness take the form of a fascination for certain wildlife species and the exoticization of other ethnic groups. Environmentalist constructions of wilderness provide a rich site for exploration of images (i.e. wolves, Native Americans) that are invoked and their connections to broader cultural themes. A second objective is to consider how broader contexts such as East-West hierarchies and concerns about Poland's place within Europe also inform environmental discourse.

It was about a month into my fieldwork when I asked Artur, a young sociology student who was volunteering with the environmental organization that I was working with about the importance of "wild nature" (*dzika przyroda*). Janusz, the fifty-something leader of the group spoke a lot about wild nature and I was curious to hear what Artur thought this term meant. Instead of giving me an actual definition, he explained to me that for Janusz, the term "wild nature" functioned as a kind of fetish. I thought this explanation was interesting, but at the time had not yet been working with the organization long enough to assess its accuracy.

The organization in question was Pracownia na Rzecz Wszystkich Istot (Workshop for All Beings), a deep ecology organization in south central Poland with considerable influence within the Polish environmental movement.[1] The research which I draw from comes from fieldwork that I conducted in 2000/01. Much of my study was focused in and around Bielsko-Biała, a city of about 175,000 located in the Beskid Mountains, a place which also functions as a tourist hub for people traveling through on their way to hike and ski. In addition, Bielsko-Biała has also become an environmental center within Poland, with at least four nationally active organizations based in and around the city.

Pracownia is among the most vocal and radical environmental organizations in Poland; its central efforts are dedicated to the preservation of wilderness areas and to protecting specific wildlife species, most notably the wolf. In the past Pracownia's work has taken the form of direct action intended to draw public attention to the destruction of natural areas, as well as the more mundane writing of letters and grant applications and providing lectures to schools and forest rangers.

My research also focused on a second organization from the Bielsko-Biała area called Stowarzyszenie dla Natury "Wilk" (Wolf-The Society for Nature and hereafter Wilk) and whose work I will also draw from in this paper. In contrast to Pracownia, Wilk professes a conservationist or scientific approach to nature protection. Their efforts center on improving conditions for wolves in Poland, though they also work to protect other endangered species. Much of their time is spent on scientific research projects conducted in the field. However, it is also worth noting that at one time Wilk's president and founder Sabina Nowak was a central member of Pracownia before leaving and starting her own organization. Additionally, I consider the Indian hobbyist movement in Poland which also overlaps to some degree with the environmental movement. Like many environmentalists, Indianists often express dissatisfaction with modern life.

This paper examines the claim that the image of wild nature, for some people at least, functions as a kind of fetish. In recent decades scholars have used the concept of fetish to examine sexuality (Deleuze, 1991) and race (Sweeney, 2004), I consider how this concept might also be used to explore how environmental groups use the concept of wilderness. Often manifestations of wilderness take the form of a fascination for certain wildlife species and the exoticization of other ethnic groups. In fact, it is this tendency to fetishize wilderness that William Cronon (1995) has critiqued within the American

environmentalist context. It is useful to examine whether this tendency also exists in contexts beyond the United States.

With this goal in mind, I examine specific environmental and/or nature performances intended to generate interest and appeal to specific groups. Performance approaches can shed light on the ways that environmental activists present their perspectives to an audience (Pezzullo, 2003). Performance studies stress the importance of situated contexts and the emergent quality of communicative acts (Bauman, 1977). The result is that performance scholars often focus on the "fabricated, invented, imagined, constructed nature of human realities" (Conquergood, 1989). Environmentalist constructions of wilderness provide a rich site for exploration of specific images that are invoked and their connections to broader cultural themes.

Therefore, a second goal of this paper is to consider how broader contexts such as East-West hierarchies and concerns about Poland's place within Europe also inform environmental discourse. This approach marks an attempt to link identity studies, including concepts of orientialism and colonialism, to constructions of environment and nature. I argue that examining the "wilderness" performances of environmentalists and other nature enthusiasts reveals important insight into Polish and European identities. Such revelations may point to reasons for the current marginal status of the movement in a country where environmental issues played a large part in undermining communist legitimacy sixteen years ago.

With these issues in mind, I examine two main types of wilderness performances. The first are performances that invoke the image of the wolf, they include demonstrations meant to call attention to the plight of wolves in Poland and to performances undertaken in the name of scientific research. The second type of performances involve the appropriation of Native American culture in the form of ritual, dress, and other forms of material culture, as well as identification with American Indian beliefs.

Wolf Performances

The figure of the wolf is an especially rich subject, due to its potency as a symbol for environmental movements, as well as its strength as a central figure in folklore. When I became interested in environmental and animal welfare issues in Poland, the image of the wolf loomed large in the Polish media. In 1997, environmentalists and animal advocates were calling for full legal protection of wolves and the issue received substantial press coverage.

The subject of wolves offers a useful point of entry into the relationship between identity and the discrepancies between East and West. In 1996 French actress and animal advocate Brigitte Bardot became involved in the campaign when she sent a personal appeal to (then president) Lech Wałęsa requesting that he put a stop to the culling of wolves in Poland. The efforts of such activists in Poland and abroad ultimately paid off when, in 1998, wolves were granted full legal protection. This decision has not ended the discussion about wolves, however, nor has it ensured their safety. The subject continues to generate intense debate among many people in Poland including environmentalists, animal rights activists, hunters, foresters, and livestock farmers. Wolves also remain a source of fascination for many in Western Europe where the species is virtually extinct. For German nature lovers, the fact that wolves still exist in the lands of their neighbor to the East is a source of interest, especially when some predict that wolves may return to Germany via Poland.

In line with deep ecology's commitment to respect other species, Pracownia was a central force in organizing campaigns to protect wolves which until 1998 were legally hunted in Poland. Wolf advocacy continues to be a very visible part of the organization's agenda. The organization "Wilk" also played a key role in wolf advocacy and education, as well as scientific research on wolves. Both organizations are part of a network of activists and scientists in Poland which advocate for wolf protection while also using the wolf as a symbol for the causes that they embrace.

Many environmentalists view the wolf as an important species. Their depictions of wolves demonstrate a departure from traditional negative representations of wolves. However, this more positive image of the wolf which stresses the link between identifying with the wolf and greater self-understanding is also a part of European tradition. Jack Zipes argues that the wolf has long possessed important symbolic value in European cultures, but that this image has undergone important changes. He acknowledges that the wolf was long viewed as a menacing creature, but asserts that it was also seen as sacred and powerful. Zipes argues that it was not until the Middle Ages that wolves (and witches) were represented as demonic and

inherently evil, alleging that the Church was responsible for this shift. In his description of the powerful symbolic role of the wolf in early European culture, he writes that it signifies

> integration of the cultural and wild elements of humans. . . . to learn to howl with the wolves (or to learn to dance with witches) meant opening up oneself to the essence of nature, and through this experience, one could achieve greater self awareness (Zipes, 1993, p. 68).

To a certain extent, the positive valance that modern environmentalists ascribe to the wolf shares the attributes of very old beliefs. However, such modern positive representations generally exclude the threatening characteristics of wolves, perhaps with good reason, since there have been no cases of wild wolves attacking humans in Europe in recent centuries.

Similar to Zipes' description of pre-medieval European culture, many environmental activists express a desire to reconnect with nature. Members of Pracownia and other groups guided by the philosophy of deep ecology assert a human need to understand that we are also a part of nature. This process involves a deep questioning of one's life and values, in an effort to develop greater self- knowledge and is facilitated through rituals that stress our relationship to the natural world, as well as attempts to revive aspects of European paganism.

Pracownia was one of the leading organizations supporting full legal protection for wolves in Poland. This campaign included two highly publicized demonstrations, in which activists carried banners that read "Wild is beautiful" and "The wolf is the best protector of Polish forests." In 1997 at a demonstration in the city of Krosno, after the government granted approval to local authorities to cull up to fifty wolves in the area, environmentalists lit fifty candles for each of the potential victims. This act invokes Polish religious rituals, in particular by referencing the important tradition of lighting candles in memory of loved ones who have died. As such, it represents an attempt to reinvest nature with sacred meaning.

Environmentalists' close identification with wolves is inherently linked to European tradition, though it manifests in alternative ways. The close affiliation with nature and the wolf as its representative has meant that the wolf often takes on totemic qualities in environmental circles. One way that this symbolic connection is articulated is through ritual, such as the howling sessions that I discuss below. Among environmentalists, rituals function both to draw attention to the movement's message and to reinvest vitality in those who are already committed to the cause. Applying performance perspectives to the study of such rituals reveals that the symbols that environmentalists draw from are located within European tradition in renegotiated forms. An environmental response to modernity has often been to seek refuge in images that have long held powerful symbolic value. These images have been remade for an audience that sees human salvation in a return to nature. The continued centrality of the wolf as a powerful symbol within environmental circles and beyond demonstrates the importance of considering the role of folklore and its manifestations in the arts, popular culture, and countercultural movements.

Wolf as Key Symbol

In recent decades the wolf has come to serve as a symbol of wildness, freedom, and animal purity for many environmentalists. The wolf has become a romantic creature of beauty, functioning as a key symbol (Ortner, 1973) and continuing to play a central role in our discussions about humanity's ties to wilderness and nature.

Environmentalists, in particular, find great positive symbolic value in the image of the wolf. In European cultures the wolf is not merely any wild animal, but *the* animal which best represents our primordial roots and lost ties to nature. In many environmental circles, criticism is focused on modern industrial society. The symbol of the wolf, running free, untainted by civilization and social constraints offers a vivid image of a spiritual or symbolic alternative, if not a practical one. Identifying with wolves provides environmentalists with a means of connecting to nature.

I encountered this attitude in my interviews with environmentalists. Aleksandra Kraśkiewicz is a key member of the staff of the Agricultural Academy research center outside Poznań. She described her interest in wolves in the following way,

> Why am I interested in wolves? I was always interested in predatory animals, and also in animals that are rare. And, you know how few wolves there are in our country. And what the situation is like for these animals . . . there aren't many of them left, they are protected, but more and more often people are

> starting to interfere with them. And besides that, I always associated them with freedom, with the primal, with nature, maybe more than any other animals. The wolf and, I think certainly the bison too.[ii] These are the two animals that I associate the most with independence (interview July 3, 2001, Stobnica, Poland).

In response to my question, Aleksandra mentions the rarity of wolves in Poland and her interest in predator species, but she also discuses the symbolic value that wolves have for her, namely the qualities of freedom, independence and closeness to nature. She indicates that she associates wolves with nature and the primal more than any other animal and that these are traits to be valued for their opposition to civilization. The trait of independence is connected to admiration for freedom from the constraints of society. Aleksandra also mentions that humans are increasingly threatening wolf populations suggesting that she sees a need to become involved in protecting the species. Therefore, the symbolic importance of the wolves converges with the practical need to protect them.

In their efforts to protect wolves, environmental activists and scientists have had to combat traditional images and beliefs about wolves. They have had to challenge folklore, which depicts wolves as bloodthirsty and as posing a threat to humans–images that are still promoted by some hunters and livestock farmers. In essence, wolf advocates in Poland are attempting to re-create the image of the wolf. In doing so, they draw from depictions of the wolf promoted by environmental organizations (and other groups) in the West for whom the wolf has come to serve as a symbol of freedom, natural beauty and mystery in recent decades. The wolf, along with the whale, dolphin, seal and panda, has become an important symbol of environmental and wildlife protection.

The Romance of Scientific Endeavor

Scientists involved in research on wolves often play an active role in wilderness performances. Their actions are undertaken within the frame of scientific endeavor; however, their work is also touched with an air of mystery. Wolf biologist Richard P. Thiel, suggests that the wolf's special status bestows a romantic air to his profession,

> Some people are infatuated with wolves. Wolves are wild. They are secretive and mysterious, and they are indifferent to the ways of humans. Wolves travel silently in small cooperative groups, ranging quickly and effortlessly over great distances in remote landscapes, usually at night. They must kill the food they eat. These qualities invoke awe and admiration, and some members of our society hold wolves in near-religious esteem. Thus some people attach a certain amount of prestige and romantic charm to the profession of wolf biologist (Thiel, 2001, p. 157).

Indeed, Sabina Nowak, biologist and president of Wilk (Wolf), is held in high esteem among wolf advocates in Poland and beyond. In the summer of 2001, I attended a research trip with Wilk. The five day camp was conducted as a means of gathering data on possible wolf activity in northwest Poland. In addition to methods such as field excursions where participants searched for tracks, the remains of wolf kills, and excrement, each evening "howling sessions" were held. This method involves stationing people within a two- kilometer radius of a trained individual who simulates a howl. The participants then listen for responses from wolves.

Sabina learned to howl from an American scientist on a research trip to the United States, practicing and refining this technique after returning to Poland. The practice is an accepted tool in biological studies of wolves; scientists in Europe and North America make use of howling sessions as a method of determining the presence of wolves in a given area.

However, there is also a romantic aspect to howling undertaken by scientists. Sabina Nowak's ability to imitate the wolf's howl and to provoke responses from real wolves grants her special power. Simulated howls are heard, not only by potential wolves, but by other humans partaking in the study. When such howls are performed for the benefit of humans (as when German journalists asked Sabina to perform a simulated howl for them), they become a performance meant to communicate to people by demonstrating, beauty, skill, and closeness to nature. The ability to howl like a wolf accords Sabina a privileged status among wolf enthusiasts.

Wolves and Indians

I first became aware of Polish interest in Native Americans in 1993 when I went to a rehearsal session to hear a friend's band play in the city of Lublin. While the group was practicing a young Polish guy struck up a conversation with me. Initially, I did not understand some of the words he was using. I soon realized that he was referring to the names of some Native American groups, but was pronouncing them in Polish. At the time, my Polish vocabulary did not include such words. He took my initial bewilderment as an indication that I did not know anything about Native Americans and was not interested in them, saying something to the affect that "you white Americans don't care about Indians and are only interested in exploiting them." He added that he didn't have much sympathy for white people, that he identified more with "brown-skinned peoples." This experience angered me; I felt I was being unfairly accused and was frustrated by my inability to respond effectively. His condemnation of white Americans seemed a bit smug and I thought about pointing out that Poles have their own troubled history in their dealings with other ethnic groups. But in the end I didn't say any of these things.

I did not think much about this incident again until I returned to Poland in the summer of 2000 to conduct fieldwork for my dissertation. I was undertaking preliminary ethnographic work with environmental and conservation organizations. I was spending a few days at a research station north of the western city of Poznań, which was home to approximately 15 captive wolves. In my conversations with Jacek, a doctoral student, I noticed that he mentioned Indians on a number of occasions. I also observed that he and the other students working at the research station had an affinity for jewelry and accessories, including belts and knives that were hand-fashioned and recalled a "native" aesthetic. From our conversations, I had the impression that Jacek assumed that if I was interested in wolves then I must also be interested in Indians. In fact, the staff expressed surprise that I had come to Poland to study wolves. After all, there are wolves (and Indians) in the United States. This assumed connection is a manifestation of the frequent pairing of Native Americans and wolves within European and North American popular culture. This pairing is significant and provides a rich topic of exploration in its own right. However, for now I limit my discussion to examining the ways that Polish images of American Indians offer insight into constructions of Polish identity and how these images are linked to cultural hierarchies, colonial projections, and perceptions of nature.

Polish Indians

Several scholars have demonstrated that white representations of Native Americans often fall into two general categories: the noble savage and the ignoble savage (Hall, 1996). As Robert Berkhofer points out these depictions serve as a key component in articulations of *white* identity, by providing a contrasting image (Berkhofer, 1988, p. 522). Repulsion toward the foreigner and fascination with her or his exotic qualities often coexist. European representations of Indians usually subscribe to this dichotomy, with the emphasis, at least on the surface, on the positive attributes of Native Americans and their culture.

In the present era, many Europeans feel a need to reconnect to nature, to unearth their primordial past.[iii] I argue that Indians provide an important symbol and often serve as a convenient vehicle to this end. A desire to be affiliated with Indians or, in fact, to become Indian provides such an opportunity. Arnd Schneider suggests that the power of appropriating the cultural productions of distant groups lies in their "authentic" status, but that such objects are also invested with new meanings and are one component of a larger project in the creation of identity (Schneider, 2002, p. 217). This connection is enacted through performance in the form of Indian hobbyism—a practice through which European enthusiasts appropriate aspects of Native American culture often in the form of dress and ritual, and in creating and maintaining Indian-inspired campsites for a series of several days.[iv]

In Poland fascination with Native American culture manifests through interest in belief, ritual, and adornment. There are considerable numbers of people—mostly young people—who come together for brief periods to perform and experience representations of Indian culture. They live in tipis, play music, dance and smoke pipes. They also organize events intended to build awareness about Indian culture. These events are held in parks and include Indian games, music, song, dance, instruments, dress, jewelry, and the telling of narratives.

According to Indianist Bogdan Płonka of the Silesian Circle of the Polish Friends of Indians, approximately 2-3,000 people are involved in the Polish Indianist movement, 500 of whom are more

actively involved. As is common among European hobbyists, Plains Indians are generally favored over other groups (Taylor, 1988). When asked about his interest in Lakota culture, Płonka mentions that some Poles say that there are similarities between Polish and Lakota culture, but he tends to dismiss this. For him it is the exotic and colorful nature of the culture which makes it appealing. Like many Indian hobbyists, he mentions the respect that he believes Native American culture bestows on nature. When asked what it is that makes Native American culture especially interesting, he describes his interest with the following response:

> What specifically is it about this culture? … it seems to me that it's something unconscious, … I don't know exactly, (there's) something wonderful (about it) which appeals to me. Well, I think I simply have this kind of personality…. I have this kind of soul which has within it part of an Indian soul, and I just happened to find myself in this (Polish) culture instead (interview, June 22, 2004, Katowice, Poland).

His comments indicate that he believes there is an inherent part of his nature that identifies with Indian culture. He finds Indian culture appealing and chooses to be "Indian." His statement also suggests that he feels somewhat alienated by modern Polish culture. Such blurring of Indian and white identities, also permeates popular culture. Scholars of Indian hobbyist movements argue that appropriating the role of Indian is an indication of European malaise regarding modernity. Phillip Deloria suggests that part of this unease is related to incongruities inherent in modern life (Deloria, 1998).

The blurring of European and Native identities is a theme found throughout many European cultures. In the French film *The Brotherhood of the Wolf* (2002) the main character, a Frenchman becomes "Indian" to avenge the death of his Iroquois companion. This transformation reveals a European desire to "become Indian"—at least for a short time. Katrin Sieg refers to such manifestations as "ethnic drag," arguing that this process often serves to identify with the victims of history rather than the oppressors (Sieg, 2002).

In his discussion of ritual, Victor Turner examines the role that marginal groups play within the social structures of groups that are politically dominant. He argues that, in many contexts, "the subdued, autochthonous people … are nevertheless ritually potent." Within this framework, those groups relegated to a liminal or inferior status are "often associated with ritual powers and with the total community seen as undifferentiated" (Turner, 1969, pp. 99-100). For many Europeans, Native Americans represent the epitome of tribal societies; such constructions invoke a naïve romanticism, which is often fueled by a desire to rediscover one's own primitive roots.

Within the context of European imperialism in Africa, Ngũgĩ Wa Thiong'o describes a similar phenomenon whereby Africans are seen as "a special species of human beings endowed with a great spirituality and a mystical apprehension of reality or else with the instinct and vitality of animals, qualities which 'we in Europe' have lost (Ngũgĩ, 1986, p. 92). This statement underscores the degree to which colonized peoples are imagined to be closer to a state of animality. This tendency may also suggest another reason for the frequent pairing of Native Americans with wolves that I mentioned earlier.

Such images may paint natives in a positive light, but nevertheless sentence them to the constraints of stereotypical roles. Dwight Conquergood argues that depictions of the Other which rely on sentimentality and romantic images of the Noble Savage are infused with sensationalism and are, therefore, ultimately dehumanizing. Such depictions exaggerate the distance between self and Other, resulting in a denial that both are members of the same moral community (Conquergood, 1985, p. 7). Other scholars such as Roger Bartra and Peter Hulme have documented the degree to which early European images of the natives of the New World were shaped by pre-existing European notions of primordial human existence (Hulme, 1986; Bartra, 1994).

In the case of Poland, actual contact with Native Americans has been very limited, suggesting that imagined connections are more important than direct historical ties. Another consideration is that while most Poles are very proud of their culture, they often feel that within Europe they have been marginalized and overlooked.[v] Many Poles would likely describe their culture as more refined than that of Native Americans. However, Poland's status as a country on the European periphery complicates presumptions about cultural hierarchies. In fact, according to Bożena Shallcross, Poles often identify with Indians, because they believe that, like Native Americans, they are the victims of history (conversation, August 28, 2000, Bloomington, IN).

In *Inventing Eastern Europe*, Larry Wolff documents the process through which, over time and culminating in the Enlightenment period, images of "barbarian Europe" shifted from Northern to Eastern

Europe (Wolff, 1994). Poland was also the site for the imperial expansion of its neighbors from the late 18th to the mid 20th centuries (though it is also important not to overlook the fact that, during earlier periods, Poland also extended its influence within territories to the east). Ultimately, placement of Poland within the Soviet sphere of influence after World War II reinforced the tendency for such countries to be perceived as peripheral and not part of "the real Europe." It may also be significant that European nature enthusiasts increasingly view Poland and other Central and East European countries as the last vestiges of European wilderness. Wildlife species that have been lost to most of Western Europe (such as wolves), persist in these countries, making them sites that are ripe for romantic projections.

Environmentalists and Indians

Environmental organizations within Poland also embrace elements of Native American material culture and belief, though these references are often vague. Such expressions are most evident in the use of tipis at meetings which last more than one day, and certain practices that are thought to come from Indian ritual and belief. The key members of Pracownia were less involved than some other environmental groups in using tipis and other aspects of appropriated Indian material culture (namely dress and jewelry). However, Native American culture plays a central role in the group's ritual practice and is seen as correlating well to deep ecology principles.

One example of the strong interest in Indian culture is the prominence of a text attributed to Chief Seattle. This speech, a well-known document in environmental circles, has been especially important for the organization. The speech condemns the devastation of nature by whites and stresses the sacredness of the land and the respect that Native Americans have for it. It also contrasts European notions of landownership with the Native view that land cannot belong to individuals, contrasting whites' utilitarian concepts about nature and Indian reverence for the landscape and non-human species. These are both ideas that coincide well with the tenants of deep ecology.

Due to the significant role that images of Native American culture play in the belief systems of many environmental groups including Pracownia, the recent debate challenging the blanket "environmental-ness" of Indians is significant to my research. In recent years there has been a stir in circles that have embraced Chief Seattle's speech as the embodiment of native wisdom. This controversy is the result of an inquiry that indicates that the text actually comes from a film script written in the early 1970s.[vi]

During my field stay with Pracownia an editorial by Stanisław Jaromi appeared in an issue of the organization's monthly newspaper, *Wild Nature* (*Dzikie Życie,* December 2000). It called attention to the article "'A Fifth Gospel, Almost': Chief Seattle's Speech(es): American Origins and European Reception" by Rudolf Kaiser. Jaromi informed Polish environmentalists of the inauthentic status of this document, suggesting that environmental activists needed to be more careful about blindly accepting romantic images of native cultures. Below this editorial, a short response appeared from the editor and president of Pracownia, Janusz Korbel, thanking the author for bringing to light the true authorship of the speech. But he also cautioned against the message of those who challenge the idea that primitive humans lived more harmoniously with nature. Korbel suggested that these were often the attempts of proponents of industrial development who wanted to delegitimize the claims of environmentalists.

This response is significant, as it reveals the importance of what Kay Milton refers to as "the myth of primitive ecological wisdom" prevalent among environmental circles. As she points out, this notion of primitive harmony with nature is important in the radical environmentalist critique of industrialization (Milton, 1996). Indian culture is exalted because it is seen as pure and closer to nature. Compromising this status, by challenging its validity, is an affront to the core beliefs of many environmentalists. Like the wolf, the Indian provides an important symbol for articulating humanity's ties to nature, and this shapes what is seen as acceptable discourse surrounding such key symbols. The wolf and Indian function as markers of wildness in contrast to the modern world and as such become especially potent forms of symbolic capital among environmentalists.

In addition to the importance of sacred texts, Pracownia and other environmental organizations incorporate aspects of Native American culture into their ritual practices. Very often within environmental groups, meetings and rituals are held in the form of a circle. Many Polish environmentalists also link this practice to Native American customs. Sitting or standing in a circle during meetings and rituals is considered to be an expression of equality among the participants. While there are individuals who lead the workshops, they are not granted a physical place that possesses more status than any other member. In

terms of physical space, no one is situated above another; no one is seated in the back. In theory, no one is less important; however, through performance leaders direct the event. And in practice, this means that participants are oriented toward such individuals. Therefore, the circular formation may be considered to be more egalitarian, but is not without hierarchical elements.

The circle formation also provides a symbolic expression for deep ecology principles—the concept that all life is interconnected and that destroying one species leads to the destruction of others. In English Pracownia's full name means "Workshop for All Beings" and within the circle—particularly when workshop activities or rituals involve the donning of masks depicting various species and natural formations—all beings are represented as being equal.

Sleeping in tipis and partaking in rituals that affirm the centrality of nature fulfill a desire to leave behind one's ordinary modern existence—usually an urban existence. Many individuals have a longing to revert to a period or state that they believe is more natural. Such meetings among environmental activists and Indian hobbyists function as an inversion of everyday life. There are far fewer people who live in the country who feel a need to find the Indian within themselves, perhaps because they are generally not as far removed from natural cycles. And because rural inhabitants live their lives near woods and fields, they may be less compelled to romanticize nature in an abstract way. Deep ecologists often assert that people have a profound need to connect with the natural world. Adopting an Indian identity or becoming a proponent of Indian culture may serve this function, at the same time; however, this urge underlies Peter van Wyck's criticism that a central component of deep ecology involves appropriating the voices of "forest beings" or indigenous groups (van Wyck, 1997, p. 81). Such allegations are part of a broader tendency among scholars to read the tendency to appropriate and exoticize non-Western cultures as extensions of colonialism, some of which I have mentioned above.

Return to Europe

Scholars of social movements have observed that a central component of activism involves the negotiation of symbols (Harper, 2001, p. 121). I have argued that identification with wolves and Native Americans serves as a means for environmentalists and other subgroups alienated in modern life to reclaim their ties to the natural world.

The debate over the status of wolves is also informed by broader issues that address Poland's relationship to Europe. In particular, such issues indicate the degree to which cultural hierarchies, constructions of ethnic identity, and images of nature are intertwined. These concepts provide a basis for discussion of the strategies that environmentalists use to challenge dominant ideologies. It would be an oversimplification to suggest that there is unification among dominant ideologies in Poland, with competition most evident between openly religious and secular groups. But there is a prevailing tendency to embrace rhetoric that stresses development, increased material living standards, and Poland's "return to Europe." In contrast, environmentalists stress the costs and potential losses of development. Some Poles see environmentalists as attempting to hold them back in their efforts to claim their place within a new Europe. And perhaps one of the most destructive legacies of the communist years was to instill a strong suspicion of people and groups who claimed to advocate on behalf of a greater good. In many ways people are cynical of others who look beyond their own self interest. There is a tendency to believe that they must be profiting from the situation somehow.

So Is It a Fetish?

Some might argue that because the term "fetish" carries the connotation of something "perverse" and "unnatural," that it should not be extended to wilderness. What could be more natural than wilderness and the desire to commune with it? And this may be the case. However, a more useful question might be, "Does invoking wilderness work?"[vii]

Certainly images of wilderness arouse strong feelings among some groups and individuals. But it does not work for everyone, and in the case of Poland, it may be less effective than in some other places. For example, radical environmentalists were not able to garner sufficient support in the early 1990s to be effective in their efforts to stop the construction of the Czorsztyn Dam in southern Poland. In this case, the slogan, "In defense of Mother Earth!" did not appeal to many locals or government officials (Payerhin, 2005).[viii] In many cases environmentalists have been able to effectively make use of direct action

campaigns to gain media attention and sharply influence environmental debate (DeLuca, 1999). In this case, however, media attention served to label the demonstrators, some of whom were involved in the anarchist movement and embraced non-traditional aesthetics, as freaks. As such they were also unable to forge strong partnerships with local people who were against the dam. Such impressions made it easier for authorities of the new post-communist government to dismiss them.

In the years since the Czorsztyn Dam was built radical environmentalists in Poland have made more attempts to include images and themes that resonate with the mainstream public, most notably by enlisting Christian iconography in defense of Mother Earth. Examples include highlighting pro-environmental statements made by Pope John Paul II and carrying a cross to the top of Pilsko Mountain and lighting candles to mourn its loss to the ski industry. This performance serves as an enactment of deep ecology doctrine which stresses the connection between humans and the natural world.[ix] This action also demonstrates the integration of central Polish cultural themes in order to draw attention to the environmentalist cause and communicate the gravity of environmental destruction. Environmentalists continue to be a marginal group within Poland, but there is a stronger awareness in recent years that forging partnerships with other groups may be the only way to exert influence in European Union-era Poland.

Notes

[i] Pracownia's name (pronounced "pratsōvnia" and translates as "the Workshop for All Beings") reveals its connection to the Council for All Beings workshops, first conceived in 1985 by John Seed and Joanna Macy. According to Seed, "The Council of All Beings is a series of re-Earthing rituals to help end the sense of alienation from the living Earth" (www.rainforestinfo.org.au/deep-eco/council.htm -12/13/03) These workshops are known in environmental circles throughout the world and have had a strong influence on key members of Pracownia.

[ii] Poland is one of the few countries that have maintained a population of European bison, a species which nearly went extinct early in the 19th century. The bison has become an important cultural symbol within Poland.

[iii] Folklorist Roger Abrahams argues that mainstream white American culture draws from minority cultures as a source of renewal (Abrahams, 1973). Connecting with groups that are identified as "other" often provides inspiration and creativity to members of the dominant group. Since Indians are viewed by Europeans as "exotic" this renders them a rich source for creative and "authentic" expression.

[iv] In terms of numbers of practitioners, Germany is the premiere country of "Indian hobbyism." Peter Bolz links this German interest to "deeply rooted longings for political freedom and 'wide open spaces'." He suggests that two main sources of representations greatly fueled German interest in Indians: the writings of popular novelist Karl May and similar authors and the presence of turn-of-the-century road shows that featured Indians in their entourage (Bolz 1987).

[v] Poles often cite Copernicus, Frederyk Chopin, Joseph Conrad, and Maria Sładowska Curie (better known as Marie Curie) as examples of Polish contributors to European culture.

[vi] Shepherd Krech's *The Ecological Indian* (1999) also challenges the common perception that Native Americans are inherently more "environmental" than whites. This book consists of a historical examination of the impact of Indians as hunters and farmers on the North American continent. Such studies have prompted debate about the appropriateness of looking to romantic images of Indians, their beliefs and practices as models for environmental behavior.

[vii] It is interesting to note that when I asked Janusz Korbel during a later interview about the meaning of "wild nature," he reiterated its importance for human beings. He also used this discussion as an opportunity to criticize another local environmental organization, the leader of which he claimed had stated that wild nature was not that important and that people in Western Europe live happily without such wilderness areas.

[viii] For an insightful discussion of differences in worldview between local communities and scientific experts, see Rikoon and Albee's "'Wild and free, leave 'em be': wild horses and the struggle over nature in the Missouri Ozarks." *Journal of Folklore Research 51(17)*, 199-218.

[ix] Killingsworth and Palmer (2001) document a similar tendency in Rachel Carson's *Silent Spring* to describe nature in highly personified terms intended to invoke human sympathy.

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Reflections from the Road: New and Improved Concepts, Tools, and Lessons for Community-based Collaboration

Gregg B. Walker
Oregon State University
Susan A. Senecah
State University of New York
Steven E. Daniels
Utah State University

Processes than emphasize multi-stakeholder collaboration have become more familiar in the past 20 years. In our integrated roles as practitioners and academics ("pracademics" according to Senecah), we have been actively involved in fostering and researching community-based collaborations. In this essay we reflect on the lessons we have learned and the concepts and tools we created or enhanced during a number of recent projects we conducted jointly and separately. Among the concepts and tools presented are new principles for collaboration such as innovative "ground rules" techniques, the use of "citizen work teams, building vicarious public involvement, and scenario building workshops. Each project is far more complex than space allows to be depicted, and the lessons, concepts and tools far less discussed than they deserve. Nevertheless, we offer them to 1) further build the knowledge and experience base for community-based collaboration assessment, process design, and facilitation and 2) support an ongoing dialogue of learning and improvement among practitioners, academics, and pracademics.

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1. Introduction

In our integrated roles as practitioners and academics ("pracademics" according to Senecah), we have been actively involved in fostering and researching community-based collaborations. In this essay we reflect on the lessons we have learned and the concepts and tools we created out of necessity during a number of recent projects we conducted jointly and separately. Our projects include forest-wide planning in western Pennsylvania, town comprehensive plan revision in upstate New York, management of Columbia River sediment in the Pacific Northwest, toxic cleanup in western New York, and winter recreation in south central Alaska. Among the concepts and tools presented are new principles for collaboration such as innovative "ground rules" techniques, building vicarious public involvement, the use of citizen work teams, and scenario building workshops. We recognize that each project is far more complex than we have space to depict, and the lessons, concepts and tools have more to be developed. Nevertheless, we offer them to 1) further build the knowledge and experience base for community-based collaboration assessment, process design, and facilitation; and 2) support an ongoing dialogue of learning among practitioners, academic, and pracademics.

Processes that emphasize multi-stakeholder collaboration have become more familiar in the past 20 years. Since the mid-1980s, federal and state natural resource management and environmental policy agencies have increasingly turned to place-based stakeholders to help with planning and project decisions (Leach, 2004). In doing so, agencies and local organizations have participated in what Wondolleck and Yaffee (2000) call "a new style of environmental problem solving and management." They explain that "government agencies, communities, and private groups are building bridges between one another that enable them to deal with common problems, work through conflicts and develop forward-thinking strategies for regional protection and development" (p. 3). Space constrains us from reviewing the current

body of literature on this topic. Instead, our intention is to share experiences and tools in a more applied than theoretical way.

This "community-based collaboration" often relies on the development of a multi-stage organizational framework to foster sustainable interaction and planning. Such development often relies on "process consultants" who can design and facilitate community-based collaboration activities. Central activities may include assessment (Senecah, 2001; Daniels & Walker, 2001) and facilitation. Facilitation of community-based collaboration "refers to an impartial third party providing procedural guidance to group participants to promote competent interactional behavior, information exchange, learning, and collaborative negotiation. Facilitation can be provided by members of the convening party, local citizens (e.g., community mediation staff), and/or professional consultants who may reside outside the local community" (Walker, Daniels, & Cheng, in press).

Community-based collaborations can take many forms. Some collaborative activities are enduring, such as watershed councils, "Friends of..." organizations, and citizen groups or partnerships. Enduring efforts are typically citizen or community driven, with government agencies participating in some way, perhaps as a resource or a participant. Others are ephemeral, tied to a specific project or planning effort. Such collaborations may be agency-driven, responding to a government initiative to include multi-party collaboration as part of a planning process. The new USDA-Forest Service planning regulations, for example, refer to collaboration with citizens/stakeholders repeatedly (28 times). Even situation-specific, agency-driven collaborative efforts can lead to the creation of ongoing community-based collaborative organizations and activities.

Regardless of the reasons for a community-based collaboration or its unique characteristics, the potential exists for positive benefits, depending more on stakeholder capacity and good will, including the agency's, than on convener initiative. Although each situation's uniqueness is incorporated into a collaborative process structure, the conceptual requirements that must be operationalized in all processes are similar, with the common theme being the need for creating, rebuilding, and/or maintaining trust. The trinity of voice (Senecah, 2004) characterizes the benchmark concepts of access, standing, and influence that impact trust in any multi-stakeholder process. Thus, the trinity can be used not only as a template to structure effective process but also a tool to diagnose troubled processes for improvement or conflict situations for mediation. When one of these elements is missing or in distress, stakeholders are likely to force them in ways that reinforce negative impressions by others or simply check-out of civic engagement. Here is a very brief and incomplete overview of the trinity. Later in this paper, we present another typology of the trinity. Its mnemonic is FAITH and together with the trinity, it proved to be an accessible way for these elemental benchmarks to connect for a federal agency convener.

The first element of the trinity is access. Access refers to opportunity and safety. Often, multi-stakeholder collaborative processes are marked by degrees of anxiety over the complex issues, the contentious viewpoints, and/or uncertainty or unfamiliarity with processes other than public hearings. In some cases, the situation has reached a self-described crisis point of escalation or has experienced such in the past. Lawsuits may have been filed. Overt displays of protest may have occurred. Threats may have been issued. A great deal of pervasive animosity, even hostility may prevail, marked by distrust, frustrations, skepticism, and entrenched perspectives about their own and other stakeholders' positions and motivations. No one feels that her/his organization's perspective has been heard. How will a process structure provide for access? For example, in a particular community, around these issues, with these interested parties, incorporating these community resources, within this agency's authority, and within this timeframe, how will this process provide for direct and vicarious participation that is safe and encouraging for participants to express themselves, learn, and consider the perspectives of others?

The second element of the trinity is standing. A process might have thoughtful, creative, and comprehensive access but still be unsatisfying and fan the flames of distrust. Standing is how a process demonstrates that civic legitimacy is accorded to diverse stakeholders' perspectives and ideas. Process survivors tell of investing time, energy, and good will into processes, only to feel that their investment disappeared into a black hole. In what ways is the knowledge respected and the ideas' feasibility considered?

Influence is the third element of the trinity of voice. Influence is not necessarily the degree to which a particular perspective or idea prevails. Influence is the outgrowth of access and standing. What happens to the participants' contributions, ideas, and comments? How are they tracked through the process? If an agency is the final decision maker, in what ways did participant contributions color the outcome? This

element is ultimately the most important, for angry, experienced citizens can easily recount processes in which access and standing seemed to be provided but ultimately meant nothing. They can tell of unsatisfying meetings, task forces, study groups, and other processes in which they invested time, energy, and good will with disappointing results. This is what Walker and Daniels (2005) call the "3I approach of Invite-Inform-Ignore."

It's not the case that decision makers know how to structure an effective collaborative process but choose not to because they prefer conflict and distrust. Our experiences show that although they might desire such a process, they and the other stakeholders lack the skills and the confidence to do so. If we believe we can structure and facilitate a process that will be productive and build their capacity, we accept the invitation.

With this background, we provide brief overviews of several cases and offer general reflections on the lessons learned and concepts and tools that emerged.

2. The Allegheny National Forest Land Management Plan (LMP) Revision Project *(Walker, Senecah, Daniels)*

As required by the National Forest Management Act of 1976, National Forests are required to implement forest-wide land management plans that are subject to revision every 10-15 years. In 2002 the Allegheny National Forest (ANF) staff initiated a comprehensive land management plan revision for the ANF. Walker, Senecah, and Daniels were retained as part of a consulting team to design and implement a collaborative learning approach for public involvement.

2.1 Background

The Allegheny National Forest was established in 1923, after the Pennsylvania Legislature approved and President Calvin Coolidge signed a proclamation for Federal purchase of available private lands for National Forest purposes.

Located in the northwestern Pennsylvania counties of Elk, McKean, Forest and Warren, the Allegheny National Forest consists of over 513,000 acres. It is the only National Forest in Pennsylvania and is within two to four hours driving time to Erie and Pittsburgh, Pennsylvania, Buffalo, New York, and the Youngstown-Akron-Cleveland areas of Ohio. Most of the Forest's users come from these areas.

Allegheny hardwood stands represent the most valuable and widespread timber on the Forest. This type includes black cherry, yellow poplar, white ash, red maple and sugar maple. The exceptional quality of the black cherry found here makes it highly valued throughout the world for fine furniture and veneers. Millions of board feet of timber are harvested from the Allegheny National Forest annually. Approximately one-half of this volume is used for pulpwood.

One of the many features of the Allegheny National Forest is the Allegheny Reservoir. The Kinzua Dam impounds the 12,000 acre, 27 mile long Allegheny Reservoir. The ANF supports numerous recreation activities, including swimming, fishing, boating, water skiing, hiking and camping, dirt biking, ATV use, cross country skiing, mountain biking, and snowmobiling.

In 1986 the Allegheny National Forest adopted is first forest-wide management plan. Its public involvement approach at that time was quite conventional, with "inform and educate" activities such as public hearings and comment letter periods. In 2002 members of the ANF plan revision team asked us to design and implement a collaborative public involvement strategy, based on Collaborative Learning (Daniels & Walker, 2001).

As part of our Collaborative Learning work with the ANF, we have made numerous trips to Northwest Pennsylvania. We have conducted numerous assessment interviews, presented a two-day Collaborative Learning training, and have designed and facilitated a variety of community workshops. Throughout this two and one-half year effort, we have developed new concepts, tried new techniques, and have learned some interesting lessons.

2.2 New Concepts and Tools/Techniques

The ANF case includes a new conceptual focus and an innovative way for citizens to work together.

2.2.1 An Enhanced Concept: Collaboration and the Principles of FAITH.

One conceptual discovery featured core principles or values of a collaborative effort. During our initial trip to the Allegheny, some ANF personnel were skeptical about engaging stakeholders collaboratively on forest plan revision. They asked us what the essence of a collaborative effort was and what set such an effort apart from a more conventional approach. We explained that because most environmental issues were policy, technology and science based, the process to address them typically defaults to the content of the decision questions, and this often leads to community frustration and worse. The process needed to be structured to build relationships (trust) in which the complex and contentious decision questions could be fruitfully addressed. We were aware that many books and articles on collaboration provide discussion of core values or principles. Wondolleck and Yaffee (2000), for example, encourage collaborative groups to discover unifying visions and goals, recognize interdependence, lead by example, focus on the problem, own the problem and the process, demonstrate commitment to collaboration, and be fair (pp.142-154). In contrast to these more conceptual objectives, Senecah (2004) presented the more applied trinity of voice with its benchmark elements of access, standing, and influence which a collaborative process needed to explicitly operationalize and be monitored against. This made sense to the ANF, and to this, Walker and Daniels added an enhanced typology of the trinity that resonated with the skeptics and helped them remember. The following were the key principles:

Honesty. We noted that a meaningful collaborative effort requires all parties to "be straight" or "level" with one another about the issues and actions being addressed. We emphasized to the ANF personnel that they needed to answer citizen questions as best they could and not, as Senecah noted, "over-promise and under-deliver."

Transparency. Consistent with honesty, we told the ANF staff that transparency is often emphasized but not realized. On the ANF, a commitment to transparency would mean that both substance and procedure elements of the forest plan revision process would be clearly visible to all interested parties. Writing about collaboration in community-based ecosystem management (CBEM) and community forestry, Moote et al. (2001) explain that "an effective CBEM process is clearly presented and understandable to all parties. It is clear who the participants are, what the schedule for decision making is, who has ultimate authority for making those decisions, and how input to the process will be used" (p. 103). "Transparency," Moote and colleagues assert, implies equal and open access to both information and planning processes" (p. 103). This clarity is essential to building trust, an important yet elusive feature of community-based collaboration.

Access. The third principle we emphasized was access. As Gray notes, "the power dynamics associated with collaboration generally involve a shift from the unequal distribution of power associated with elitist decision making to more participative, equally shared access to the decision-making arena." Gray adds that " collaboration opens up control over access and agendas to wider participation" (1989, p. 120). As ANF staff struggled with decisions regarding the implementation of a Collaborative Learning approach, we encouraged the Forest leadership to reach citizens, groups, and communities who might not participate directly in a more conventional public involvement process.

Inclusion. As we recommended access we stressed the related principle of inclusion. We presented these principles two principles to the ANF team as cousin concepts. We noted that a productive collaborative process seeks to include a wide variety of voices and provide those voices with access to the process. Doing so serves the interests of concerned and affected parties. As Brunner observes, "the procedural test [of the common interest] recognizes that inclusive and responsible participation in the decision process serves the common interest" (2002, pp. 12-13). Similarly, McKinney and Harmon surmise that "interest-based strategies are more effective when they are inclusive, informed, and deliberative" (2004), p. 209). When designing a collaborative process, Hargrove encourages leaders to "think in the opposition direction" and include parties who might be excluded in conventional decision-making processes (1998, p. 138).

Fairness. While Gray relates fairness to representation (1989, p. 170) and fairness frames (2003, p. 16), we remarked to the ANF personnel that all participants need to perceive the participation and decision-making processes to be fair. Wondolleck and Yaffee assert that "in successful collaborative efforts, considerable effort is made to craft decision-making processes that are perceived as fair and outcomes that are judged as equitable" (2000, p. 153). Fairness is a defining feature of procedural justice (Lawrence et al., 1997). Community-based collaborative efforts can include procedures to assure fairness. Doing so

"guards against people feeling that they have been "taken" and allows them to share information and make commitments" (Wondolleck & Yaffee, 2000, p. 153).

Without intending to do so, these five principles created the mnemonic of FAITH (as our colleague Daniels noted, this was more appealing than "HIFAT"). ANF personnel responded very positively and appreciated the mnemonic both for its positive symbolic value and for its worth as a reminder of core principles of Collaborative Learning and collaborative public involvement. Although the trinity of voice is theoretically rich and useful, we have subsequently introduced the more applied principles of FAITH to a number of other groups of natural resource professionals, each time with a similar positive response.

2.2.2 A New Tool: Citizen Work Teams

In our initial Collaborative Learning project work we designed and facilitated community workshops consistent with the first level CL workshops discussed in Daniels and Walker (2001). As we continued to work with the ANF, we designed and implemented innovations in the CL community workshop approach.

One major innovation was the "citizen work team." As the ANF forest plan revision process evolved, citizen interaction evolved as well, from dialogue to more deliberative communication (Daniels & Walker, 2001). As part of the NEPA planning process, the ANF plan revision team initiated work on alternatives. We designed and directed two rounds of CL citizen workshops that addressed alternatives development issues. In both cases we asked citizens to organize themselves into citizen work teams of five to seven people. We strongly encouraged diversity among the teams-diversity of interests, diversity of views, diversity of experience, diversity of occupation, etc.

We asked citizens to think of their work teams as adjunct teams to the ANF plan revision team. After citizens organized themselves into teams, we gave them a worksheet to fill out (at the second round of alternatives development workshops we referred to the worksheets as personal notes). Examples appear in Figures 1 and 2. Space between questions has been condensed.

Figure 1. Citizen Work Team Worksheets

Space between questions has been condensed.

Work Session I
During this workshop you will be a member of an Alternatives Development Team (WDT). Your team will function like a small "think tank," identifying principles that may guide the alternatives development process, and building the basic framework and elements of some possible alternatives.

Team members should introduce themselves to in another. You will be working with this group throughout the day.

Please answer the following questions. Share your answers with the team. Your team will share its ideas on questions 3 and 4 with all workshop participants.

1. What is your connection to the Allegheny National Forest?
2. What are your concerns about the Allegheny National Forest and its future?
3. In light of your and other team members' concerns, what principles should guide the development of management alternatives?
4. In light of your team's concerns and principles, what attributes should be common to all management alternatives?

Work Session II
In the first work session, your team generated principles and attributes that can guide alternatives development work. In this and in Work Session III, your team should begin to develop different alternatives views of managing the ANF. As a team, work through the following questions/tasks:

1. What issue(s) or management area(s) will anchor this alternative? What will be the primary focus or priority in this alternative? Refer to the Notice of Intent (NOI) and Analysis of the Management Situation (AMS) materials when addressing these questions.
2. How will emphasizing this issue/management area affect other management issues?
    a. What will not be affected? How do we know this?
    b. What other issues/management areas will be enhanced? How do we know this?
    c. What other issues/management areas will be diminished? How do we know this?
3. How will the Allegheny National Forest landscape be affected?
    a. What land allocations will not change? How do we know this?
    b. What land allocations may change? Where? How do we know this?
    c. What are possible desired impacts of land allocation changes? How do we know this?
    d. What are possible undesirable impacts of land allocation changes? How do we know this?
4. How will ANF stakeholders (SH) or interested parties (IP) be affected by this management emphasis?
    a. What SH/IPs will be unaffected? How do we know this?
    b. What SH/IPs will likely benefit from this management emphasis? In what ways?
    c. What SH/IPs will likely perceive themselves to be harmed by this management emphasis? In what ways?

We asked citizens to think of their work teams as adjunct teams to the ANF plan revision team. After citizens organized themselves into teams, we gave them a worksheet to fill out (at the second round of alternatives development workshops we referred to the worksheets as personal notes). Examples appear in Figures A and B.

At the second round of citizen workshops related to alternatives development, citizens selected work teams based on their issue cluster preferences. Rather than provide worksheets, we offered workshop participants forms with questions on which the plan revision team sought feedback or input. Two condensed examples appear in Figure 2.

Figure 2. Citizen Work Team Personal Notes Forms (Space between questions has been condensed.)

Personal Notes for Group Discussion: Vegetation Management and Habitat Diversity
Your discussion group will consider the related forest plan revision issues of vegetation management and habitat. Before discussing these issues in your group, please provide your initial thoughts on these questions:

1. What are your views on designing alternatives around the following general purposes and principles of vegetative management?
   a. Produce high value hardwood by managing for younger forests (PreAlt B)
   b. Balance high value hardwood production and vegetative diversity through mix of forest age classes. (PreAlt C)
   c. Promote older forests of Northern Hardwoods and Upland Hardwoods. (PreAlt D)
   d. Are there other purposes of vegetative management that should be evaluated? Please explain.

2. Should the forest use uneven-aged silvicultural systems more often in the future? Please explain.
3. Do the preliminary alternatives adequately address the key elements of habitat diversity? Could the alternatives address this issue better? Please explain.
4. The alternatives include landscape corridors as a mechanism to improve older forest habitat. What do you think of the landscape corridor configurations that appear in the preliminary alternatives? For example, should they be larger? Smaller? Moved? Please explain.
5. Is there a different approach for achieving older forest habitat that the ANF should consider? Please explain.
6. How could landscape corridors and vegetative management affect each other? Please explain.
7. How do management decisions on the Forest affect local social and economic conditions?

Personal Notes for Group Discussion: Habitat Diversity and Recreation/Trails
Your discussion group will consider the related forest plan revision issues of habitat diversity and recreation/trails. Before discussing these issues in your group, please provide your initial thoughts on these questions:

1. Is it clear what activities would be permitted in the Intensive Use Areas (IUAs)?
2. Is it clear where equestrian use would be permitted under the new Forest Plan?
3. Is the number of Intensive Use Areas in each alternative appropriate? Please explain.
4. Should the number of Equestrian Use Areas vary across the alternatives? If so, how should they vary and why?
5. Is there adequate access to services along the existing snowmobile trail system? If not, describe additional needs.
6. Do the preliminary alternatives adequately address the key elements of habitat diversity? Could the alternatives address this issue better? Please explain.
7. The alternatives include landscape corridors as a mechanism to improve older forest habitat. What are your thoughts on establishing landscape corridors to improve habitat values? What do you think of the landscape corridor configurations that appear in the preliminary alternatives? For example, should they be larger? Smaller? Moved? Please explain.
8. Is there a different approach for achieving older forest habitat that the ANF should consider? Please explain.
9. How do landscape corridors and recreation / trails affect each other?
10. How do management choices on the Forest affect local social and economic conditions?

In both rounds of alternatives development workshops, the worksheets or personal notes forms provided citizens with guides for structured discussion. Some workshop participants wrote extensively on their forms and others wrote little, but in all cases the forms provided a foundation for dialogue, deliberative interaction, and learning. The writing tools and tasks were important to a work team's safety and productivity. Each person had ideas to share. Each person experienced the access, civic standing, and influence of having a voice (Senecah, 2004).

2.3 Some Lessons Learned: From FAITH to Using Citizen Input

The FAITH mnemonic resonated very well with ANF staff and provided everyone with an easy way to remember core principles of the Collaborative Learning effort. Putting the principles into practice has proven to be quite challenging by comparison. Access and inclusion are often constrained by limited resources (time, staff, budget) and deadlines. The worksheets and personal notes forms have generated rich information from citizens but plan revision team members have struggled to develop appropriate ways to both process that information (part of the trinity of voice element of civic standing) and demonstrate to citizens that their ideas have been considered (the trinity of voice element of influence).

3. The Chatham, New York Community Conversations Project *(Senecah)*

3.1. Background

Chatham is a small town of 4300 with an incorporated village and several unincorporated hamlets. Like many similar towns within 30 miles of the state's capitol, it remains dominated by gravel roads and scenic vistas, a few family dairy farms, and bucolic rural character. Increasingly, towns like Chatham face pressure from big box stores, chain stores, and subdivisions. In fall of 2003, the Town Board called for and approved the revising of its 30 year old comprehensive master plan, appointed three of its five members to lead the effort, and ran a news article asking for volunteers to be on a Comprehensive Planning Committee to help with revising the Master Plan. About 25 community members responded and began to meet monthly.

The first year of the plan revision process was fraught with disorganization, no clear direction, lack of leadership, and absence of accountability and follow through. It ended with a loud communal outburst of frustration from the decreasing pool of citizen volunteers who were still hanging on and faithfully attending the monthly meetings. After the mutiny, the town board quickly and arbitrarily appointed a steering committee (SC) headed by a town board member, and the SC immediately assigned subcommittees. Nothing else changed, however, so the planning effort continued to grievously lack structure, leadership, accountability or direction. This now extended to the subcommittees causing further distress and disillusionment and eventually more attrition.

Eighteen months into the plan revision process, some steering committee members voiced a concern that the SC's isolation from the public over the previous 18 months could ultimately undermine the community's support for the revised master plan. Therefore, the steering committee contacted community member Senecah, who had given the SC a standing offer for her services from the beginning. The SC asked me to design and coordinate a public involvement plan, which I did and the SC unanimously approved. It included a series of large-scale and smaller community conversations, forums on specific topics, interaction with local interest/civic groups, a vicarious public involvement strategy, and a graduate student summer intern to coordinate activities, tend to SC tasks, and write grant proposals.

The kick-off events were two large-scale community conversations, one on Saturday morning and another on a weekday evening, which were comfortably crowded in the school cafeteria. These collaborative learning events were well attended, considering that Chatham had never experienced a community event like this. The town supervisor, the steering committee, subcommittees, participants and the local and regional newspapers deemed the events very successful, enjoyable, and fruitful, and the generated information very rich and useful. The Chair of the SC called the process "the gold standard."

3.2 New Concepts and Tools

3.2.1 A Concept: Building an Outer Ring of Vicarious Community Participation

The only process the Town had ever used was the traditional approach of citizens speaking at the end of town board or zoning board of appeals meetings, or official public hearings on draft documents. The practical challenges were that 1) the community, including the steering and subcommittee members, were not experienced with any kind of collaborative process and 2) most of them had no experience with any community process such as what a planning process requires. I anticipated that Steering Committee, subcommittee members, and others would need mentoring to build capacity (skills and confidence) in order to contribute and participate in the community conversations; and the events' success could not be measured solely by the number of community participants who attended.

The process had to be a double helix structure. One strand needed to structure all the nuts and bolts of the community events, and the task matrix allowed people to invest energy to whatever degree they desired and with confidence that they could accomplish the task/s. Intertwined with the promotion and execution was another strand that needed to provide the non-attending community with the vicarious experience of participating or at least feeling familiar enough with the topic of planning for Chatham's future that they felt included in the community conversations and comfortable enough to have their own conversation about it with neighbors, friends, or family. The planning sessions for promoting the event and raising awareness was in itself collaborative, creative, and fun. Some of the more innovative ideas activated were:

- Contributions of paper, copying, distribution, and event supplies by various businesses, especially banks and the grocery store

• Pre-movie slides run at the local theatre in the village: Graphic artists in town contributed slides and the theatre owner ran the slides at no cost in the pre-movie promotional slide show. Flyers were handed out in the lobby.

• Information tents with cleverly depicted information on every table at local restaurant tables and bars.

• ¼ page flyers put in every grocery order at the only grocery store in town the week before the events.

• Flyers and information sheets with frequently asked questions in conversational tone posted and available at every business, whether auto parts, beauty salon, senior apartments, real estate broker, or antique shop.

• Personal invitation letters to heads of interest groups, local leaders, civic organizations, and county/state agencies

3.2.2 A Lesson Reinforced: If Convening Party Members Could Collaborate, They'd Probably Be Doing It to Some Degree Themselves!

Collaborative based processes are new to most convening parties. They come to the desire compelled by varying motivations, some which may be at odds with their comfort level for taking what they perceive as huge political, professional, or personal risks. From its beginnings, the steering committee had lacked a clear plan, a consistent structure for making decisions, or any accountability for carrying through with action items or commitments. Commitments and decisions changed with every meeting. Although they lauded the community conversations and basked in the positive community reactions, and although they enthusiastically and publicly committed to the public participation plan several times, the steering committee members did not follow through with their multiple commitments to fulfill post-event tasks and did not hold each other accountable. Hence, the public involvement plan did not proceed as planned and approved.

Even worse, two members of the steering committee acted out their concerns by approaching the town supervisor and town board members to sabotage the public involvement plan. Without pre or post-discussion with the SC, the town supervisor cancelled it all, including the signed contract with the summer intern, and because the SC had no clear line of authority or sufficient comfort level with distressful topics, they never questioned or even mentioned the action. In retrospect, I gave my own community a pass on assessing their capacity to engage a sustained collaboration based public involvement process. I should have given more attention to the well-known dysfunctional dynamic that had characterized the SC's interactions over the previous 18 months. I entered the process as a citizen, not a professional. Nevertheless, although the "official" public involvement plan died an early death, the subcommittees asked for training and support to run smaller community conversations on their topics, and this has been very satisfying to them and the participants. Now, three years into the planning process, the subcommittees have become confident in pressing this information for consideration in the goals and objectives of the revision of the town's comprehensive master plan.

4. Regional Sediment Management: Working with the U. S. Army Corps of Engineers (Walker)
4.1. Background

The U. S. Army Corps of Engineers (USACE) manages the waterways of the United States, including sediment or sand management. USACE has typically focused on managing sand at coastal projects on a project-by-project basis. This approach to sand management has not always adequately considered the cumulative impacts of individual projects on down drift projects. In response to this concern, the USACE has initiated efforts to assess the benefits of managing sediment resources as a regional scale resource rather than a localized project resource. The concept of Regional Sediment Management (RSM) grew out of May 1998 meeting of the Coastal Engineering Research Board. As a management method, RSM includes the entire environment, from the watershed to the sea. RSM should account for the effect of human activities on sediment erosion as well as its transport in streams, lakes, bays, and oceans.

In the last five years, USACE headquarters staff identified ten project areas for RSM demonstration initiatives, including sites in the Jacksonville, Mobile, Los Angeles, Detroit, Vicksburg, and Portland Districts. The Portland District site is the Mouth of the Columbia River (MCR).

A goal of the demonstration program is to change the paradigm of project specific management to focusing on a regional approach in which the USACE as well as state and local agencies stop managing projects and begin "managing the sand." Specific objectives of the demonstration program are:

(1) Implement regional sediment management practices.

(2) Improve efficiencies by linking projects.

(3) Apply new technologies.

(4) Identify and work though bureaucratic obstacles to RSM.

(5) Manage in concert with the environment.

(6) Incorporate a multi-stakeholder process for strategic planning and project coordination.

The USACE Portland and Seattle Districts added an additional objective for the RSM project at the Mouth of the Columbia: innovative and ongoing stakeholder engagement. Pacific Northwest USACE leadership staff wanted to use RSM as an opportunity to build better relationships with stakeholders; to change their paradigm of public involvement. To address the sixth objective, "incorporate a multi-stakeholder process," the Portland District of the U.S. Army Corps of Engineers contracted with Walker Consulting of Corvallis, Oregon to apply a Collaborative Learning approach to stakeholder engagement.

4.2 New Concepts and Tools/Techniques

We feature two tools here, both of which are grounded in literature on assessment and capacity building: Stakeholder conversations and stakeholder training.

4.2.1 Stakeholder Conversations

The first step in a Collaborative Learning project is situation assessment. Consequently, the Collaborative Learning portion of the Regional Sediment Management project featured stakeholder conversations. Through these conversations, the RSM situation could be appraised. To accomplish this task, a stakeholder involvement team (SIT) was created.

Conversations between Walker and USACE staff members generated a number of stakeholder conversation objectives.

(1) Discover what SHs know about RSM.

(2) Identify RSM and MCR issues.

(3) Learn about SH perceptions and expectations of the USACE.

(4) Learn from SHs what they think is important in as RSM stakeholder involvement process.

(5) Assess the collaborative potential of the RSM situation.

This last objective is particularly critical when considering a Collaborative Learning approach for stakeholder involvement and RSM. As Daniels and Walker (2001) explain, for Collaborative Learning to be viable, stakeholders and the decision authority need to perceive that there is collaborative potential in the situation. This perception is based on two factors. First, stakeholders (including agency staff) believe that there is a possibility for meaningful, respectful communication interaction among the various parties. Second, stakeholders believe that a mutual gain or integrative outcome is possible, that is, that the

fundamental structure of the situation offers the potential for both or all sides to achieve more of their objectives than would be likely in some other venue (Lewicki et al., 1999).

Consequently, the assessment of collaborative potential is two-fold: first, can stakeholders interact with one another in a constructive, and civil manner; and two, can stakeholders participate in the development of decisions that will benefit the parties more than if a party chose to act alone. The assessment determines: (1) the current potential for collaboration, and (2) the extent to which certain aspects of the situation need to be changed in order to establish good potential for collaboration. There is no specific "formula" to this assessment process. Rather, the analyst has to assess the situation as comprehensively as possible given available resources to do so, such as time, access to people for interviews or conversations, review of documents, and so on. In policy decision situations, though, the willingness of parties to try to work together and the degree of decision space the relevant decision makers are willing to share are key factors (Walker & Daniels, 2005).

With the RSM stakeholder conversations objectives in mind, Walker developed a conversations protocol. The protocol included a conversation narrative and eleven questions. The narrative and the questions were reviewed and refined by USACE personnel. The eleven questions appear in Figure 3.

As the RSM-CL Stakeholder Involvement project director, Walker recruited a team of seven current and former Oregon State University students. Walker and a colleague (an extension faculty member and experienced facilitator and social science researcher) trained the SIT members to conduct the stakeholder conversations. The training included a review of the Regional Sediment Management Demonstration Initiative, background reading material on RSM, and an explanation of the stakeholder conversations procedure. Seventy-one people participated in the stakeholder conversations (for a full report on this project, see Walker, 2004).

Assessing collaborative potential and conducting stakeholder conversations as a means of doing so were new conceptually and practically to USACE staff. Portland District Corps staff typically enacted a "tech-reg" approach when interacting with stakeholders and did not have much experience with collaboration. The stakeholder conversations revealed that many parties wanted to work collaboratively with the Corps but were very skeptical. Stakeholders were quite concerned that the decision space in a regional sediment management approach would not be sufficient for meaningful collaboration. The conversations themselves, a number of stakeholders noted, provided reason to be optimistic.

4.2.2 Stakeholder Training

Optimism, though, is not sufficient for a community-based collaborative effort to succeed. The parties involved need to be willing and able to engage one another collaboratively. Given a stakeholder interaction history to the contrary, the Corps asked Walker and Daniels to design and conduct training opportunities for Corps personnel and for interested stakeholders.

Consequently, in addition to stakeholder conversations, the RSM-CL Stakeholder Involvement effort included Collaborative Learning training for both Corps personnel (a two-day training) and citizens. Citizens/stakeholders were invited to participate in a one-day Collaborative Learning training workshop. Two identical workshops were held, on inland and one on the Southwest Washington coast. About 35 people participated in one of the training days. Figure 4 presents the one-day training design.

A key element of the stakeholder CL training was demonstrating CL tools as they participants learned about the CL approach. In the afternoon, for example, participants worked with a situation map of the ambiguous RSM process. Following the mapping activity, participants completed worksheets in which they expressed their concerns about RSM and proposed improvements (e.g., recommended actions) or characteristics of a viable RSM process. The training workshop participants worked on the RSM process situation map as a full group. They discussed their concerns and improvement/action ideas in small groups. Following that, each participant was invited to share a key concern or improvement idea with the full group.

Figure 4. One-day Stakeholder CL Training Design

0830	Continental breakfast (provided)
0900	Instructor introductions and training workshop logistics
0915	Why consider a Collaborative Learning approach?
	** Tech-reg and discourse-based public participation and decision-making
	** Collaborative public participation and decision-making
1015	Break
1030	The nature of the Collaborative Learning Approach
1130	Lunch (on your own)
1230	Hard systems, human activity systems, and systems thinking
1300	An exercise in systems thinking: situation mapping
1415	Break
1430	Application to RSM: A Mini-RSM/CL workshop
	** Mapping the RSM process
	** Concerns about RSM
	** RSM process improvements, actions, recommendations
1615	Wrap up and safe travels

4.3 A Lesson Learned: Ephemeral Efforts don't equal Enduring Results

Even though some members of the Corps were excited about working collaboratively with stakeholders to develop a regional sediment management strategy, many Corps personnel were not. Similarly, while many stakeholders welcomed the opportunity to collaborate with the Corps on RSM issues and activities, skepticism endured. A two-day Collaborative Learning training for Corps staff and one-day training workshops for stakeholders were not sufficient to overcome structural constraints, procedural history, and trained incapacities. Additionally, international commitments drew Corps staff and funding resources away from domestic projects.

5. The LOOW Restoration Advisory Board (RAB): Working with the U. S. Army Corps of Engineers *(Senecah)*

5.1. Background

The former Lake Ontario Ordnance Works (LOOW) was originally 7500 acres of peach orchards on the Niagara Escarpment taken through eminent domain and used for activities that left chemical contamination. In 1945, 5000 acres outside the production areas were declared excess and disposed to private landowners. The entire campus of the Lewiston-Porter School District were built on part of the surplused land. Then housing, and private corporations were built, including the only commercial hazardous waste disposal facility in the northeast US. What was left of the former LOOW site was transferred to the USACE in 1998 and is included the Defense Environmental Restoration Program for Formerly Used Defense Sites (DERP-FUDS) designed to address hazardous waste contamination caused by DOD activities.

The Niagara Falls Storage Site (NFSS) was originally 1,500 acres of the southern portion of the former LOOW used for various activities including the production of high-energy fuel and storage of radioactive materials during the development of the atomic bomb. All radioactive materials that were formerly located throughout the property were consolidated in the current 191 acre NFSS area. The site was transferred to the USACE in 1997 and is included in the Formerly Used Sites Remedial Action Program (FUSRAP) to decontaminate or otherwise control sites where residual radioactive materials remain from the nation's atomic energy program or from commercial operations.

U.S. government activities (Department of Energy (DOE) and Department of Defense (DoD) World War II and Cold War activities) are responsible for most of the federal facility contamination at over 61,000 sites. For the most part, these facilities served national security objectives that often took primacy over environmental stewardship objectives and sometimes promoted a general resistance to external oversight. The cleanup cost is expected to cost up to $400 billion dollars over the next 70 years and pose enormous scientific, technical administrative, regulatory, and political challenges. Consequently, the extent of existing contamination on federal land is only recently being fully characterized and the enormity of the challenges associated with cleanup of hazardous and radioactive waste recognized. The LOOW

(hazardous waste) (www.lrb.usace.army.mil/derpfuds/loow**)** and the NFSS (nuclear waste) (www.lrb.usace.army.mil/fusrap/nfss) in the Town of Porter in Niagara County, New York are such sites, each managed under separate management programs that address their particular contamination. They are six miles north of the infamous Love Canal.

In addition to a lack of knowledge, technology, or attention paid to the risks associated with these kinds of sites, most agencies also had little experience in communicating effectively with local communities and other stakeholders due to their long history of secrecy at many sites and their military organizational cultures. These communication difficulties contributed to further public distrust of operations and a lack of public confidence in the federal commitment to cleanup these sites. More recently, agencies have made significant commitments to the communities in which they are located with intentions to engage in transparent public involvement processes with substantial opportunities for meaningful participation by affected communities

Lifelong as well as fairly new members of the communities impacted by these two sites carry a burden of pain, anger, cynicism and betrayal stemming from past exposure and/or federal agency activities and inactivity. Given the sites' legacy and people's experiences, any government agency that entered the scene with the best of intentions but equipped with limited funding and traditional public participation tools was bound to be seen as the latest chapter of a story line many community members felt they knew quite well.

5.1.2 Restoration Advisory Boards

Since 1994, Restoration Advisory Boards or RABs have been a formal, recognized mechanism and the primary way by which the Department of Defense supports public involvement in restoration activities. Approximately 330 RABs operate in U.S. states and territories. (www.dtic.mil/envirodod/Stakeholder/Wcommunity/SI_WCRAB_Dir.htm) In 1998, the USACE Buffalo Office was encouraged to initiate a RAB for the LOOW. The team had significant concerns and fears about how effective one could be, especially for the LOOW site's unique situation. For example, although the two sites were viewed as one because of their juxtaposition and their co-mingled histories, public concern was highest for the NFSS, yet the RAB was created in the program that was authorized to support one, in the program addressing the former LOOW.

A RAB process promised an opportunity to connect with the communities and share information in ways different from what could be achieved in a traditional public meeting process. Therefore, the LOOW RAB was created although it was expected that the NFSS would become one of its priorities. A public relations firm solicited nominations for RAB membership and formed a non-USACE selection committee. It chose RAB members with an eye towards ensuring representation of the full continuum of interests according to the Department of Defense RAB Guidance document. The RAB met for the first time on June 29, 1999 and continued roughly on a quarterly basis through March of 2002.

Most RAB members entered the RAB process with an open mind and expectations that the USACE would be more active than the previously assigned federal agencies in developing better relationships with the communities, but over the course of the next two years, dissatisfaction and frustration evolved and increased. For example RAB meetings were usually held in sterile environments and arranged in what many thought was austere and controlling. This was uncomfortable for many RAB members and citizen attendees. The USACE built agenda typically consisted of USACE and contractor power-point presentations on technical studies. Individual RAB members asked a few questions or stated opinions, but were generally at a loss as to what their role was. The public audience had to wait until the formal RAB agenda was finished to express concerns or ask questions.

Because USACE commanders are assigned to a district for only two years, parties also felt that they were futilely investing time and energy in building site history and understanding with a commander whose memory bank would be lost every two years. Because of accusations from some that meeting summaries were biased and incomplete, summaries were replaced with court reporter transcriptions for the final two meetings of October 2001 and March 2002. These transcriptions were then viewed by some as authoritarian and legalistic but by others as useful, necessary, and even entertaining. Vocal challenges, perceived physical threats, frustration, disruptions, and tension increased.

By March 2002 RAB meetings were costing the USACE over $30,000 per meeting. Then the general USACE budget became suddenly and severely constrained due to shifting Congressional and agency priorities exacerbated by the terrorist attacks of September 11, 2001. The final straw was the March 2002 meeting, when police were called in, the RAB meetings were suspended, and shortly afterwards, Senecah was asked to conduct a situation assessment and facilitate a collaborative process to restructure of the RAB.

With two assistants taking notes for each, I interviewed 44 stakeholders and issued a draft and then a final refined Situation Assessment Report. I then met with study participants several times from late 2002 into mid-2003 to talk about the assessment findings, train in Collaborative Learning, and design a new RAB framework. A citizen-led temporary steering committee was formed and began structuring a variety of work groups. In the end, the RAB became totally citizen-run and accountable. The U.S. Army Corps of Engineers continues to provide administrative support and the LOOW and NFSS project managers contribute technical expertise to the new community-led RAB. One of them is a RAB member.

5.2 New Concepts and Tools

5.2.1 Breaking the Mold of Previous Expectations.

The history of this case was heavily burdened by the symbolism and reality of sterility, formality, and hierarchy. The USACE, by the staffs' own explanation, "were doers, not relationship builders. We see something to be done, and we do it." As a result, although the public mission and good will intentions of the RAB was to support a process of dialogue to build relationships (e.g. See trinity of voice and FAITH elsewhere in this paper) in which complex, contentious issues could be addressed, the USACE process was linear, stilted, and based on techno-info transfer to address content issues. This made sense to the USACE, but it was destructive to their mission and cast doubt on their intentions.

Most of the 11 RAB meetings over the previous two years had been held in the cavernous former gym in the building that was now the school district's administrative building; this was the only site that could handle these kinds of meetings. No refreshments were provided because agencies cannot spend funds this way. People entered to see stark brown tables set in a horseshoe near the center of the room, with large microphones set in front of each member's place. Other gray metal chairs were set in theatre style, with a microphone set in front facing the horseshoe. At the last RAB meeting, the USACE commander had attended for the first time, and he deliberately wore his official uniform in hopes that this would restore civility. Instead, the audience microphone had been broken in the first minutes and the police had been called. The Commander's two-year term was over shortly after this.

Seven months later, my assistants and I prepared for the first workshop to be held after the distribution of the Situation Assessment Report. The 31 participants would include diverse stakeholders as well as the new commander and other top ranked USACE officials, and elected officials. I was aware of how critical it was to break the psychological mold of previous expectations as soon as people walked into this room. So they were met by friendly, helpful greeters at the building entrance and a bright welcome table with other friendly assistants handing out bright information packets and directing participants to the refreshment table.

Providing freshly brewed coffee, fruit, and other treats is always a given, but I am always amazed at how many facilitators undervalue this significant ritual. They buy cheap cookies and coffee if at all, or don't bother to arrange them attractively. That night, huge urns of coffee allowed the aroma to hit people as soon as they entered the building. They immediately gravitated from the welcome table to the colorful, attractive refreshment table, commenting often how good the coffee smelled. With coffee and snack in hand, they scanned the former gym to locate the meeting site. Nothing looked familiar. What I had done with the proxemics of the workshop and with the ground rules was risky, but very successful.

Instead of tables and microphones, participants saw a nearly closed circle of tightly spaced chairs in a different part of the room. In front of the chairs were the low narrow benches taken from the nearby former locker rooms, covered with brightly colored cloths and sprinkled with wrapped hard candy and toys for diverting nervous energy. As they walked towards it, they began to laugh with each other and make remarks about it being silly or like a picnic. These touched off responses from others, and soon, everyone was chatting, talking, and laughing. I had to make efforts to quiet them and start the workshop. Within 10 minutes, hands were rocking slinkies, molding playdough, connecting legos, and unwrapping candy.

It was time for the ground rules, and I had been increasingly annoyed with the usual, worn out ground rules posted on flip chart paper. They are easy for participants to ignore, like an airline pre-flight safety routine, and distracting to enforce. To break this expectation, I scattered bright orange "Commitment to Civility" half-sheets on the benches and in their packets (see Figure E). I nonchalantly held up and waved the half-sheet, and asked, "Now, just so we're clear, who came here tonight hoping that they would be belittled or attacked? Who's thinking, 'oh, yes, let it be me who tries to speak but no one listens?' Hmmm, well, then, who came here tonight just waiting for the opportunity to interrupt or dominate the discussion and be a bully so we can't have a productive evening together?" People looked sheepishly at their feet,

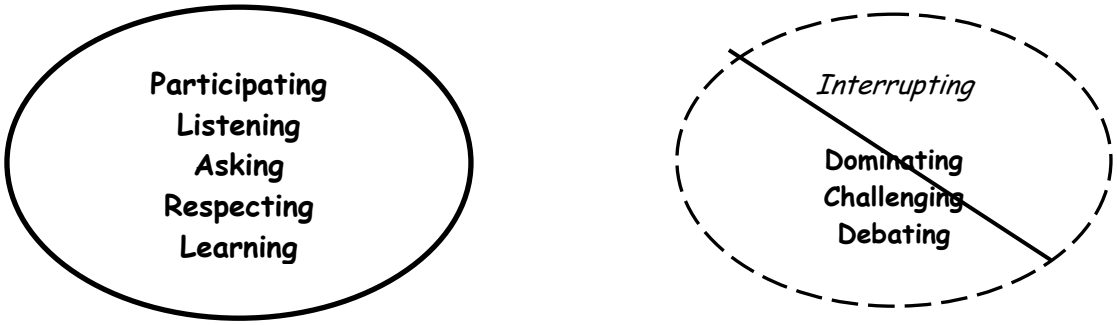
then at each other. They laughed, and someone raised a hand and laughed, "That's me!!" and everyone laughed.

After emphasizing the value of their experiences, knowledge, and concerns about the situation, I direct their attention to the behaviors listed in the slashed and unslashed circles of the Commitment to Civility sheet, asking for a show of hands of who can't agree to mutually honor this commitment to civility in themselves and others. This makes everyone responsible for enforcing civility because all a person has to do in a small group is discreetly pick up the orange sheet, and the group self-corrects without disrupting the conversation. In a large group, a person holds the sheet a little higher. Walker, Daniels and I have used this same Commitment to Civility in many processes ever since, and it has been an effective tool.

The laughing at this workshop does not suggest that the issues related to this situation were treated as a laughing matter. It suggests that when their negative process expectations were strikingly and refreshingly unfulfilled, it relieved tension. Participants rated the workshop as highly productive, hopeful, and even enjoyable. The proxemics and commitment to civility helped produce sincere conversations, reflected by tones of voice, respectful and active listening, and body language. After a series of workshops, the RAB was reinvented into a citizen run entity with full USACE participation and support.

Figure 5: Commitment to Civility

In order for this Community Conversation to be as productive as possible, we ask that you commit to behavior that supports collaborative learning.



5.3 Lessons Learned

5.3.1 Reinforced Lesson: the Cathartic and Empowering Value of the Experience for Participants in a Situation Assessment

Before any meeting of stakeholders is held, participants have a confidential opportunity to explore and reflect on issues and aspects that they often have never considered. Until then, they have most likely been strategically consumed in the drama and concerns of the situation in its immediate moments. A situation assessment allows venting and reflection on how a situation has evolved; what its emotional, physiological, intellectual, social impacts have been on you and others; what your perceptions are of others, what your projected assumptions are of how others perceive you; how you perceive your options; what your willingness is to risk another process; the degree to which you are willing to learn about other process approaches; what obstacles you think need to be addressed; what your preferences are; and verbalizing your choice to commit to engaging a new process with good faith.

As a result, the situation assessment experience has the power and potential to create a shifted reality for the participants. It has the power and potential to influence the odds for success of a collaborative-based process. The situation assessment process is not only an "ends in view" process to produce information. It becomes another piece of the larger "ends in view" of the complex and contentious situation. The way the assessment itself unfolds becomes part of the way a subsequent process unfolds (or does not) which becomes part of the ongoing situation which ultimately becomes part of the continuing community and stakeholders' narratives of how they engage with future contentious issues. The conflict assessment experience can be powerfully productive, , educational, and even healing.

Therefore, conducting a situation assessment calls for not only proficient interviewing techniques. It calls for almost a sixth-sense toolkit to help guide the practitioner who ventures into this charged

experience to provide a "voice" to participants. The trinity of voice (access, civic standing, and influence) demonstrates how a skillful interviewer conjointly creates a valuable experience of catharsis, reflection and opportunity with the interviewee. The interviewer is better able to assess the prospects for a fruitful process and the stakeholders are better able to understand the conflict, the stakeholders, and their options for action.

Access refers to opportunity and safety. The situation assessment grants permission to be brutally candid and frank. Interviews are confidential and usually not tape-recorded. The subsequent report contains no attribution by name, title, or organization. Interviewer notes are not subject to Free of Information Act requests.

The situation assessment process allows the individual stakeholder perspective to be noticed and to receive full attention. This experience is so rare in our everyday lives that most stakeholders quickly settle into the opportunity. The interviewee's side of the story receives undivided attention with no interruptions or debate. No public audience, constituency, or media requires posturing. The grammar is marked, for example, by the venting of their anger, the sharing of inside information, organization's plans and concerns, and deepest fears. They speak of issues for which there is no other safe venue, e.g., intra-organizational frustrations, anger, and skepticism. Stakeholders reflect on the internal situations of their organizations, e.g., what political pressure they are subject to. They produce their own reality check of the options available to their organization in order to achieve their ideal outcomes. They have a safe space in which to consider their priorities.

Standing means the legitimacy that stakeholders' perspectives are given in the assessment process. The interviewees have been identified as influential and important voices to be included in the process, and they are asked who else should be included in the assessment process. They (or their organization) have a degree of power to stall, oppose, or obstruct the implementation of anything that might come out of a collaborative-based process. Including them in the assessment process builds support, credibility, and legitimacy not only in the assessment but any subsequent process. Although the interviews are confidential, the process is certainly being watched.

The process also allows the interviewee to consider competing stakeholder interests. Questions are to clarify and know more, not to debate or counter. The interviewer can play devil's advocate without sparking angry defensiveness. Although the situation assessment report uses direct quotes and paraphrasing, it provides no attribution. It provides a descriptive flavor of the competing opinions, concerns, and interests of each distinctive perspective; and often is the first step in breaking down stereotypes and bias held about other parties. Stakeholders search the compilations of paraphrased articulations to identify their contributions. They recognize their perspective in the report and see that it is presented in a non-evaluative way. This reaffirms their standing.

Influence is the outgrowth of access and standing. Influence means the ability to impact outcomes. They are encouraged to consider what information is necessary, e.g., questions of science, credibility of science. Interviewees are asked if they would be willing to participate in a process if one is indicated and they are assured that it is the stakeholders' choice of which facilitator to use if they decide to go forward. Stakeholders are asked for direct contribution to what a subsequent process should look like and be structured. This is important because often, the conflict has been marked by unsatisfying attempts to gain a "voice." During the assessment, the professional diplomatically and subtly builds a general knowledge and comfort level with Collaborative Learning concepts and builds realistic expectations for any subsequent process. It acquaints the stakeholders with the concept of ground rules and process structure and builds a comfort level with the practitioners in case they are chosen to lead a subsequent process. When the draft report is distributed, it is seen as more of a collaborative product, and the comments reflect the anticipation that these will also have an impact on the final report. When parties gather for the first session, it is often with greater confidence, enthusiasm, and hope.

In the USACE RAB case, the conflict assessment produced shifts in how stakeholders viewed the situation. They safely began to vent decades worth of anger and fear. They looked beneath their public posturing to explore what was really at stake for them and what their ideas were for improving the situation. It sparked their interest and faith that the RAB could be reinvented. It provided the first installment of building their capacity, willingness and good faith to participate in a collaborative process.

The USACE RAB case reinforced the enormous and critical values of conducting a situation assessment, even if it had been determined that the collaborative potential is too low at that time to engage in a process. By their own estimate, stakeholders were left with much more to think about. The assessment report clarified issues, stereotypes, fears, points of agreement, points of disagreement, and provided a road

map of how to proceed if they chose to. The cynicism of ever improving the situation was reduced and the hope increased. Stakeholders came to the first RAB restructuring workshop with more capacity and positive energy to begin.

The experience can play a transformative role in repairing relationships of alienation from institutions and practices of governance, and support an ability to solve public problems and conflict (Dukes, 1996).

5.3.2 Another Lesson: We've Got the Recipe Now -- Agencies Sometimes Think It's Easy to Simply Now Be Collaborative

Commanders at USACE district offices change every two years. The commander who had initiated the situation assessment was not the one in command when the report was issued or the workshops were begun. This new commander was enthusiastic but a very can-do direct action leader. Although the RAB members and the USACE officials strongly encouraged him to retain Senecah to launch the new RAB and continue to build the individual and group capacity, he insisted that "We need to cut the cord sometime, and it might as well be now." Over a year went by with less accomplished by the RAB than anticipated. Yet, the frustration within the RAB and within the community never escalated. The relationships and good will amazingly held, the RAB retained its integrity, and two years passed. Three citizens vied to be chair when the position became available, and a new commander now supports capacity building. The RAB recently took itself on a successful retreat to clarify and strengthen its capacity to fulfill its objectives.

6. Kenai Winter Access Planning, Chugach National Forest *(Walker and Daniels)*

6.1. Background

Just as the Allegheny National Forest leadership did in 2001, in the mid-1990's the Chugach National Forest (CNF) leadership initiated a forest plan revision process. Walker and colleague Steve Daniels were asked to design and help implement a Collaborative Learning framework for public involvement about forest plan revision. They did so in 1997 and 1998 via assessment, training, and community workshop activities. The forest plan revision team continued to use CL principle and tools throughout much of the forest plan revision process (Daniels & Walker, 2001).

On 31 May 2002, the Alaska Regional Forester signed the Record of Decision for the Revised Chugach Forest Plan. Shortly thereafter, the Regional Forest received appeals from a number of individuals and organizations on various parts of the decision. Some appeals focused specifically on the closure of the Carter-Crescent Lakes area of the Kenai Peninsula to winter motorized access (primarily snowmachines).

In January 2003, after reviewing the appeals and the administrative record, the Regional Forester withdrew that portion of his decision closing the Carter-Crescent Lakes area to winter motorized access. Consequently, the management direction for that area remained as it was in the 1984 Chugach National Forest Plan. Under the 1984 Forest Plan, the area is open to winter motorized activities if adequate snow exists to protect resources.

The Regional Forester also instructed Chugach National Forest staff "to reconsider this portion of the decision at the local level, with involvement from all interested parties, to make sure that the site-specific impacts of any closure were fully disclosed and that reasonable alternatives were considered" (Meade, 2005). The Forest Supervisor wrote: "It is clear the Carter-Crescent Lakes area is highly valued by individuals and communities and that a local collaborative approach to help resolve motorized/nonmotorized issues would be welcomed by most people" (Meade, 2005).

After consulting with various communities, groups, and citizens, the CNF Supervisor received approval from the Regional Forester to expand the planning effort beyond the Carter-Crescent Lakes area. To include most of the Seward Ranger District. As Forest Supervisor Meade wrote constituents: "Our decision to expand the planning area reflects the value we place on your involvement and your commitment to seek a collaborative solution" (Meade, 2005). Walker and Daniels were retained to design and facilitate a Collaborative Learning public involvement strategy for the Kenai Winter Access planning project.

6.2 New Concepts and Tools

6.2.1 A New Tool: Supporting Civility by Addressing Expectations

Mediators and facilitators rely on ground rules to promote and guide civil discourse among parties in conflict (Moore, 2003; Beer & Stief, 1997; Kaner, 1996). In our Collaborative Learning workshops, we use the term "guidelines" instead of ground rules and emphasize the importance of civility. In the many

community workshops we have facilitated over the years, civility guidelines have been sufficient to guide constructive citizen involvement and interaction.

The civility guidelines fell short of this goal at a recent public workshop in a Kenai Peninsula, Alaska community. This workshop, designed in part to have citizens "ground-truth" planning assumptions and sideboards, was the first Chugach National Forest meeting to occur in this community in about a year. This was also the first public event in this community as part of the Kenai Winter Access project.

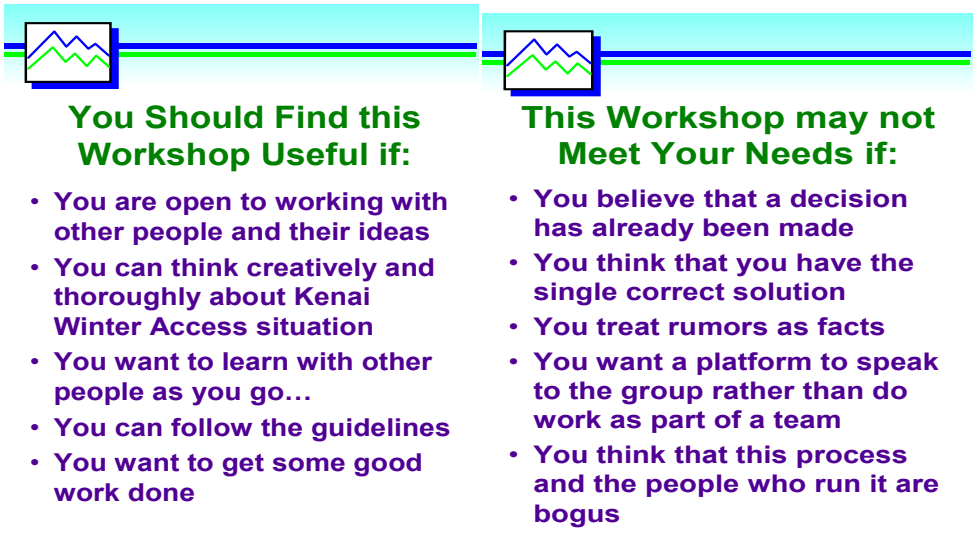
CNF staff advised the facilitators that the meeting would be small, about 15-20 people, and that meetings in this community had been typically low-key (civil, reserved). Consequently, the Walker agreed to facilitate this workshop alone.

65 people attended the workshop. The meeting room was set up for 40. Walker had prepared 45 copies of all materials. Shortly after a welcome from the CBF forest supervisor and a review of the civility guidelines, Walker presented the evening's workshop agenda. A young man interrupted this presentation as asked, "Where are you from?" He followed that question with "What's the Forest Service doing bringing in some outsider from Oregon to solve our problems?" This started a tidal wave of pointed questions and aggressive statements. People from various parts of the room said "How much are you getting paid?" Why aren't you writing all this down?" "This meeting is a joke, you've already decided." Why is the Forest Service closing us (snowmachiners) out of the forest?" "You guys are a bunch of liars." Why wasn't this meeting publicized?" We're tired of you always caving in to the Anchorage greenies." These are just samples.

After this workshop ended we reflected on how to better address this situation; a workshop that becomes, in part, a venting session. While venting sessions may be necessary and can be productive, we wondered how venting can contribute to workshop goals. As a result of this experience, we have added material to our civility guidelines that we refer to as "expectations." We have put these materials into two slides (see Figure F).

The information on these two slides, presented immediately after reviewing civility guidelines, pre-empts some of the assumptions citizens may hold as they enter the workshop. The information allows provides facilitators with a foundation for addressing expectations or predictions as citizens present them during the workshop.

Figure 6. Managing Expectations – Community Workshop Slides



6.2.2 A New Design (Tool): The Scenario Building Workshop

CNF leaders have emphasized a successful Kenai Winter Access plan depends on productive CNF-citizen and citizen-citizen collaboration. We have designed and facilitated the scenario-building workshop. The Scenario Building workshop asks citizens to form diverse work teams and build the components of a management scenario.

The scenario building workshop emphasizes mutual learning, deliberation, constructive argument, systems thinking, and iterative progress. Each citizen work team constructs a management scenario through a series of tasks. Each task builds on previous work **(see Figure 7).**

The worksheets provided workshop participants with an opportunity to think privately about Kenai Winter Access management ideas before interacting and deliberating with other work team members. The worksheets framed the discussion and scenario building effort. In so doing, the worksheets helped participants work through a conflict situation that many perceived as intractable (Lewicki et al., 2003).

As the culminating activity, each work team was asked to report its final scenario ideas to the full workshop. A team could record and present its ideas on a table-size map of the project area or use a flip chart. All nineteen work teams (across three different workshops) selected the map option. Some participants proposed that their team presentations to the full workshop be videotaped. All teams agreed to be video recorded.

Figure 7. The Scenario Building Workshop Agenda

Kenai Winter Access Scenario Building Community Workshops, Seward Ranger District, CNF

1400 Registration and refreshments

1430 Welcome and plan for the day
- – The Collaborative Learning approach
- – Workshop guidelines

1445 The Scenario Building Workshop and the overall Kenai Winter Access planning effort
- – Workshop goals
- – Workshop activities to achieve these goals
  - ** Develop a set of focused scenarios
  - ** Develop an integrated management option

1515 **Scenario I: Improve management specifically within the Carter-Crescent area** (break follows)
Key Question: How can we maximize the winter access value of the Carter-Crescent area to ensure that all users have access to high quality experiences as they define them?

1625 **Scenario II: Increase winter access opportunities throughout the project area**
Key Question: How can we maximize the winter access value in the entire project area to ensure that all users have access to high quality experiences as they define them?

1725 **Scenario III: Institute a series of time share opportunities** that are rotated across seasons, years, and geography to ensure that:
1) all user groups have access to high quality opportunities at all times,
2) all user groups have periodic access to all areas, although not necessarily every year (unless not otherwise closed due to other resource protection or safety reasons), and
3) the timeshare process shares or manages the risk of bad snow years to the extent possible.

1825 Supper break (provided by Walker and Daniels on-site)

1900 **Scenario IV: The Integrated Scenario OR Develop your own scenario**
If INTEGRATED: What set of ideas can you draw from your scenarios that taken together do the best possible job of creating high value winter access opportunities for all users of the Kenai?
IF DEVELOPING YOUR OWN (e.g., special area designations): How can we maximize winter access value in the project area to ensure that all users have access to high quality experiences as they define them?

2000 Sharing your best scenario with the full workshop
Record ideas on a map or flip chart

2030 Thank you and safe travels

Walker and Daniels Collaborative Learning Workshops 2005 - CNF SBCW handout

Each task begins with a worksheet. In the Kenai Winter Access situation, the second scenario building worksheet offers an illustration with space condensed **(See Figure 8).**

Figure 8: Scenario Building Community Workshop Building Scenario Two: Improving Winter Access in the Seward Ranger District Project Area (space has been condensed)

This scenario is being examined because winter use in the Carter-Crescent area is affected by the availability of winter use opportunities around it. Any competition or tension that may exist among users for Carter-Crescent could be reduced by providing more winter access opportunities elsewhere in vicinity. The Project Area is those Forest Service lands on the Kenai Peninsula, south of Summit Lake and including the Resurrection Pass travel corridor. The Carter-Crescent area is bounded by the south by Kenai Lake, to the west and north by the Sterling Highway, and to the east by the Seward Highway.

Over the next hour you and your work team members should build the best Project Area winter access scenario possible. This worksheet should help you develop and explain your ideas about how winter access throughout the Project Area could be improved with the specific requirement that there be an opportunity to shift use from Carter-Crescent to the area being enhanced. Your work will help in this planning process if you propose an improvement somewhere AND explain how that improvement impacts the area in Carter-Crescent. We have included a number of questions that might be useful as you develop your ideas about winter access in Carter-Crescent. Take a few minutes to answer those questions you find helpful and then bring these ideas to your team.

Snowmachine Users

1. From what communities do the most of Carter-Crescent snowmachine users come?
2. What other winter access destinations in the Project Area are potentially as convenient for these users?
3. What improvements could be made to the winter access management in those other destinations to make them more attractive to snowmachine users?

Non-mechanized users

1. From what communities do most Carter-Crescent non-mechanized users come?
2. What other winter access destinations in the Project Area are potentially as convenient for these users?
3. What improvements could be made to the winter access management in those other destinations to make them more attractive to non-mechanized users?

Improved Winter Access Opportunities

1. Describe any part of the Project Area could become a significant winter access opportunity if only minimal improvements were made (parking, trails, education, signage, etc.)?
2. How much do you think those improvements would cost, and where do you think the funding might come from?

New Winter Access Opportunities

1. Describe any part of the Project Area could become a new significant winter access opportunity?
2. What actions and resources are needed to make this happen?

Do you have any other thoughts about how winter access throughout the Kenai could be improved in order to reduce any user group competition that might exist in the Carter-Crescent area?

Name_____phone_____email_____

6.3 A Lesson Re-learned: The Importance of Co-Facilitation

The last point we want to draw from the Kenai Winter Access relates to the volatile workshop experience presented earlier. Given the complex and controversial nature of the conflict situations we typically facilitate, we rarely guide a workshop alone. Facilitation partners can intervene in a tense, emotional situation to reestablish civility guidelines or implement a contingency plan. Neither occurred in the confrontational Kenai Winter Access meeting.

7. Conclusion

How do concepts, tools, and lessons for community-based collaboration emerge? As these cases demonstrate, they often come from project work in communities and on landscapes. In each case presented here, we brought concepts and tools with us. Our prior knowledge of and experience with community-based collaboration were essential but not sufficient. We had to understand each situation as best we could

and tailor our conceptual understanding and process experience to the specific situation. Consequently, new concepts and tools emerged. Not surprisingly, new lessons were learned.

In this sense, just as ecosystem scientists speak of adaptive management (e.g., Lee, 1993), as "pracademics" we practice adaptive management of pluralistic, collaborative processes. In more than a dozen years of Collaborative Learning work, for example, the CL approach has been applied differently on each project. Therein may lie the most important lesson from work in the field: regardless of the concepts and tools we develop, we need to understand the communities and their problematic situations and adapt our knowledge and techniques as we design and implement processes to foster collaborative public involvement and decision-making.

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Stakeholder Politics and Conflict at the Confluence of Organizational and Environmental Literatures

Todd Norton
University of Utah

My purpose in this paper is exploring and developing a conceptual integration between the organizational and environmental dimensions of stakeholder politics and conflict. Although these literatures differ in domain of concentration, they are alike in their concentration on the focal firm and need to examine the focal problem around which stakeholders position themselves. Foregrounding this approach I find that three intersections help conceptualize inter-stakeholder involvement: 1) Environmental decisions alter more than ecological issues; they also (re)configure local and regional land use potential along organizational lines. 2) A focus on boundaries among stakeholders suggests that internal processes impact negotiation among stakeholder, but that boundaries among stakeholders can shift given changing ecological and political circumstances. 3) Contestation for land tenure further involves discursive claims of interest, decision authority and decision influence. These practices of contestation are usefully explored through dialectic notions of hegemony which 'recodes' control as resistance, and justifies resistant positions vis-à-vis other discourses of control.

My purpose in this paper is to interrogate and develop a meaningful conceptual space where both organizational and environmental literatures contribute to a thorough understanding of stakeholder participation in issues of community growth and land management. Literature on environmental public participation typically demarcates National Environmental Policy Act (NEPA) of 1969 processes as distinct from other policy development processes with ecological implications (e.g., local planning of regional resource use and exploitation). At the same time environmental participatory management focuses on stakeholder's capacity to become involved and impact decisions within agency processes. As a result this literature tends to examine efficacy of a single organization in the gathering and management of public opinion and interest. Organizational stakeholder literature reflects a similar limitation as the primary goal is fulfilling interests of various constituent members of a single organization rather than examining multiple collectives' contribution to policy processes. If we are to more effectively manage complex, and often protracted, environmental conflicts we need to theorize beyond the single organizations management of multiple 'external' collectives, what is elsewhere called the *focal firm* approach, and consider networks of involvement in a *focal problem* (Putnam et al., 2004).

In this paper I contribute to the wide-ranging discussion of stakeholder involvement by exploring principle intersections between environmental and organizational stakeholder literatures. Connecting these literatures expands the scope of what constitutes environmental decision sites (Delicath, 2004) while remaining within boundaries substantively environmental in nature. Specifically the added framework of organizational stakeholder theory enables consideration of how environmental decisions, for example designating land public or using public land in a particular way, impact stakeholder relations and the ways social collectives respond to and constitute environmental decisions. These conceptual concentrations apply equally and aid in the demarcation of NEPA processes and a host of community or regionally based policy processes with environment impact. To begin, I briefly review environmental and organizational stakeholder literatures and suggest conceptual limitations to these literatures. These limitations provide entrée for further and more robust integration for which I suggest three principle dimensions including a conceptual model of stakeholder contestation for land tenure.

Literature Review

The notion of stakeholders has played a significant role in both organizational and environmental literatures since at least the 1980s and involvement in environmental policy extends to federal NEPA standards of 1969. These literatures maintain a concern for the ways multiple groups obtain and maintain participatory status through knowledge, authority and influence, legitimacy, and involvement through a variety of scopes including economic and ecological impact. Both literatures strain under the two sometimes competing demands of increased stakeholder involvement and increased organizational legitimacy.

These literatures differ, however, in subtle yet significant ways. Organizational stakeholder theory typically examines decision making and involvement possibilities within the realm of private business entities, especially corporations. Stakeholder considerations include management of organizational image for key groups impacted by these choices. This view foregrounds economic logic and function of organizations within the *triple bottom line*, highlighting the economic dimensions of *relevant stakeholders* and obscuring other *potential stakeholders*. As Logsdon and Wood (2000) suggest "a larger purpose of stakeholder theory is to help corporate managers improve the value of the outcomes . . . and minimize the harms to stakeholders" (p. 3). Stakeholder management thus is a form of boundary management: stakeholders are seen to hold potential threat to corporate objectives; management's job is to balance these threats by remaining economically viable.

Environmental stakeholder approaches operate predominately within notions of civic engagement, specifically how interested collectives (Hawes, 1995) collaborate regarding use, value, and allocation of ecological resources within and through public institutions (e.g., the Bureau of Land Management). Involvement in this domain has long been ambivalent among bureaucrats and citizens alike. As King et al (1998) suggest, "Although the political system in the United States is designed to reflect and engender an active citizenry, it is also designed to protect political and administrative processes from too-active citizenry" (p. 318). Participation from the citizen viewpoint is often a delicate balance of empowering interests but doing so in a way that does not co-opt ones' involvement for a predetermined decision (Hendry, 2004). Participatory practices thus become boundary maintenance for all sides involved as agencies need to demonstrate a gathering of public input and stakeholders need/want to voice their opinion but often lack the knowledge, time, and expertise to do so effectively (Kinsella, 2004).

Lack of clarity in the practice of participating arises from the unsettled nature of what constitutes *genuine participation*. If *genuine* means that citizens have full decision authority (as suggested by Arnstein, 1969), serious questions arise regarding implementation and accountability of environmental decisions as social collectives have similar potential to negate their environmental degradation as bureaucratic organizations (Peterson, 1991). If, however, *genuine* means more robust access, standing, and legitimacy for stakeholders (Senecah, 2004), then the central issue is *stakeholder influence* and not decision authority (Spyke, 1999).

This quandary is in part created from researcher's current conceptualization of environmental participation. Looking broadly over this literature, we find a considerable focus on a single federal agency's management of stakeholder input in policy decisions. Organizational stakeholder literature reflects a similar limitation as the traditional objective of organizational rhetoric is management of corporate image and solvency for salient internal and external groups. In this way stakeholder management emphasizes effectiveness and solvency in the administration of a single organization (Strauss, 1998) with less consideration for the social and environmental impacts of solvency. The basic thrust of both literatures thus adopt what organizational theorist Edward Lehman (1980) calls a utilitarian-pluralist deficiency as the primary purpose is gauging the effectiveness of a single institution rather than assessing networks of organizations or collectives (Hawes, 1995)[i].

Recent conceptual work on stakeholder involvement suggests movement away from this *focal firm* paradigm and toward analysis of a *focal problem* around which stakeholders position themselves (Putnam et al., 2004). This approach calls for added consideration of the inter-organizational linkages (Monge & Contractor, 2001; Monge & Contractor, 2003) and meaningful connection of internal and external communication (Cheney & Christensen, 2001). Through these considerations scholars can shore up the utilitarian deficiency described by Lehman and examine how multiple and various types of organizations contribute to environmental and community policy development. However, this trajectory complicates analyses because it calls not only for examination of multiple stakeholder involvement at a single site (see e.g., Depoe, 2004; McComas, 2001) but how involvement both constitute and cross distinct site boundaries.

The issue thus becomes how to understand stakeholder relations within and across organizational boundaries in a way that is conceptually rigorous but reflective of the complexities experienced by participants. Further examination of stakeholder literature in the environmental and organizational domains responds to this dilemma.

Organizational and Environmental Intersections

I propose three principle intersections between environmental and organizational stakeholder literatures. These aspects are certainly not the only possible connections but provide a beginning point for conceptual development. The first connection considers how environmental decisions alter local and regional inter-organizational relations by reconfiguring stakeholder interests regarding control of land. Intersection two focuses on boundaries among stakeholders and especially the way internal processes bear upon negotiation among stakeholders and the subsequent ecological impacts. The third intersection contains multiple dimensions but is generally focused on the politics involved in struggles for land tenure control. The conceptual framework further suggests meaningful utilization of hegemony as a dialectic of control and resistance (Mumby, 1997a). Given space limitations I briefly discuss these first two connections and spend considerably more time on the third.

Intersection 1: Environmental Decisions as (Re)Configuring Forces

Environmental decisions operate as external macro forces upon local communities by (re)configuring organizational land-use possibilities. Environmental decisions do not just alter ecological management but also local and regional organizational possibilities.

Much of extant environmental public participation literature is concerned primarily with how agencies (decision authority) gather public opinion (decision influence). In this way current literature takes participation as the end-goal and assesses institutional participatory barriers. This concentration brings environmental scholars to critique input potential of different programs including: public agency inclusion or exclusion of relevant stakeholders (Peterson & Horton, 1995); benefits and limitations of particular opinion-gathering mechanisms (King et al., 1998; Rowe & Frewer, 2000); and discursive structures within meetings (Depoe, 2004). Assessments of this nature are useful but provide little guidance for locals to cope with and benefit from changing configurations through environmental decisions. Because environmental decisions are external to community, change is often placed upon local collectives by non-local sources. Subsequently, inter-stakeholder relations become products of environmental decisions.

This conceptualization necessitates distinction between environmental and other organizational decision processes with environmental impact. Environmental meetings include a variety of programs like referenda, public hearings, opinion surveys, negotiated rule making, consensus conferences, citizens' jury panels, citizen advisory committees, and focus groups (Rowe & Frewer, 2000). I refer collectively to these mechanisms as *environmental meetings* because they include 1) negotiation among multiple stakeholders and 2) primary concern for complex ecologically-based relationships. A number of other policy processes entail association among multiple stakeholders but are different because ecological management is a secondary concern if at all. Processes of this domain include community and county zoning and planning where issues such as utility production/consumption, housing, infrastructure, and economic development are engaged (see e.g., Frank, 2000; Hibbard & Lurie, 2000; Keating & Krumholz, 2000). As scholars integrate environmental and other domains like organizational literature, decision characteristics (multiple stakeholders) as well as content (social vs. ecological) become pertinent. Communication scholars have fallen short of exploring community and regional planning processes (McComas, 2001), even though these processes contain equally important and equivalent ecological impact as environmental meetings.

Intersection 2: Decisions, Boundaries, and Accountability

A second focus within the environmental/organizational intersection concerns the issue of boundaries within and among stakeholders. Stakeholder analyses need to more thoroughly interrogate how internal organizing patterns impact negotiation among stakeholders. This intersection thus involves an element of response to environmental decisions as reconfiguring forces, but further indicates a concern for boundaries across stakeholder groups in that response. Simply put the processes and products of internal processes in all managing and participating organizations bear heavily on conflicts among stakeholders. As Deetz

(1995) suggests, organizations are like icebergs in that it is not big decisions but the sheer mass of seemingly inconsequential daily choices which make the most significant impact.

Concern for boundaries suggests two important considerations. First, external environmental positions are in large part derived from internal organizing processes. This perspective holds true for both organizations with authority status (federal agencies) and those relegated to influence (stakeholders). Agencies currently involved in the management of environmental processes are, at their very root, organizational entities, and their management is framed just as much by internal choices as external constraints (e.g., bureaucratic rigidity and legal mandate respectively). An example of this is evident in the Forest Service's considerable efforts to gather public opinion in the Roadless Initiative process (Walker, 2004). Although the process failed, the agency's capacity to alter the way they met NEPA standards demonstrates the internal dimensions of managing institutions. Conversely, then, it follows that the prominence of current participatory mechanisms is partly manifested by internal organizing dimensions.

However, scholars cannot assume simple lines of organizational demarcation in their concern for boundaries. Instead of taking internal processes as conceptually and practically divorced from external positions, we need to understand more and in what specific ways predominately internal operations impact external positions and processes. It is not enough to say that the Bureau of Land Management performed this or that practice because they are bureaucratically organized. Future inquiries need to question what exactly it is about bureaucratic structure that predisposes management actions. The same holds true for local and regional stakeholders. Present participatory literature tends to see collectives as somehow subordinate to the 'big, bad, bureaucracy' but collectivist and feminist organizations are not absent of tensions along organizational boundaries (Martin, 1990; Rodriguez, 1988).

Second, the issue of internal and external organizing suggests reconsideration of the critical question of *participatory gap* by placing environmental decisions squarely in the laps of members from all participating stakeholders. A dominant theme in environmental participation literature is the so-called "participatory gap" or disparity between disingenuous and genuine participation (Arnstein, 1969; Hamilton, 2004). Of particular concern is the potential for agencies to exclude or co-opt through management (control) practices. This, however, presupposes a fairly simplistic series of social relations within a bureaucratic model of engagement where the controlling agency is responsible for both their actions and the involvement of others. Building on Graham's (2004) notion of social communication as mutual responsibility, complicity of environmental policy needs to be placed with all managing and participating organizations and collectives. Current concentration on federal agencies, or corporations operating within federally funded projects, is a reasonable outgrowth of present management practices; however this concentration also obscures the environmental impact by various other organizations such as local business, city and county government practices, as well as agricultural and recreational collectives.

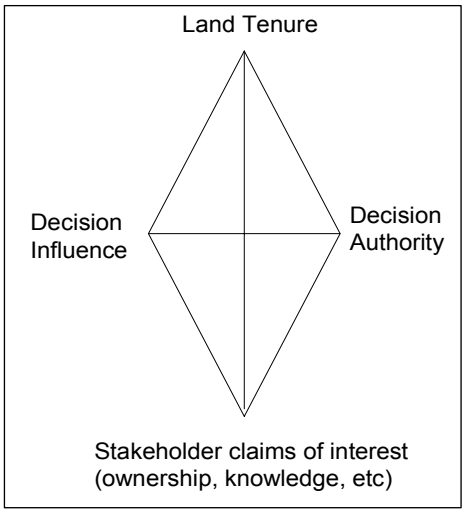
These additional considerations change how scholars assess involvement by reconsidering the complicity and accountability of all organizations in decision processes. And, these decision processes include spaces substantively environmental in nature (e.g., land management proper) as well as social, political, and economic decision spaces with ecological impact (e.g., housing and economic growth). It is of significant import to assess these various decision spaces upon the bases of who holds decision authority, who bends authority through influence, and whose claims control are evident on the socio-political spectrum of a particular issue. For example, local planning commissions do not hold authority to designate federal land but do control land-use development within incorporated boundaries (Hendry, 2004). Currently local organizations are seen primarily as agency victims when they too control decisions.

The first two intersections provide different ways of examining similar domains – how multiple types and levels of organized collectives rendezvous on the enviro-social front. What is needed is a conceptual framework tying these differing but equally import domains to one another. Below I develop such a framework through various elements of land control.

Intersection 3: Dialectic of Control for Land Tenure

Contestation for control of land-use offers insight into a variety of environmental conflicts in the United States. Principle variables to consider, for cursory purposes, include tenure, claims of interest, decision influence, and decision authority. Land tenure (not interests) is stakeholders' central objective and concern. Tenure denotes land and land-resource use, conservation and development and is the reason for participation.

Figure 1: Land Tenure



Claims of interest are means to gain tenure and thus are conceived as social constructions with powerful implications to political-economy (Galtung, 1988; Heydebrand, 1980; Marx, 1973) instead of natural and static structures. Inclusion of decision authority and influence are likewise necessary because these dimensions are closely intertwined in the process of managing land and the conflicts around such management. I utilize the concept of hegemony to explore these struggles.

Dialectical Hegemony and Land Tenure

In the following section, I argue that control and resistance are ontological issues in struggles for land tenure control. Correspondingly, hegemony and counter-hegemony are the epistemological ways of knowing within contestation for control. Control and resistance are constituent of the phenomenal world whereas hegemony and counter-hegemony are means of knowing that world. In these ways control is dialectic, or opposed to and contingent upon the capacity to legitimize discourse of control as a resistant position against other discourses. I first introduce the concept of hegemony and then discuss its applicability to the model on land tenure.

Hegemony

The concept of hegemony is chiefly associated with Antonio Gramsci (1994) and his theory of praxis. As a socialist and Marxist, Gramsci's concern lies in the forces behind societal collectives coming to believe in or otherwise conform to political and economic regimes not in their best interest (Grossberg, 2003; Hall, 2003). Through hegemony Gramsci kept materialist philosophy and emancipation alive by theorizing outside strictly Marxist postulations.

Subsequent work articulates contours of hegemony. Conceptual development of hegemony is anything but settled and uniform. Condit (1994) urges the structural study hegemony or the ways institutional components replicate elite interests. Others in critical organizational studies suggest a consent model of hegemony (Kondo, 1990) which variously aims at better understanding how those supposedly dominated acquiesce to structures of domination. Clair's (1993; 1994) as well as Townsley and Geist's (2000) work on sexual harassment reside within this school of thought which sees hegemony as partly enacted by the oppressed (see also, Mumby, 1988). Still others (see e.g., Deetz, 1995) argue for a resistance model yet have not described what moments such a structure entails.

Dialectical hegemony in organizations

In the realm of critical organizational studies, Dennis Mumby offers a view of hegemony rooted in Gramsci's notion of praxis (Mumby, 1997a). This repositioning sits between a critical modern and postmodern (Mumby, 1997b) position by exploring how some groups come to be seen as 'naturally' dominant and their interests universal (Mumby, 1988) but also considers the relationship between control

and resistance. All resistant positions and practices can likewise be read for their function to control. For example, Jordan (2003) emphasizes the way temporary workers' rhetoric acts as a site of resistance against organizational authority and simultaneously to empower their immediate interests. Similarly, Flemming and Sewell (2002) suggest that resistance in conventional organizations must be examined for 1) its subtle and less than obvious manifestations and 2) the way resistance and control intersect on different levels of organizational life.

This analytical course is limited, however, in that the notion of hegemony is for practical purposes defined through and equated with practices of control / resistance. Conflating hegemony with control writes epistemology or ways of knowing into the ontological nature of the world. Following this path of inquiry leads to the realm of ideological critique which necessitates researcher declaration of dominator and dominated (see e.g., Chiapello & Fairclough, 2002; McGee, 2000; Pitt, 2002). Nothing wrong with ideological critique but it contains conceptual assumptions questionably at odds with Marxist notions of dialectic (Marx, 1973; Nicholas, 1973). As Williams (1988) suggests,

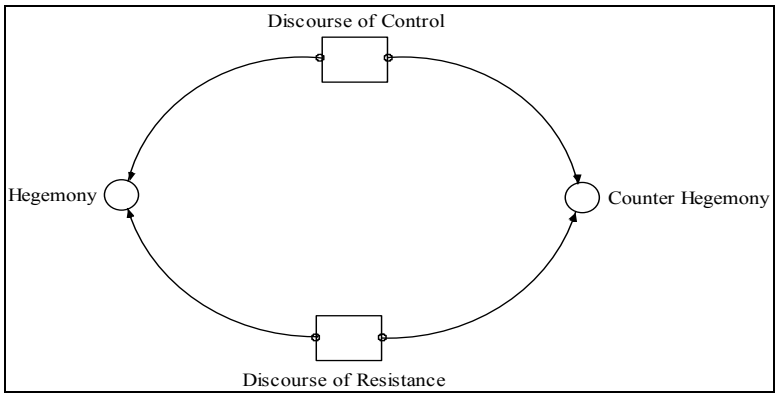
> Hegemony is then not only the articulate upper level of 'ideology,' nor are its forms of control only those ordinarily seen as 'manipulation' or 'indoctrination.' It is a whole body of practices and expectations, over the whole of living: our senses and assignments of energy, our shaping perceptions of ourselves and our world (p. 1159).

If hegemony is simply an inevitable tension between and among discourses of control and resistance, there is little room to 1) read control other than through hegemony (see e.g., Thompkins & Cheney, 1985) or 2) claim the role of counter-hegemony in contested terrain.

This heap of conceptual confusion is, I believe, partly clarified by the following position. Issues of control and resistance are ontological claims and are based upon discursive experience or the nature of the phenomenal world (Anderson, 1996). Correspondingly issues of hegemony and counter-hegemony are epistemological claims or coming to know the world. As Williams (1988) argues: "[Hegemony] does not just passively exist as a form of dominance. It has continually to be renewed, recreated, defended, and modified. It is also continually resisted, limited, altered, challenged by pressures not at all its own" (p. 1161). This trajectory raises significant question concerning the role of counter-hegemony, its moments, its components, and its function as a force within struggles for control. Such questions are currently unanswered by classic (Williams, 1988) as well as current (Mumby, 1997a) critical scholarship.

Taking control / resistance as ontological and hegemony / counter-hegemony as ways of knowing that world, we can think of struggles for control based on dis-sensus rather than consensus and involving all dimensions in an ongoing cycle (Deetz & Mumby, 1989).

Figure 2: A dis-sensus model of discourse and hegemony.



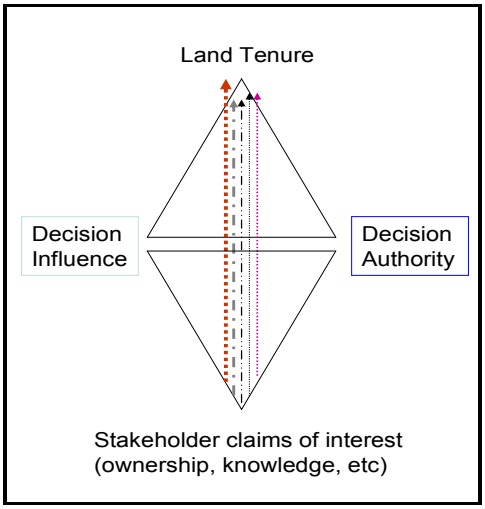
Conceptually, discourses of control pass through hegemony to achieve resistant status and counter-hegemony to justify this resistance as right in opposition to other discourses of control. They emerge from counter-hegemony as justified resistance to that discourse community but are taken as control by other discourse communities. Consequently, another stakeholder discourse enters the political scene to control and resist other discourses, and the cycle continues.

Through this cycle, conflicts of interests become moral conflicts (Pearce & Littlejohn, 1997) but not because their interests are simply and rationally incommensurable but because their discourses are simultaneously oppositional and contingent. This conceptualization is akin to Hawes' (2004) ethnomethodological view of conflict and difference but operates at a broader level of stakeholders as discourse communities. Having dwelt long on these issues, I now suggest possible applications to contestation for land tenure.

Contested land tenure

Above I suggested that contestation for land tenure involved all the following: decision authority, decision influence, claims of interest, and control of tenure. Figure 1 contained a single claim as its purpose was introductory. Environmental stakeholder conflicts constitute a complex interplay between interests and tenure, authority and influence.

Figure 3: Complex interplay of dimensions for tenure



Below I discuss three dimensions key to this interplay of dimensions.

Dimension 1: Multiple claims of interest

Contested situations regarding land tenure are first and foremost defined by multiple claims of interest – different ways of manipulating and exploiting resources for collective benefit. Situations marked by a single claim are more aptly defined by domination and not contestation (similar to power versus domination; Foucault, 2000). Highlighting struggle for control among stakeholders, however, should not suggest these spaces are defined by a rational negotiation of "objective" interests but that discourses function to enact contestation and control in particular ways (Deetz, 2005; Deetz & Mumby, 1989).

The emphasis on function of discourse provides an important distinction from much extant literature on discourse and interests. Currently there are two dominant approaches towards interests within the critical-interpretive genealogy. The critical modern view suggests that researchers can accurately identify stakeholder interests. This is especially evident in Marxist and neo-Marxist critique (see e.g., Althusser, 1996; Hall, 2003; Horkheimer, 2000; Marx, 1973). The postmodern perspective acknowledges (even celebrates) researcher vulnerability in accurately identifying stakeholder interest (see e.g., Chen, 2003; Shome & Hegde, 2002)[ii]. The limitation to the first line of thinking is that scholars are elitist miners of truth making claims of hegemony and counter-hegemony suspect from the start because the affair may be little more than researcher fantasy. Because notions of class are researcher derived, scholars run the risk of missing the mark regarding the class within which participants reside or identify themselves (Hall, 2003). This is evident, for example, in a good portion of feminist organizing literature where experiences of institutional sexism hinge on experiences of being sexed (see e.g., Fine, 1993; Fletcher, 1994; Pringle, 1989). The danger in the second line of thought is that the inability to claim any stakeholder interest completely neuters critical scholarship to challenge current structures which institutionally suppress some

groups. If scholars are incapable of identifying interests, there is no room to suggest where hegemony is occurring.

An alternative and more fruitful route is articulated within critical organizational scholarship. This research trajectory heads in a somewhat different direction asking instead what logics and interests stakeholder discourse supports regardless of whether stakeholders intend to support those interests or not. This path of inquiry examines the ways discourse functions to establish some interests as dominant and others as subordinate. As Deetz and Mumby articulate:

> Rather than pretend that anyone is in a good position to know what anyone's (let alone everyone's) true interests are, our questions have been different. They might be summarized as follows: Are the structures of interest representation such that self-interest can be understood and articulated? Do different interests have an equal opportunity for impact on decision making? (Deetz & Mumby, 1989, p. 29)

The central foci of environmental stakeholder assessment becomes the interests discourse supports and the contestation it accomplishes. For example, we can imagine community residents supporting land use policies which 'keep things the same as they always have been'; this discourse is often an appeal to maintain a sense of tradition and stability but it likewise (intentionally or otherwise) supports particular uses of land resources like agriculture or logging. The analytical point is that discourse needs to be read for the claims of interest engaged by various stakeholders, not assessment based upon researcher presumed interests. An example is evident in the resistance to comprehensive community planning in many locations of the United States (Association, 2002). While local discourse often resists the change represented in 'forced' government rules (Tauxe, 1995) and supports interests of stability and tradition, this discourse often (and ironically) leads to exponential change (Hibbard & Lurie, 2000).

The basic proposition in this dimension is that scholars begin reading environmental conflicts as accomplished through multiple claims to control land tenure. Further, the focus on discourses of interests provides a means to assess the relative accomplishment of those positions. Just because different interest groups compete for tenure is not to say that they do so with the same degree of favor. An increase in ecological legitimacy does not equate to the toppling of business interests; it only denotes more explicit contestation among diverse stakeholders.

Dimension 2: Decision Authority and Influence

The second dimension emphasized in Figure 2 is the distinction and interplay between decision authority and influence. As previously discussed, inquiries in environmental participation tend to adopt a focus on a single organization's (typically a federal agency) efficacy to gather opinion and decide among interest groups given the formal authority granted to that agency (see e.g., Carman, 2002; see e.g., Fiorino, 1990). Collaborative approaches (Daniels & Walker, 2001; Depoe, 2004) and similar programs such as mediated modeling (see e.g., van den Belt, 2004) partly resolve these issues as they increase the opportunity for stakeholders external to decision authority to define environmental problems and feasible / desirable solutions.

What is far less investigated and of considerable interest is how authority and influence among both public managing (e.g., the Bureau of Land Management), private (e.g., local business), formal non-governmental organizations (e.g., the Sierra Club), and a host of locally based collectives and associations (ranchers and chambers of commerce) interconnect in ongoing management situations. A good portion of the literature on forms of organizing suggest considerable difficulty on the part of these alternative forms when they participate with bureaucracies (see e.g., Rodriguez, 1988). At the same time government bureaucracies are under considerable pressure to consider multiple (sometimes opposing) group interests (Peterson & Horton, 1995) and are likewise constrained by the mandates handed them (Schwarze, 2004).

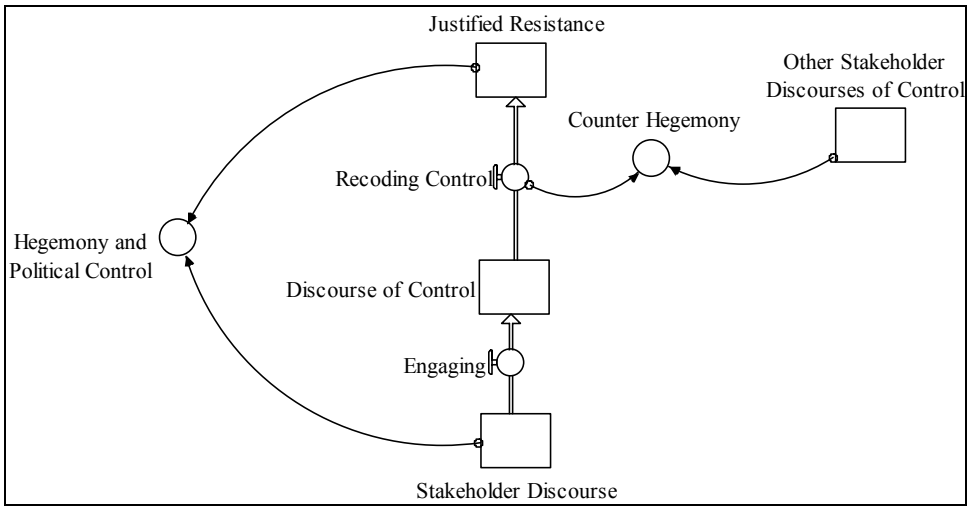
We find, then, a need to better understand how discourses of authority and influence interconnect with one another in ongoing stakeholder negotiation. Complex environmental situations are first defined by multiple stakeholder claims which constitute the contested terrain. But as tenure becomes contested terrain, issues of authority and influence come to bear on negotiation. In contested situations decision authority is given to the (seemingly) neutral mediating position such as the federal government and external stakeholders are granted influence. These bureaucratic and technocratic structures are not without their own limitations to form sound ecological practice. Take for example the ecological impact brought about from Department of Energy management of nuclear facilities (see e.g., Depoe, 2004; Hamilton, 2004), and

similar consequences from private bureaucracies (see e.g., Pezzullo, 2003). At the same time focusing solely on the (mis)management practices of these organizations obscures the ways external participants influence bureaucracy by placing demands upon it through day-to-day choices (Perrow, 1986). Overemphasis in either direction creates non-dialectic analyses by 1) not considering the practices in one domain as it relates to another, or 2) holding the assumed 'dominant' power responsible for the other's decisions. Take, for example, Hendry's (2004) analysis of Western Mobile in New Mexico. I agree with her that Western Mobile effectively turned NEPA into a decision justification mechanism. I disagree, however, with Hendry that the local planning board was somehow duped into their allowances to Western Mobile. I am less inclined than Hendry to hold Western Mobile accountable for a decision made by a local planning board. Planning commissions, not a corporation, maintain decision authority over zoning consistency. In fact, Hendry's analysis points to the complex interplay of authority and influence. Within the domain of local planning regulations it was Western Mobile who practiced influence and the planning commission who employed authority (although they arguably abrogated their authority). In short, authority and influence are more complex a single agency maintaining authority and others influence; all stakeholders practice degrees of both authority and influence and are likewise accountable for these practices.

Dimension 3: Dialectical discourse

The multiple interests model (Figure 2) suggests that contested situations involve multiple claims of interest striving for control of land tenure. Figure 3 unpacks the specific dimensions involved within each line of discursive practice and especially the interaction between them. Using Stella© modeling software to conceptualize discursive practices, we can think about contestation involving the following.

Figure 3: Practices of contestation



Each stakeholder constituency has a stock or availability of discourse regarding specific uses of land (logging, preservation, scientific discovery, recreation, agriculture, and so forth). Members of stakeholder collectives draw upon this discourse by engaging it. Thus discourses of control are engaged by stakeholders and constitutive of conflict. Engaging discourse establishes the presence of control on the part of a (all) stakeholder(s). The presence of such control subsequently proceeds through a 'recoding' process where hegemony operates between group A's and group B's discourse. By establishing the presence of other discourses of control, groups A's control is internally interpreted as resistance to these other discourses. Here the epistemological dimensions or the process of *coming to know* the world impact this discourse of control to *recode* or alter its interpretive characteristics as a discourse of resistance. Hegemony in this way operates as a mediating experience between stakeholder A's and stakeholder B's discourse because resistance needs the other discourse just as much as it opposes it.

Acknowledgment of the tensions between and among discourses fulfills a dialectic view of hegemony beyond what is typically considered in organizational studies: the dialectic scholars like Clair (1994) and

Condit (1994) fail to capture and the kind of dialectic involved in a resistant model suggested but not theorized by Deetz (2005) and Mumby (1997a). After discourses of control are recoded as resistance, counter-hegemony operates to justify these resistant practices. All stakeholders pass through epistemology to justify their resistance (recoded control) as legitimate in response to other discourses of control. Importantly this experience loops back around by supplying available to stakeholders. By continually enacting discourse in the same manner (Weick, 1979), stakeholders effectively shut off other potential interpretations of ecological and eco-political issues and thus reproduce (Deetz, 1995, p. 98 - 99) opposition within conflict.

Conclusion

My efforts in this paper have been directed at a more nuanced reading of environmental and organizational literatures in regards to stakeholder involvement. I find the integration of these literatures useful both conceptually and practically as is evident in the intersections posited. These intersections, I hope, strengthen the conceptual development and practical understanding of participatory processes of bona-fide situations. For example, from the locals' point of view, and especially from the organizational capacity within specific locales, environmental decisions often mark the beginning of change instead of the end-goal.

Scholars might make meaningful connections between traditionally recognized environmental policy processes and other social and economic process and their ecological impact. Further, additional concentration on organizational boundaries may help scholars consider the way internal organizing processes bear upon negotiation among stakeholders. Finally, the integration of these literatures helps conceptualize and unpack the complex and dense systems of practices occurring in contests for land tenure. Here literature clearly demonstrates a concern for issues of authority, influence, interests, and tenure. Discussion of these dimensions, however, are somewhat fragmented and lack connection to their counterparts. Scholars might realize more traction in analyses of how these components interplay with one another.

Notes

[i] In this paper I frequently use the terms collectives and organizations to demarcate slightly nuanced phenomena. Organizations typically denote what are generally accepted as contained units of action where collective refers to broader social collectives who are predominately informally yet powerfully orchestrated practices. The boundaries between these forms has been unclear since at least the mid 1970's and Weick's notions of organizations as organizing units.

[ii] This should not suggest any clear line of delineation between critical modern and postmodern approaches but clusters of assumptions.

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Wilderness in the American Imaginary: Media Constructions of Scientific and Political Knowledge

Catherine A. Collins
Susan R. Kephart
Willamette University

This essay explores the concept wilderness in U. S. newspapers from 1995-2004 from a rhetorical and framing perspective. The mythic landscape of the West becomes the "American imaginary," depicting wilderness as either a rich storehouse to be consumed by heroic conquerors and harvested by agrarian stewards, or as a sacred museum full of priceless treasures, i.e., majestic nature. The paper addresses media conventionalization of the concept wilderness and how it defines our past, present, and future relationship to a shared landscape, i.e., our progressively global environment. We argue that the frames the media choose reflect the knowledge that they offer as most important, hence truthful. Mythic concepts like nature, wilderness, or landscape are socially constructed; thus, some kinds of knowledge are privileged over others in decisions about the environment. Our numerical and content analysis reveals scientific frames as prevalent over both political and general wilderness frames. Finally, we address the question of whether news media in the last decade since the Earth Summit supported greater environmental advocacy, or led instead to a devaluing of the importance of environmental protection.

Myths are "the grammar and rhetoric of the social order. They both regularize the flow of information, and convey feeling. Like the calls of geese in the night, appeals to collective myth serve to remind us that we are together and heading in the right direction" (Burch 1971, 57). Nowhere is this more true than in the American mythic landscape—i.e., *wilderness*. In what some have called our "Western" myth, countless writers have conceived America as the new Eden, an open space into which one might flee the corruption of place, cities, governments, and individuals. "Once the Atlantic was crossed, moreover, the name *West* was transferred, step by step, to whatever part of the continent lured men on. . .to the unexplored space behind the next natural barrier, past the Appalachians, the Mississippi, the Rockies" (Fiedler, 1968, p. 26). The wild, untamed beauty of the continent inspired reverence and an appreciation of the sublime. For these Americans, the wilderness was the New Eden, a sacred place, a landscape in which to define themselves and their place in the universe. In the Western Myth the landscape is unbounded, a wilderness that tests the individual. In this mythic landscape, we are given a chance for rebirth, a pristine space in which hard work and individual effort yield material rewards.

This mythic conception of the continent and of the wilderness west of civilization has always been central to American national identity (e.g., Carpenter 1977). "America from its settlement has relied on the frontier for its identity; the rugged frontiersman conquering the wilderness" (Brown 2004, p. 275). This landscape and the American narrative also provide the central premise for Turner's frontier thesis (1938), Henry Nash Smith's (1970) discussion of the American West as symbol and myth (1978), David Noble's eternal Adam and the New World as Garden of Eden (1968), Nash's meditations on wilderness (1967), and Jewett and Lawrence's conception of an American monomyth (1977). The Western myth is reflected in three narratives: one story is agent centered, focusing on the frontiersman who confronts wilderness and conquers it; another envisions wilderness as scene, evoking an appreciation of majestic and untamed nature, larger than any individual; and, in a third, humans domesticate the wilderness through agrarian efforts and are in turn shaped by their relationship with nature. Each conception of the American landscape is a dynamic social construct that continues to evolve. Significantly, the Western myth and its supporting

narratives have survived and are continually reflected in our art, literature, governmental policies, media accounts and individual and collective perception of the environment. However, "no identity or myth is a perfect unity. . .a pristine essence. . . .[Myths] always are defined and articulated in multiple, contending, and unpredictable contexts" (Katerberg 2003, p. 554).

We explore the concept wilderness, noting in particular how its portrayal by the news media is shaped by three western narratives: that of wilderness as the unconquered frontier, the agrarian garden, and the sacred pristine landscape. The paper addresses media conventionalization of the concept wilderness and how it defines our past, present, and future relationship to a shared landscape, *i.e.,* our progressively global environment. Since much of the public debate about the environment emerges in news media, one of our goals is to discover the kind of knowledge major U.S. newspapers feature in discussions of environment. We argue that the frames the media choose reflect the knowledge that they offer as most important, hence truthful. Pedynowski (2003) further reminds us that mythic concepts like nature, wilderness, or landscape are socially constructed; thus, some kinds of knowledge are privileged over others in decisions about the environment.

> In a world with multiple realities of 'nature' that are constructed by diverse groups with differing motivations and access to power, decision-making in environmental management can become a contest over whose knowledge is 'right', or in Foucault's sense of the word, whose knowledge can produce the most powerful claim to 'truth'. (Pedynowski 2003, p. 738)

Our long-term interest in popular media representations of wilderness began with media framing of biodiversity, including its scientific underpinnings. Though not always explicit as a privileged concept, biodiversity is a key element of the wilderness experience, whether one envisions a pristine landscape rich in species or, alternatively, an expansive frontier so entangled with vegetation as to render it impassable. Thus, we analyzed news accounts that employed both biodiversity and wilderness as key constructs.

Three earlier studies emphasize how our conception of the environment is reflected in the use of the scientific term biodiversity in the popular media, from its introduction by scientists in 1996 through 1991, just before the Earth Summit. One scientific frame, Race Against the Clock, predominates (61% of stories), but the next two most frequent frames, Environment vs. the Economy (23%) and Political Wrangling (16%) stress political rather than scientific aspects of biodiversity (Collins & Kephart, 1995). Even Race Against the Clock is only marginally scientific; it epitomizes species extinction as a crisis focus in popular news accounts. Frames that would represent a more realistic scientific conception of biodiversity, *e.g.* ecosystem services, are largely ignored in the popular media even as they garner increasing currency in the scientific media (Kephart & Collins, 1998). The 1992 Earth Summit changes the nature of environmental stories. Daily coverage during these two weeks employ scientific frames 0-12% of the time, but political knowledge clearly predominates, evident in 40% to 80% of the stories (Collins & Kephart, 2001).

The current study of popular media's conception of wilderness began with an assumption that writers would privilege political over scientific knowledge, given the increasing politicization of frames for biodiversity and the inherently conflict-driven nature of media accounts. We were interested particularly in the role science plays in the construction of a popular understanding of wilderness. The purported objectivity and methodologies of science "make scientific knowledge among the most valid and credible to access in a decision-making process" (Pedynowski, 2003, p. 749). We asked: What narratives historically define our current understanding of wilderness? What frames signal a call to environmental action? Have these frames changed in concept or emphasis over time? Answers to these questions lead us to a discussion of the wilderness myth followed by an explanation of how the frames combine with the western narratives to construct our understanding of wilderness and its role in policy decisions.

Method and Critical Assumptions

In the last twenty years framing has gained centrality in studies of the social construction of reality in the media. Goffman (1974) first defines frames as organizational, classificatory, and interpretive acts through which individuals "locate, perceive, identify, and label" (p. 21) events and information. Gamson (1989) contends that meaning is constructed when facts are "embedded in a frame or story line that organizes them and gives them coherence, selecting certain ones to emphasize while ignoring others" (p. 157). Social constructions of reality are contestable because they are selective: "Far from being stable, the

social world is . . .a kaleidoscope of potential realities, any of which can be readily evoked by alternating the ways in which observations are framed and categorized" (Edelman 1993, p. 232).

By the mid nineties, a stream of research had linked framing, language, and narratives to media constructions of meaning (Tuchman, 1978; Schudson, 1982; Nimmo and Combs, 1983; Bennett and Edelman, 1985; Ettema and Glasser, 1988; Rachlin, 1988; Graber, 1989; Roeh, 1989; Gamson and Modigliani, 1989; Iyengar, 1991; Liebes, 1992; Pan and Kosicki, 1993; Edelman, 1993). In essence, news stories involve "a choice, a way of seeing an event. . .[and a] screening from sight" (Gitlin 1980, p. 49) that privileges particular understandings of reality, in this case environment.

This study examines media portrayal of wilderness in stories that also invoke biodiversity as a named construct. By juxtaposing two concepts that are tied to public perception of the environment, we feature their potential interaction in news stories, and further evaluate how media interpret and reconstruct the associated scientific concepts into political and social realities. The concept wilderness is particularly amenable to this type of rhetorical content analysis: 1) it is associated with clear narratives that define the western mythic perception of new, uncontaminated domains, and 2) these stories have vacillated over time, purportedly shifting away from humans as conquerors and exalted stewards set apart from other organisms to humans as co-inhabitants of a natural landscape that sustains an entire web of life.

We conducted a content analysis of new stories from 1999-2004, using a full Lexis-Nexis search of stories in U. S. newspapers, enabling us to definitively locate the entire population (n=959) of major news accounts for stories mentioning both wilderness and biodiversity. The numerical analysis included a random sample of 200 stories stratified across years to provide even coverage of the 10 year period and partitioned into two 5-year segments that allowed us to evaluate any major changes in coverage for 1995–1999 *versus* 2000–2004.

The combined expertise of the co-authors, a rhetorical theorist and a biologist, permitted a unique approach to content analysis that led to an initial list of 12 scientific concepts and 29 rhetorical story frames for potential inclusion (12 science, 8 political, and 9 wilderness frames). The frames provide organizing ideas and contexts in a manner consistent with theoretical constructions (Goffman, 1974; Tankard, 1991). To determine intercoder reliability, we first read a subset of stories for frames noted in our earlier research on biodiversity in the media (Collins and Kephart, 1995; Kephart & Collins, 1998), and for new frames. This sample included 10% of the random sample of news accounts from each year, and an additional group of stories pre-dating the study period (1990-1995). Thus, coding was based experientially on items in media and scientific discourse (i.e., a different universe of content *sensu* Tankard et al., 1991). This analysis yielded an intercoder reliability score of 93% (Scott's pi; Stempel & Westley, 1989). We coded all 41 frames and concepts as variables in n = 197 stories. In our summary we include only common and unambiguous elements present in greater than 5% of the news stories; n = 29 frames or concepts. We used parametric statistics as appropriate to evaluate the varied importance of coded elements over time and for frame categories (scientific, political, wilderness).

Wilderness as a Construct in the Media

A brief review of the western myth and its associated narratives contextualize this research.

Conquering the wilderness: the frontier narrative

Panay (2004) suggests that America's character is tested by adversity, that being American means occupying "a perilous frontier space, one that brings with it the anxiety of new trials and challenges to be faced in uncertain and unsettling futures" (p. 209). It is precisely this uncertainty and constant challenge that forges rugged individuals. The sense of duty and commitment to nation and one's destiny arise from the individual's experience of overcoming nature's tests. "The value of individualism was expanded to mythical proportion through the imagery of primitivism. . .This fiction stresses the elements of individual loneliness and alienation in man's primal conflict with the forces of nature" (Burch, 1971, 75-76). Natural leaders emerge from the conflict between individuals and nature, confident of their abilities to lead because overcoming hardship reveals the depth of their determinism. In this mythic landscape, the individual who survives is heroic. So, too, is the Nation heroic as it impresses itself on the wilderness as part of its "manifest destiny."

Having conquered the wilderness, the frontiersman could extract from it the natural resources it contains, the gold, trees, game or other bounties. A container metaphor reflects both the conception of the

land—something that holds valued resources, and the appropriate human response to it—something to be ignored other than as a place of storage. In competition, the resources are infinitesimally more important than the landscape that gives them up.

Domesticating the wilderness: The agrarian narrative

Once conquered, the wilderness, first in the East and South and eventually in the far west, was tamed, the land plowed and curtailed. The frontier narrative—humans conquering the wild—is transformed into an agrarian narrative—domesticating the land. James Lanman captures the mythic hero of the agricultural West in *Hunt's Merchants' Magazine* (1840):

> The agriculturist, removed from the pernicious influences that are forever accumulated in large cities, the exciting scenes. . .passes a quiet and undisturbed life, possessing ample means and motives thoroughly to reflect upon his rights and duties, and holding a sufficient stake in the soil to induce him to perform those duties both for himself and for his country (p. 142).

Having conquered the wilderness the yeoman farmer lives off the land, interdependent with it, working the soil to bring forth its potential. Brown (2004) concludes, "life in the west is more natural, wholesome, and harmonious because one is in close communion with nature" (p. 281). A new metaphor for the land emerges, *i.e.,* the landscape as a garden that must be tended to be productive, and periodically renewed from germplasm in still extant wild forms. Humans work the land as its stewards in a dynamic relationship borne of struggle and perseverance. Nature is valued for its direct use potential rather than for any inherent intrinsic value. If cared for properly, the land yields valuable products. Respect for it is premised on actual and future benefits for humankind.

Appreciating pristine wilderness: The majestic nature narrative

The myth of the west is both a place and a process (Katenberg 2003, p. 553). As place it is the wild vistas and open space the pioneers and early explorers discovered; as a process, the west is transformative, creating who we can become. The essence of this narrative is reflected in John Muir's writing in 1898, "Thousands of tired, nerve-shaken, over-civilized people are beginning to find out that going to the mountains is going home; that wilderness is a necessity; and that mountains. . . are useful not only as fountains of timber and irrigating rivers, but as fountains of life" (p. 21). It is also visible in the art and literature of a developing nation. Thomas Moran, Albert Bierstadt, and Frederic Church painted landscapes that exemplify the mystic sense of the nation in their renderings of Yosemite, the Grand Canyon, Yellowstone, and the Rocky Mountains. The American landscape was the subject of photographers Carlton Watkins and later Ansel Adams. Writing about Watkin's photography, DeLuca and Demo (2000) conclude, "Facing such an overwhelming scenic panorama induces a profound reverence for nature. Moreover, by effacing his orchestration of the image, Watkins rendered 'living natural scene' onto an edenic referential frame" (p. 251). The wilderness in this narrative is refuge from urban life and iconic of a quality of life based on an appreciation for beauty, the visual aspect of the landscape.

The metaphoric shift from container to garden is insufficient to capture the sacredness of wilderness in this third narrative of the mythic west. Scenic elements dominate a narrative in which a pristine place is untouched by humans, except the individual experiencing nature at that moment. Sacred wildernesses are transformative, allowing the individual to re-invent him/herself in the presence of the sublime.

Wilderness construct in news stories

Combined, the three competing narratives give substance to the western myth, reflecting an "environmental imaginary" and its conception of nature (Peet & Watts, 1996, p. 263). Importantly, since these competing visions in our imaginary are also sites of contestation, they become the stuff of good newspaper stories. The construction of the wilderness in news stories begins with naming this place. "The kinds of meaning we invest in land. . .affect not only how we interact. . . but also how we come to terms with the history of our involvement with particular places, and the human and nonhuman lives that depend upon the environment of those places" (Powici, 2004, p. 74). Do we value the environment for its own sake? Do we need to "save" or "improve" nature? Are humans a part of the environment? Answers to these questions reveal the contested nature of the wilderness in the American imaginary and point to inevitable clashes among stakeholders who attempt to influence policy. An array of binaries emerge, *i.e.* wilderness/civilization, conservation/preservation that demands, as Powici argues, contextualization and

interpretation. The social construction of the wilderness also changes over time; what was once vermin to be eliminated, *e.g.* wolves, is now in need of protection and reintroduction.

Research reveals increased attention to broad environmental concerns and changing conceptions of the wilderness. Prior to Earth Day 1970, the media practically ignores the environment, and by the 1980s primarily highlights public controversies. Mass communication, organizational, and rhetorical studies of the environment focus on natural disasters, conservation disputes, stakeholder debates, and risk assessment. (Mazur, 1981; Friedman, 1981; Freimuth & Nevel, 1981; Oravec, 1981, 1984; Glynn and Tims, 1982; Luke, 1987; Peterson, 1991, 1995; Rentz, 1992; Williams & Treadway, 1992; Lange, 1993; Moore, 1993; King, 1996; Depoe & Condit, 1997). As Lange notes, "conflict has become a quintessential feature of the American political drama" (1993, p. 239).

Current research now focuses on the nature of the social construction of wilderness and its emergence in environmental management policies (DeLuca & Demo, 2000; Daley, 2000; Schwarse, 2002). Research in geography (Pedynowski, 2003; Morgan, 2003; Smith, 2004; Walker & Fortman, 2003; Drake, 2004), economics (Waites, 2004) leisure and recreation studies (Steadman *et. al.* 2004), literary analysis and philosophy (May, 2003; Powici, 2004; Bonnett, 2003), cultural studies (Panay, 2004; Brown, 2004; Katerberg, 2003), biology (Alagona, 2004), and environmental studies (Wickersham, 2004; Johnson *et. al.*, 2004) reminds us that "the meanings and connotations associated with wilderness are not inherent or absolute, but rather any label assigned to wilderness necessarily reflects the subjectivity of the perceiver" and wilderness "is the creation of a given set of people at a particular point in time with particular cultural, social, and political interests" (Johnson *et. al.* 2004, p. 612).

Wilderness Myths and Frames 1996-2004

Our numerical and content analysis reveals scientific frames as prevalent over both political and wilderness frames. Of frames occurring in 25% or more of news stories, two are scientific in focus (Pristine Wilderness as a Unique Treasure, 28.4%; Humans as the Cause of Environmental Destruction, 27.4%), and one is political (Environment *vs.* Economy, 26.9%). Of the top 15 frames, Political Wrangling (18.3%), and two wilderness frames, Recreation *v.s* Wilderness (17.8%) and Wilderness and Psyche (17.2%) were less common but still of major importance. From an environmental perspective, it is encouraging that Environment and Economy emerges as a widely recognized perspective, present in nearly 15% (14.7) of the news stories (e.g., reflecting ecotourism as a viable option). Yet it still ranks below frames dominated by human use of the environment, *i.e.* those focusing on recreation or the American psyche. The most surprising result is that Race Against the Clock occurs in only 9.1% of these news stories, yet it was the most common frame in stories from 1986-1991 (Collins and Kephart, 1995). The frames Environment *vs.* Economy and Political Wrangling exhibit similar frequencies in our earlier study (Collins and Kephart, 1995) and in the current analysis. Below, we explore examples of the various frame types and their relative importance in wilderness stories.

Science frames

Pristine Wilderness as a Unique Treasure is frequently employed during the last decade, representing 27.9 % of the scientific frames scored. Moreover, this frame increases from 22.6 % (1995-1999) to 32.4 % of science frames in the last five years (2000-2004; $X^2 = 3.5$ $P = 0.06$). Here wilderness denotes "areas little changed by civilization" ("Next" 2000, p. D7), but it is powerfully adept at changing us. One story explains the need for wilderness as innate in us. "We need open places to get reacquainted with ourselves, to get a feeling of freedom, to get reinvigorated" (Barnes, 1996, p. 1). A bush pilot describes one such unique treasure, the Arctic National Wildlife Refuge, as "a sacred, spiritual place," "a divine oneness" (Dial, 2001, p. 1K). The sentiment is closely linked with the Wilderness and Psyche frame that sees unspoiled nature as characteristic of both wilderness and our transformed individual and national identity. The frame often invokes the need for experiential knowledge, "the kind that may push the public to move (or preserve) mountains" (Wallace, 2004, p. M5).

Ironically, Unique Treasure not only reflects the majestic nature narrative but can become the starting point for the frontier narrative. The transformation arises as individuals overpower the obstacles the wilderness imposes on westward migration. One can climb a mountain to experience its sublimity or to prove oneself capable of the ascent.

Combined with the Unique Treasure frame, the Humans as Cause (of wilderness devastation) frame challenges the frontier narrative with its focus on conquest. This frame also supports the majestic nature narrative, representing 26.9% of the science frames in our analysis, but with little change in frequency over the two 5-year periods (X^2, $P > 0.05$). The Humans as the Cause frame frequently focuses on the shrinking wilderness that "We have a sacrosanct duty to protect" (Wilson, 2003, p. 1) but are busily destroying. Metaphors such as "the heavy hand of past human actions" (Rivest, 1999, p. A9) or human "predatory" behavior indict human direct use values. This scientific frame is often juxtaposed with the political frame pitting Environment *vs* Economy, yet the frames also call the reader to assume their "sacred obligation to restore what we once nearly ruined" ("Then," 1999, p. 12).

Of the remaining scientific frames present in 5% or more of the news stories, animals or noteworthy plants become "poster children" for garnering environmental support (*i.e.* Fuzzy Bear frame) in only 10.7% of stories. Similarly the concepts "web of life" (9.1%), whether or not humans should interfere to protect wilderness (9.6%), and the importance of the functions provided by wilderness and biodiversity (7.6%) all received scant attention in news stories during 1995-2004. Two of these frames (Interfere or Not, Web of Life) decrease slightly in importance with time, by 6.4%, and 3.3%, respectively, whereas Fuzzy Bear increases somewhat (3.4%), but the differences are not statistically significant (X^2 test $P > 0.05$).

Scientific concepts

Although less influential than a frame, scientific concepts in news stories do influence the public's understanding of environmental issues and their recognition of the role of science over politics in shaping wilderness policy. Although 40% of the news stories in this 10-year analysis include the basic scientific terms ecosystem, community, or habitat, less than 5% of them mention genetic diversity, a concept known to influence population persistence *vs* extinction. In addition, of the 12 scientific concepts coded, only three occur in ~20% or more of the news stories, besides the basic terms already noted. Many stories (33.6 %) isolate species rarity and extinction as an issue, whether noting the presence of the endangered red-cockaded woodpecker as it "flitted through the sunbathed canopy" or arguing the futility of preserving species already destined for extinction. Unfortunately very few stories mentioning wilderness also recognize the concern over using mitigation in place of preserving intact ecosystems (10.2%), the danger of exotic and invasive species (9.6%), or the importance of conserving biodiversity hot spots (6.1%). What does emerge as focal points for scientific or political wrangling are concepts tied to natural resource management (31.5%), conservation or preservation strategies (20.8%), and ancient forests (19.8%). Together these topics and sustainable forestry comprised 40% of the scientific concepts in the news stories mentioning wilderness and biodiversity. Only 8.6% of news stories highlight Native Americans as an important element.

Political frames

Environment *vs* Economy is the single most important political frame in wilderness-related news stories, representing 34% of the political frames (Figure 2b). In contrast to Environment *and* Economy (18.6%), it pits environment and wilderness against the all-important economy in a win-lose proposition, and lacks the transformative power of linking a biodiverse environment to long-term human survival and sustainable economies. What is remarkable, however, is that the more environment-friendly version increases significantly in prevalence among political frames over the two 5-year periods, from 23 to 30% (X^2=4.0, $P = 0.04$).The contrast between these two ways of framing wilderness/environment in relation to the economy is exemplified in several key stories in our content analysis. The Environment *versus* the Economy frame is often linked to urban development; construction of homes and malls become threats to open space—to a lifestyle based on living with the land—the agrarian narrative. This frame also epitomizes the conflict over preservation *vs* extraction in our forests, *e.g.*, "When the Forest Service looks at the forest, all they see is board feet. . . .Their analysis of timber sales ignores the most important elements: clean water and air, opportunities for relaxation and recreation, and homes for thousands of species" ("Metro: Virginia" 12/18/02, B3).

Political Wrangling also frames environmental stories as quintessential conflict narratives replete with hidden agendas, name calling, and political manipulations. Not surprisingly, Political Wrangling represents 23.1% of politics frames, emerging as second in importance only to Environment *vs* Economy. One writer sees Political Wrangling reducing "environmental conflict resolution to some namby-pamby process of split-the-difference compromise, without principle or purpose" (Trautwein 1/21/99). Metaphors of battle,

fighting, and theft of the state or nation's natural jewels are frequent (*e.g.*, Izakson 2/27/99), as are references to game playing and charades.

Of the remaining political frames present in 5% of more of the news stories, some lambaste or brand pro-wilderness environmental advocates as "extremists" (10.3% of political frames, Fig 2b), regret that too few dollars exist to fund wilderness protection (8.3%), and contend that the U.S. fails as a successful problem-solver on environmental issues (5.8%).

Wilderness frames

Two very different themes dominate wilderness frames, the desire for Recreation *vs* the Environment (26.1%) and that of Wilderness and Psyche, *sensu* the American identity (25.4%). The major conflict story focuses on recreational needs *versus* the need for unspoiled, unpopulated wilderness. Even when the story is not about competing desires, use is contrasted with preservation. Most of the time, this frame centers directly on conflict and is cast as one side irrationally responding to proponents of an alternative perspective. The Wilderness *vs.* Roads frame is clearly related to this perspective, and constitutes 14.2% of the wilderness frames category, giving a combined value of 40.3% for these road and recreation based frames. Wilderness *vs.* Roads commodifies nature as a playground. An advocate for off-road vehicles casts environmental groups as well-funded, backed by attorneys who are happy to file lawsuits "that lock the public out of public lands" and supported by media stories that report the worst examples of off-road vehicle use (Johnson, 2001, p. A12). Those who oppose such recreation decry how vehicles pollute the soil and destroy sensitive ecosystems, contrasting the fragility of nature with human trampling.

The Wilderness and Psyche frame is consistent with this sense of untrampled nature that back-country hikers and wilderness enthusiasts aspire to enjoy, but it is also linked to our national identity: "public lands allow us to penetrate America's soul, deep into its past, right to the wild core of the continent" (Trimble, 2004, p. L1). One backpacker captures this sense of awe toward the wild: "the scenery is beautiful. But it's also something about wondering where I'll sleep. . .or if I'll get water that seems to take life back to its more elemental form" (Kolhaase, 2002, p. 24). Support for the majestic nature narrative describes the wilderness as beautiful, silent, still, a place of escape and solitude, a cultural treasure, a wild place "caught in a noose of urban development" (p. 24). The place of the forest in the American psyche often incorporates the debate over preserving ancient forests; as one activist notes: "The forest is owned in common by all Americans;" its fate should not depend on the economic interests of a few or political waffling by bureaucrats in government agencies (Stockton, 2002, p. A1).

In contrast, the third most prevalent wilderness frame, Human Desires *versus* the Environment (18.7%), casts the environmental conflict as a series of choices, frequently employing war metaphors that defy win-win solutions. Capitol Hill and courtrooms are imaged as battlefields, the law as an assault weapon, and debating human desires and environmental needs necessitates donning armor. One proponent speaking from within the agrarian narrative claims environmentalists have tried to "expunge humans from the countryside. . .This is rural cleansing pure and simple" (Mullman, 2001). Comparing water rights restrictions to ethnic cleansing leaves little room for developing common solutions between competing stakeholders. The frame polarizes human and environmental needs and casts humans in the role of villain, despoiling nature for selfish reasons. In some cases human presence is seen metaphorically as "an infection that will require strong medicine to cure" (Verrengia, 2002, p. H6). This agrarian narrative pits stewards of the land against both bureaucrats entrenched in political wrangling or selfish and extremist environmentalists. In the majestic nature narrative, selfish desires spoil nature for everyone and hasten its extinction thus denying a sacred right to future generations. Even in its mildest forms, the frame shows no respect for alternative views, and sharply criticizes the inappropriateness of our choices. One editorial contrasts the outcry against proposed road closures with silence on plant extinction and the loss of genetic uniqueness that took millions of years to evolve," as beautiful Eden vanishes from the Hawaiian Islands (Krist. 2000, p. B6).

Of the remaining wilderness frames, only Education as a Solution to environmental problems was present in 5% or more of news stories (15.7%). This might give us hope that readers will understand that the more we learn about wilderness and natural ecosystems, the better we will become as planetary stewards and advocates of sustainable management. Unfortunately, however, stories utilizing this frame decrease dramatically over the two 5-year periods, from 25% to 10.5 % of wilderness frames while Recreation *vs* Wilderness increases from 20.8% to 29.1% (X^2=6.4, P = 0.01). The slight increase in the more environment-friendly, Wilderness and Psyche is encouraging but not statistically significant (P >0.05).

Conclusion

Media framing privileges particular understandings of reality, and in so doing creates an "environmental imaginary " that further prescribes the "forms of social and individual practice which are ethically proper and morally right with regard to nature" (Peet and Watts, 1996, p. 263). Thus, the way we metaphorically explain our environment makes a difference (Hellston, 1999). The mythic landscape of the West becomes the "American imaginary," depicting wilderness as either a rich storehouse to be consumed by heroic conquerors and harvested by agrarian stewards, or as a sacred museum full of priceless treasures, *i.e.,* majestic nature. Perhaps what makes Muir's writings so powerful over time is his ability to merge these narrative concepts of wilderness, as a garden to be tended or a wild, sacred space. He "blends two seemingly antithetical registers: [the human-centered] discourse of the pastoral. . . and the Romantic vision of the natural sublime where nature stands for that which transcends the human" (Powici, 2004, p. 78).

The varied views of wilderness as common heritage, sublime refuge, or a rich web of interdependent organisms all transform the human response to it and the acceptability of strategies for managing this valued landscape. Visitors to Rocky Mountain National Park reveal a plethora of definitions of wilderness and reasons for valuing it, but one thing is certain, "Whatever the experience of wilderness means, there first has to be a wild place" (Pendergast, 2004). Thus "some forms of environmental depletion are reversible. . .[but] wilderness and biodiversity may be lost forever." (Passell, 1995, p. 1).

So the question remains: Have news media in the last decade since the Earth Summit supported greater environmental advocacy, or led instead to a devaluing of the importance of environmental protection? Our analysis lends support for both. News stories are abandoning the once popular fear-driven frame of time running out, focusing instead on conservation strategies for rare species, sustainable forest management, and "green economics," a newly emerging accounting perspective that reflects the synergism of Environment and Economy. Even the notorious World Bank now places more money into "intangible investments like education and wilderness preservation and less into pouring concrete and clearing forests" (Passell, 1995, p. 1). The emphasis on Recreation *vs* Wilderness is not all bad either, since we are learning to tread more softly in this unique treasure we call wilderness, and to measure our individual and collective "ecological footprints." However, while humans are now portrayed as taking causal responsibility for the destruction of biodiversity, much less understanding exists in news media of the ecological services that this web of life provides to ensure our common future. Moreover, if we fail to make environmental activism "relevant to people, communities and their concerns" (Santaniello, 1995, p. 3B), or to resist constant efforts to make wilderness stewardship the centerfold in a war between "environmental extremists" and "exploitative developers," we may someday only be able to recall that "in the beginning there was wilderness…."(Chase, 1997, p. 9D).

Clearly the dually important tasks of educating the public on the role of biodiversity in sustaining healthy ecosystems and of promoting environmental advocacy face difficult challenges, including the desire for off-road joy-riding, federally subsidized mining and grazing rights (Dobson, 1997, p. B6), and many other interests "whose financial stake is much higher than that of some lowly rancher with an annoying wetland on his property" (Horsey, 1995, p. E1). Given such powerful economic drivers, "the crusade to get the federal government out of the business of protecting and preserving the land is [truly] an expression of the worst kind of selfish individuals" (Horsey, 1995, p. E1).

Yet news stories also reveal what a few concerned scientists and citizens can do, whether protecting one of the most pristine Floridian "keys" as a state botanical site (Kresl, 1995, p. 1G) or unifying diverse community groups to promote a collective conservation mission (Santaniello, 1995, p. 3B). In Washington, mailers offering a chance to adopt an acre of forest land for $100 yielded "$12,000 in pledges" ("Environmentalists," 1997, p. 5A). One forest supervisor notes the importance of activism: "The world is run by people who show up. . .you can either be involved or you can give it to me. . . .and I can guarantee you won't like it." (Loftus, 1997, p. 7A)

Trimble so aptly concludes that our public lands "are the least visited, least celebrated, least guidebook-heavy landscapes in our nation. . .and. . .belong to all of us. A last treasure, a last frontier" (2004, p. L1). Open sacred space is still foremost in the American conception of wilderness, as are the resources therein. "Our forests of towering. . . .500-yr old trees are cathedrals in their own right…revered for spiritual reasons. . .for the habitat they offer, …for aesthetic reasons. . .and economic value. (Schneider, 1997, p. A1). "Here you really do feel like you're the first person who walked through the woods" (Kresl, 1995, p. 1G).

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Visual Enthymemes of Alaskan Wilderness: Television News Coverage of the Arctic National Wildlife Refuge

Terence Check
St. John's University

Alaska's Arctic National Wildlife Refuge (ANWR) has been the site of contested meanings over what constitutes wilderness. Environmentalists have promoted wilderness protection for the refuge, arguing that it is the last undeveloped area in North America. Proponents of oil exploration, however, have challenged this rhetorical definition and argued that drilling is compatible with wildlife. This debate has been mediated largely through television newscasts. This essay examines network news coverage of the Arctic National Wildlife Refuge and argues that a visual enthymeme present in these reports favors the environmentalist perspective, even when the spoken narrative reinforced industry's position. Based on this analysis, the essay recommends the continued use of the "wilderness" trope in land disputes.

To those struggling to preserve wilderness areas, the crown jewel may be the Arctic National Wildlife Refuge (ANWR) in Alaska's northern plain. "For conservationists who would draw the line around this vast home for caribou and musk oxen," wrote Timothy Egan (1991) in the *New York Times Magazine*, "all other environmental battles are dwarfed by this epic struggle over the Arctic refuge. It may be the last big land fight of its kind" (p. 23). Even more than other natural areas, public perceptions about ANWR are dependent upon rhetorical definition and mass media framing, given the region's remote location. This has resulted in a rhetorical battle over the very definition of wilderness. For example, Senator Joseph Lieberman has called the area one of "God's most awesome creations" (Goldberg, 2005) while the *Wall Street Journal* has suggested that ANWR "is basically a frozen desert, wind-swept and bleak even in summer" ("Oil and Caribou Can Mix," p. 85). Attitudes about the refuge—and the corresponding policy that emerges from those attitudes—are thus influenced by the social construction of this natural area through mass media. "A 1.5 million-acre swath of wilderness that few Americans have ever visited has been transformed into a political abstraction," wrote Michael Grunwald (2002) in the *Washington Post*, " a blank canvas for advocates to cover with portraits that suit their arguments" (p. A03).

One of the key sites of this rhetorical struggle has been network television newscasts. Despite the onset of the internet, many Americans still get their news from television, and since television news produces both visual and verbal cues, it has special potential for influencing views on issues. Media scholars have noted the importance of news in priming viewers-- that is, in influencing their decisions about what issues are important (Ansolabehere, Behr, and Iyengar, 1993). Other media scholars have taken the argument further by suggesting that television news can influence people's attitudes toward issues, particularly those they have no direct experience with, and on those issues that can be presented in a visually dramatic way. Writing about the importance of visuals in television news, Conrad Smith (1992) argues, "American television journalists believe news video is a separate language with its own grammar and syntax, a visual language that has considerable power to influence how viewers perceive coverage of a person or event" (p. 32). Despite the potential of television news to frame perceptions of environmental issues and places, communication scholars have generally been dismayed by the portrayals of environmentalists and environmental issues in network news (see, for example, Schlechtweg 1996). Such mainstream television portrayals typically frame environmentalists as disruptive radicals and the issues they promote as elitist challenges to the dominant economic system.

Since the late 1980s, the fate of the Arctic National Wildlife Refuge has been the subject of several television news stories, including special segments—such as ABC's "American Agenda" or NBC's "In Depth"-- that have devoted extended coverage to the issue. It would be tempting to assume that such

stories work to reinforce ideals of exploration and consumption, thus favoring industry. The recent legislative outcome concerning ANWR—a March 16, 2005, vote by the United States Senate to open ANWR for oil drilling and exploration – would seem to affirm mainstream television's hegemonic preferences. Furthermore, the Senate vote raises new questions about the political strength of the environmental movement in America, at a time when the "death of environmentalism" is already being debated. Critics have suggested that one of the movement's problems is its reliance on the rhetorical trope of "wilderness," a maneuver, these critics contend, that reinforces a dualism between culture and nature (Vance 1997).

So, did television news coverage of ANWR work to support industry's view or, worse yet, reinforce perceptions of wilderness that ultimately undermined the effectiveness of environmental appeals? In some cases, yes: seeking to "balance" their stories with competing views, network correspondents sometimes quoted industry representatives who had no training on wildlife issues. But this analysis also found that the visual depictions of ANWR in network news stories favored the environmentalist perspective. After analyzing network television news stories about the Arctic National Wildlife Refuge, this essay makes two main arguments: First, that a "naturalistic enthymeme" present in network news coverage of ANWR helped to reinforce visually a narrative that favored environmental perspectives. This was the case even when the verbal narrative presented the side of industry. Second, based on this analysis, the essay contends that visual depictions of "wilderness" should be encouraged and inserted into environmental debates, even when they have the potential to reinforce nature/culture dualisms that critics have suggested are an inevitable outcome of the wilderness trope. While the environmental movement can adopt new strategies, it should not abandon appeals to "wilderness," especially those that are visually based.

The Struggle Over the Arctic National Wildlife Refuge

In 1960, Secretary of Interior Fred Seaton designated 8.9 million acres of coastal plain in northeastern Alaska as the Arctic National Wildlife Range. In the late 1970s, the U.S. House of Representatives passed legislation designating the entire Range as wilderness area, but the Senate insisted that part of the Refuge be left available for potential future oil and gas exploration should the nation deem it necessary to do so. In 1980, President Jimmy Carter signed the Alaskan National Interest Lands Conservation Act (ANILCA), which more than doubled the size of the protected area to 19.6 million acres and renamed it the Arctic National Wildlife Refuge (ANWR). However, a section of the original Range was not designated as wilderness under ANILCA. This 1.5 million acre area, bordering the Beaufort Sea, is commonly known as the "1002 Area," and is named after the section of the ANILCA that reserved this area for potential development. Section 1003 of ANILCA stated that any oil and gas exploration and production would require the authorization of Congress (Booth 1988; Speer 1989).

By the beginning of 1989, ANWR drilling seemed imminent because environmental groups could not persuade lawmakers that drilling posed an ecological danger to the coastal plain. After all, oil drilling had been occurring in Alaska without incident. The grounding of the Exxon Valdez in 1989 changed this mood. At first President George Bush seemed to heed the warning and fulfill his promise to be the "environmental president". With Energy Secretary James D. Watkins, Bush announced plans for a "national energy strategy" on July 26, 1989, that promised to emphasize conservation and energy efficiency. However, the Iraqi invasion of Kuwait in August of 1990 jolted oil consumers and re-introduced ANWR as a policy option. In May of 1991, the Democratic chair of the Senate Energy and Natural Resources Committee, J. Bennett Johnson, unveiled energy legislation which was highly favorable with the goals of the Bush administration. Meanwhile, the President threatened to veto any energy bill that did not include ANWR drilling. Lawmakers readied the bill for a debate on the Senate floor on November 1, 1991. Suddenly, a Senate filibuster led by Democrats prevented debate over the energy bill. Led by Tim Wirth of Colorado, a strong advocate of environmental issues, members of the filibuster claimed it was needed to call attention to environmental concerns, which they felt the bill abdicated. Senator Paul Wellstone of Minnesota then introduced an amendment to cut off debate on ANWR, and there were not enough pro-drilling votes to defeat the filibuster.

Bill Clinton and Al Gore won the White House in 1992, and they pledged to defeat efforts to drill in ANWR. Although Republicans won majorities in the House and the Senate during the midterm elections of 1994 and re-introduced a provision to open ANWR as part of a Balanced Budget Act in 1995, President Clinton vetoed the bill. Since Republicans did not have enough votes to overcome a Clinton veto, the

prospects of drilling in ANWR were unlikely, but Clinton decided against designating ANWR as a national monument, which some environmentalists had hoped he would do prior to leaving office in 2001.

When George W. Bush assumed the presidency in 2001, drilling advocates had new hope that ANWR would be opened for oil exploration and development. Alaskan Senator Frank Murkowski, a long-time proponent of drilling, helped craft the National Energy Policy Security Act of 2001, which directed the Secretary of the Interior to "establish and implement a competitive, and environmentally sound oil and gas leasing program for the exploration, development, and production of the oil and gas resources of the 1002 area of the Arctic Coastal Plain" (Rosenblith). By the Spring of 2002, those who wanted to protect ANWR were again forced to use a filibuster to prevent drilling in the refuge. Bush repeatedly included provisions calling for oil exploration in ANWR as part of the annual budgets he submitted to Congress, but each time these efforts failed as pro-environment forces rallied to defeat the efforts.

Then in November 2004, President Bush was re-elected to the Presidency, and the Republican majority in the Senate grew by four seats. Under pressure from the White House and Alaska's Senators, Senate Budget Committee Chair Judd Gregg of New Hampshire attached a provision to a 2006 budget resolution calling for drilling in ANWR. Unlike most legislative maneuvers, the budget bill was exempt from filibusters and needed only 51 votes to pass. While pro-environment lawmakers had narrowly defeated a similar move in 2003, this time they did not have enough votes to prevail, and the Senate decided on March 16, 2005, by a 51-49 vote to include Arctic drilling in the budget (Blum 2005; Little 2005). The final budget bill has yet to be passed as of this writing, but Marnie Funk, a Republican spokesperson for the Senate Energy and Natural Resources Committee, was optimistic about the outcome. "This is our best shot ever at getting ANWR," he said (Little, 2005).

The Framing of Wilderness

Critics have long asserted that language has the power to shape perceptions of reality. Our whole reaction to a situation, contends Langer (1995), "depends on how we manage to conceive the situation--whether we cast it in a definite dramatic form, whether we see it as a disaster, a challenge, a fulfillment of doom, or a fiat of the Divine Will" (p. 56). Stone (1988) argues that shared meanings encourage and "motivate people to action and meld individual striving into collective action. Ideas are at the center of all political conflict. Policy making, in turn, is a constant struggle over the criteria for classification, the boundaries of categories, and the *definition* of ideals that guide the way people behave" (p. 7, emphasis added). Definitions are one of the many ways people use language to convey thoughts and beliefs about people and situations (Schiappa, 1993). Burke (1966) suggests that "[d]efinition itself is a symbolic act" (p. 44) because it decrees that a person should single out a situation as one thing rather than another.

It should come as no surprise, then, that journalists could favor a particular perspective depending on how they have framed a news story. "Because there are a hundred different ways to tell each story," Conrad Smith (1992) reminds us, "journalists must always select one way of structuring the available information into a cohesive and, if possible, compelling narrative. Each choice the journalist makes precludes other possible ways of arranging the information that might have told just as accurate and compelling a story from a different perspective" (p. 23). In particular, television news relies on dramatic visuals to convey a given narrative. Generally, these visuals can be more important than their accompanying narration, since "viewers of television news develop their notions about news primarily on the basis of an organization of visual images rather than the more informative oral reports" (Altheide and Snow 1988, p. 201). However, communication scholars who have studied depictions of environmental issues and events in television news have focused primarily on the verbal content of these news stories (Shanahan and McComas 1999). Scholars who have studied images in environmental news stories (DeLuca 1999; DeLuca and Peeples 2002) have focused on image events constructed by activists in promoting an issue or agenda. There has been little research on how mainstream television news works visually to construct perceptions of "wilderness," and whether these perceptions work to advance or undermine environmental arguments.

This study examines several network television newscasts about the Arctic National Wildlife Refuge from 1989 to 2001. Specifically, I will do a close analysis of two of these news stories, an ABC News "American Agenda" report televised on February 8, 1989, and an NBC News report televised on February 17, 2001. The ABC report was telecast prior to the Exxon *Valdez* oil spill and before most Americans even knew about the controversy over the Arctic refuge. The NBC report came after George W. Bush assumed the presidency and when political pressure to drill in the refuge was mounting.

Analysis of ABC "American Agenda" Report

The issue of Arctic drilling emerged as a significant policy dispute in the late 1980s when the first President Bush suggested that ANWR should be opened for oil exploration. ABC News devoted a segment of its "American Agenda" series to this issue on February 8, 1989. I have divided this report into four major sections: Opposing Views on Wilderness, History of the ANWR Controversy, Drilling and the Environment, and the Conclusion.

I. Opposing Views on Wilderness.

One of the criticisms of news coverage of environmental issues is that journalists tend to be event-driven, attributing problems to specific actions of individuals, corporations, or government without a broader investigation of systemic causes of environmental problems (Wilkins and Patterson, 1990). In the introduction to this report, ABC News anchor Peter Jennings emphasizes that the Arctic refuge is a "test" of the new Bush Administration. This language focuses attention on the political battle over ANWR, not its ecological merits. In this examination of political gamesmanship, Jennings directs the emphasis on who will win the battle, who makes the best moves as part of this game, and what the political outcome will be.

While the introduction by Jennings works to frame ANWR as a political battle, the first ten shots of the news story function to dramatically shift the viewer's attention to the ecological merits of the refuge. Potter begins his story with a quote from the Sierra Club, and the accompanying visuals provide spectacular images of the geological and biological features of the refuge. Initially, in shots 2-3, viewers see stunning images of expansive plains with mountain peaks in the background. An image from an elevated location reveals a valley below, punctuated by a stream and basking in sunlight. Such images conform to cultural expectations of sublime wilderness: the setting is majestic and seemingly devoid of human intrusion and development.

Potter uses a war narrative in his description of the "pitched battle" that conservationists will have with President Bush over ANWR, and at this point in the story the expansive skyline of the refuge is punctuated by technology, as viewers see a helicopter flying through the sky (shot 6). However, the helicopter seems like an intrusion in this special place, both visually and with the buzzing noise of its blades. Although framed as a battle, the scenery is not congruent with cultural images of war-torn landscapes. Wars tend to occur in cities, with their crumbling buildings and burned-out cars, and seem inappropriate in this setting.

Potter's description that the refuge "teems with life" is reinforced visually by scenes of nature that are prominent in many of these images (shots 4, 7-10). Viewers witness a sheep family walking with two babies, followed by a baby caribou seen trotting in what may be some of its first steps. These shots evoke sympathy, especially when the young animals are highlighted. The first several shots of the refuge confirm that it is a landscape filled with wildlife, thus providing powerful visual evidence to deflect charges that ANWR is a barren wasteland. The visual images reinforce what Finnegan (2000) calls the "naturalistic enthymeme," where visual imagery of nature is thought to be a reflection of objective reality. "The photograph has long been associated with faithfulness to nature. Although we know that photographic images do not duplicate the world exactly, we do assume that the camera documents actual facts as they appear before the camera." (Finnegan 2000, p. 240).

In shots 11-12, the industry perspective that ANWR is a "frozen desert" is presented, along with video footage from the Alaska Oil and Gas Association showing a flat, wind-swept winter landscape. Potter repeats industry statistics claiming that the refuge contains three billion barrels of oil, but he provides no context for these numbers (What is the basis for this prediction? Is that a large amount? How much of that can be recovered? How much is that in comparison to what Americans consume?) Still, the images are largely unpersuasive, since they have been preceded in the story with visuals confirming ANWR's rich biological diversity. Despite cultural associations that something that is "frozen" is devoid of life or meaning, the use of industry's own rhetoric is insufficient to overcome the numerous shots that viewers have already seen of a bountiful refuge.

Conforming to standards of news objectivity, a representative from each side of the debate is presented in shots 13-14. Senator Ted Stevens of Alaska, a longtime proponent of drilling, speaks first and says that ANWR is the last place in North America to look for oil in large quantities. Stevens's assertion is immediately followed by a soundbite from George Frampton of the Wilderness Society, who suggests for the first time during the broadcast that ANWR is a "wilderness" that will be lost forever if drilling occurs. Since Frampton follows Stevens without interruption from Potter, it seems as though he is directly refuting

Stevens's statement. In his short quote, Frampton affirms the cultural construction of wilderness as a place devoid of human intrusion or development.

II. History of the ANWR Controversy.

This section of the report describes why ANWR became a political controversy. Potter notes that the ANWR issue "blew open in the last twenty-four hours of the Reagan presidency. The day before he left office, his Interior Department finished a proposal to Congress to make it easier and cheaper for oil companies to drill in the Arctic refuge." Immediately in this section of the report, viewers may become suspicious about former President Ronald Reagan's intent, as Potter suggests he made it easier to drill in ANWR on the day he left office. Although Potter provides no details of these actions (What had Reagan done? How had he made it easier and cheaper for industry? Why had he done that?), viewers might surmise that Reagan was unable to get these proposals through normal channels and had to abuse his executive authority to give industry a midnight hour gift.

More significantly, the report presents an unflattering portrayal of President George Bush, both visually and verbally. Bush is quoted as saying he is an environmentalist, but Potter frames this as a campaign promise broken by a politician who has reverted to an "old" (i.e., tired, discredited) position favoring industry. Near the end of this section, Bush is presented uttering his famous quote that caribou rub up against the warm Trans-Alaska pipeline and have babies. Although the quote is meant to represent Bush's belief that caribou can co-exist with oil development, it serves as a synecdoche for the Administration's larger policy position on ANWR, which is framed as ridiculous and laughable. When Bush originally made his statement in February 1988, he was widely ridiculed for it, and even pro-drilling advocates distanced themselves from the argument that caribou get affectionate with oil pipelines. Visually, Bush undermines his own statement by shrugging his shoulders and displaying a sheepish grin, with his poise undermining his own ethos.

The most important aspect of this segment is the scene of caribou crossing a road in Prudhoe Bay. This visual is juxtaposed against Potter's description of Bush's argument that a "predicted disaster" in Prudhoe Bay did not happen. Although the visual is meant to convey industry's point that wildlife and development can co-exist in Alaska, the image is actually quite jarring, since the mountain range and wild streams that viewers were introduced to in the previous shots of ANWR have now been replaced by a harsh industrial scene featuring oil wells and trucks. Unlike the previous scenes which seemed to show the caribou grazing peacefully on the grasses of the coastal plain, the animals in this scene are running away from the trucks in the road, as if they are scared of them. As the caribou flee to safety, a "DANGER" sign is seen in the foreground. Although this sign is warning drivers to maintain a 15-foot clearance to overhead lines, the sign serves as a metaphor for how a once-beautiful landscape has now been transformed into something dangerous and hazardous to life. Communication scholars have noted the potential for visual images to carry persuasive power that often contradicts the verbal content of the spoken narrative (Stein, 2001). In this case, the pro-development narrative is undermined by images that represent a harsh contrast to the sublime images of nature seen earlier in the telecast.

III. Drilling and the Environment.

In this section of the ABC report, Potter presents the competing views of both sides of the issue. Stevens is shown in his office showing Potter a piece of sandstone that he believes is dripping with oil. He asserts verbally that "caribou don't want to eat that oil," which is meant to imply that since the animals do not have a use for it, then it ought to be used by people. Like Bush's statement, the quote reinforces the perspective that oil drilling advocates are not experts on the wildlife. More important, the visuals that viewers see immediately after the quote undermine Stevens' argument. Viewers hear the sound of a bulldozer and a nighttime scene of what appears to be a large oil rig at Prudhoe Bay. Smoke and emissions are seen coming from the site. The nighttime scene carries with it connotations of illegal work being conducted under the cover of darkness. Scene 30 features oil rig workers in a close-up, and one of them is grinning, just as Potter discusses global warming in the oral narrative. The grinning worker conveys the unintended message of greed and indifference, especially as Potter discusses the larger environmental problems facing the planet. Finally, viewers see one more industrial scene (shot 31) of a fire and a large plume of smoke, presumably from Prudhoe Bay, at the same time that Potter discusses how "searching for oil" may be "threatening the wilderness." Because people equate particular images with certain culturally understood meanings, images have the potential to "show us the unspoken" (Messaris, 1997, p. 221). In

this case, the visual imagery of industrial sites belching smoke into the air reinforces cultural associations of industry as dirty, which is at odds with assumptions about wilderness being pristine.

One of the typical complaints about news coverage of policy issues is that news tends to focus on episodic events, and rarely examines larger systemic causes of problems. Scholars who have examined environmental reporting have been especially dismayed by this characteristic of mainstream news. However, in this report, Potter suggests that there is a connection between this issue and the larger problem of global warming. Michael Fischer of the Sierra Club is quoted as suggesting that Arctic drilling and efforts to reduce global warming are "two inconsistent, incompatible concepts." In this report, the reporter does link oil drilling to larger environmental concerns and implies that society should reduce its consumption of oil.

IV. Conclusion of ABC Report.

In the conclusion to the report, Potter again suggests there are opposing views on this controversy, and notes that a legislative and legal battle between proponents of drilling and conservation groups looms on the political horizon. As he concludes his report, viewers see four parting shots of the refuge, all of which reinforce the cultural perspective of a pristine wilderness. Viewers see an aerial view of the vast refuge, then a closer aerial view of six caribou, and then a panoramic view of a majestic landscape with blooming flowers in the foreground and a river in the distance. Finally, the report ends with a closer view of caribou with a river in the foreground. All of these are images that support a "naturalistic enthymeme" that the "real" truth is that the refuge contains bountiful wildlife represented by the presence of the caribou.

The ABC News report was televised early in 1989, before the Exxon Valdez oil spill and the legislative battles over ANWR that occurred in the 1990s and since George W. Bush took office in 2001. This essay will now examine a news report from the NBC Nightly News from February 17, 2001. I have divided the report into the following sections: Defining Wilderness, Native People, and Caribou and Oil.

Analysis of NBC Nightly News Report.

I. Defining Wilderness.

The verbal and visual introduction of the NBC News report is much less favorable to environmental interests than the ABC News report previously analyzed. Seigenthaler begins the report with language that suggests oil drilling is both necessary and compatible with preserving the landscape. He calls the refuge "sprawling," and compares its size to the state of South Carolina. This analogy implies that drilling would have only a minimal impact on the refuge as a whole. He emphasizes the economic benefits of oil drilling, saying it would supply the nation's oil needs for months. Although environmental groups often suggest ANWR would supply enough oil for only a six month supply given current U.S. consumption rates, the tone of Seigenthaler's voice implies that this is a long period of time. More significant, the large image behind Seigenthaler shows a windswept, winter scene, with what appears to be a lone fox walking across it. This visual suggests that ANWR is barren and bleak, devoid of most wildlife.

NBC correspondent Jim Avila begins his report with both verbal language and visual images that reinforce the perspective favored in the introduction—that ANWR is an undesirable place, at least when valued using criteria of wilderness as sanctuary and a place of pristine beauty. Avila describes the refuge as "vast," once again implying that drilling would not affect most of the landscape. He calls the region an "empty outpost" which suggests it is devoid of animal life. The pictures confirm these assertions, as viewers see empty plains covered with snow. Unlike the sunny pictures of the refuge in the ABC report, this segment shows only a dim sunlight, suggesting that life cannot survive under these conditions. When the report finally does show pictures of animals in scenes 3-5, viewers see a distant shot of a single ox and then a distant shot of a fox. Avila describes the fox as "lonely," implying that it has no companions. The beginning of the NBC report dramatically reinforces industry's perspective that ANWR is not worthy of wilderness protection.

However, the tone of the report shifts starting in scene 5-6, when viewers see a close-up of a polar bear and then a flock of geese in flight. These images are dramatic. Unlike the previous images of wildlife, these images are shot in extreme close-up, suggesting that if one looks closer (at the visual images as well as the policy issue), one will discover another side to the story. The images of wildlife filling the television screen are incongruent with the previous images of a barren landscape. There is a sudden shift in the verbal description of the refuge as well. A wildlife specialist is quoted as suggesting this place is "America's

Serengeti," and Avila himself now refers to ANWR as the "ultimate wilderness" and an "unspoiled frontier." Viewers then see close-up shots of caribou, then a larger shot of the caribou that fills the television screen. Again, these images contradict the earlier ones, suggesting that ANWR has the qualities of a wilderness if only one looks for them.

II. Native People.

This section of the report is significant, as the focus now shifts to the cultural consequences of oil drilling. Avila suggests that the caribou that migrate through ANWR have an essential spiritual link to the native Gwich'in people who live in the region. Now the report has become more than a description of energy vs. the environment. Avila has linked social concerns to the debate over oil drilling. He suggests verbally that "multinational oil companies" want to drill for oil, implying that foreign companies would profit from oil drilling at the expense of native cultures. Neets'ali Gwich'in Indian spokesperson Sara James appears, and compares her tribe's plight to the Plains Indians and buffalos of North America, evoking sympathy and guilt for what audience members may feel was a national tragedy. James sits in what appears to be a simple home, with inexpensive lamps and pillows in the background. Viewers see images of older women washing clothes in a metal bucket, reinforcing the ideal of primitivism that many think is compatible with life in the wilderness. Finally, Avila suggests that George W. Bush wants to drill here, but the images that accompany the spoken narrative make that position seem heartless: a lone, young caribou is seen walking through a field of dandelions, followed by a large herd of caribou grazing on the grass of the plains.

IV. Caribou and Oil.

This final section of the report presents both sides to the dispute over oil drilling in Alaska. From an environmental perspective, there is much to criticize in this section of the report. Avila himself walks under a suspended pipeline, and suggests that caribou can walk underneath the structure. He quotes Cam Toohey of the group Arctic Power, an organization funded by the oil industry and the State of Alaska to promote oil drilling in the Arctic refuge. He balances the report by quoting Fran Mauer, a biologist who works for the U.S. Fish and Wildlife service in the Arctic refuge. Unfortunately, Avila does not compare or assess the credentials of either of these sources (Mauer has over 25 years of training as a wildlife biologist in ANWR and is a specialist on caribou migration, whereas Toohey has no scientific training or background), nor does he identify Arctic Power's economic interest in opening up ANWR for exploration and drilling.

Still, even this section of the report contains aspects—especially visual enthymemes—that favor the environmental side to the dispute. Like the ABC News story, this segment shows scenes of caribou crossing a road while trucks wait for them to pass. This visual is inserted into the report at the moment when Avila refers to industry's argument that drilling and protection of caribou are compatible with one another. Like the images of caribou and trucks from the ABC News report, these images seem incongruent with the pristine spectacle seen earlier in the report. Viewers see a long road, and the trucks are kicking up dust, marring the landscape and obscuring the view of the mountains in the background. Near the end of the report, viewers are once again shown a large, sweeping image of the Arctic plains, with countless caribou filling up the screen. These images conform more directly to cultural associations of a pristine wilderness.

The Need for Wilderness.

While scholars have criticized the social construction of "wilderness" (Cronon, 1996), this analysis of mainstream television news reports on the Arctic National Wildlife Refuge shows that this rhetorical trope has value in promoting environmental perspectives. Thus, this essay affirms Kevin DeLuca's (2001) admonition, "To abandon wilderness or to allow it to become a devil term with which to tar environmentalists, however, is to abandon a powerful if flawed rhetorical figure, an ideograph with considerable resonance" (p. 646). While some critics have suggested that mainstream news functions to marginalize environmental concerns, this analysis of network television reports on the Arctic National Wildlife Refuge shows that the environmental perspective was emphasized. In particular, the visual imagery shown during the report helped to cement the impression that ANWR is an ecological wonder worthy of protection from development. The importance of these visual elements should not be

underestimated. Conrad Smith (1992) has suggested that television "has a powerful role in shaping our impression of news events, especially those containing strong visual elements. Because news pictures give viewers the illusion of being eyewitnesses and because viewers may remember visual images longer than the accompanying words…, television news has credibility and a potential for impact unmatched by other news media" (p. 30). In particular, images of the natural environment help to reinforce a "naturalistic enthymeme" that gives viewers the impression that they are witnessing unaltered reality. Such visual imagery functions to thwart the arguments of developers, even when industry's rhetoric is repeated and privileged in network newscasts.

If all of this is true, and if "typically the abstract is trumped by the concrete" (Zarefsky, 1998, p. 3), then why did the United States Senate vote to allow drilling in ANWR on March 16, 2005? Is this evidence that "wilderness" has lost its rhetorical power, or that environmental groups should adopt a different persuasive strategy? Unfortunately, the Senate vote had more to do with the results of the 2004 elections than with the images of ANWR seen on network newscasts. The new Republican majority in the Senate was able to pass drilling legislation over the objections of those who opposed it (Murray 2005; Blum and VandeHal, 2005). In addition, while the stories I analyzed helped to promote an environmental enthymeme, there were probably too few of them: over the past 15 years, there were a handful of stories about ANWR on all of the networks.

Still, if anything, this study confirms the need to promote the wilderness ideograph in public lands disputes, and to do so in a way that visually reinforces cultural expectations of pristine wilderness and its connection to human interests. Certainly, drilling proponents have understood the power of visuals to define public perception of this faraway place. While preparing a slide show for Interior Secretary Gale Norton about the facts relating to ANWR, Ann Klee, Norton's top advisor, complained to the department's biologists, "Don't you have any ugly pictures of ANWR?" (Grunwald, 2002, p. A03). And images of ANWR by Subhankar Banerjee contained in a book and a photography exhibit at the Smithsonian Institution's National Museum of Natural History became the subject of political controversy when the museum stripped the photos of much of their accompanying text, and moved the exhibit from the main-floor rotunda to the basement, allegedly as a result of pressure from pro-drilling advocates (Egan, 2003; Flinn, 2004; Olson, 2003). Instead of abandoning cultural conceptions of wilderness as a vast, pristine area devoid of human intervention, such rhetorical definitions—and the images that accompany them and reinforce them—should be stressed as a way of promoting the preservation of certain natural landscapes.

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Heidegger, Standing Reserve, and Being at the Hanford Reservation

William J. Kinsella
North Carolina State University

This essay examines the potential of Heidegger's phenomenology as a foundation for environmental communication theory, and develops implications for communication theory more generally. The essay engages existing debates regarding "representational" and "constitutive" views of communication, problematizes the humanistic premises and dichotomous logics of both views, and offers an alternative approach grounded in Heidegger's ontology and his critique of modern technology. The Hanford nuclear reservation serves as an illustrative text, exemplifying Heidegger's reading of nuclear energy as a culmination of both Western metaphysics and the instrumental stance that he calls "enframing." In Heidegger's view, the ordering and control accomplished through enframing diminishes the possibilities for human existence as well as for relationships between humans and nature.

During my first visit[i] to the Hanford reservation in Washington, a primary facility for plutonium production during World War II and the Cold War and now the site of the hemisphere's largest environmental cleanup, I encountered one of that place's many ironies. My group paused briefly at the so-called "N-springs," where radioactive water bleeds into the Columbia river, where radiation levels prohibit dwelling for more than a few minutes. As we stood by the yellow and magenta ribbon distinguishing the "hot" zone from the zone of acceptable exposures, pondering the constructedness of that boundary, the cleanup workers who were acting as our guides told us how much they enjoyed working in this untouched environment. "Untouched," they called it, because since 1943 Hanford has been closed to the public, first in the name of national security and then in the name of public health and safety. As a result of the diminished human presence the reservation now houses a remarkable range of wildlife. Only that morning, our guides told us, they had seen a mother cougar and her young wandering by the N-springs.

The Hanford workers did not seem to share our ironic reading of their observation. Did the cougars honor the prohibition signaled by the flimsy ribbon and its color code, placed there by, and for the benefit of, the symbolic species that commands this space? How could the "most contaminated place in the Western world" (Dalton, Garb, Lovrich, Pierce, & Whiteley, 1999; Udall, 1993), a late-modern landscape of decommissioned nuclear reactors, chemical processing plants, and leaking liquid waste tanks, be understood as an "untouched," "natural" habitat? The workers spoke of the cougars with respect, even reverence, and seemed authentically touched by their presence. Their appreciation of the animals is echoed in numerous documents, from technical reports to public relations flyers, produced by their corporate employers and by the U.S. Department of Energy, which oversees the work at Hanford. Nevertheless, the enterprise that subsumes these individual workers, the corporations, and multiple government agencies has endangered these animals with radioactive and chemical contaminants for more than half a century, while, ironically and inadvertently, it has protected them from many of the other hazards posed by human cohabitation. That enterprise is part of the still-larger "atomic bomb system" (Arney, 1991) that incorporates humans, cougars, and much of the rest of nature and culture, placing those components at risk for incalculable harm. These ambiguous relationships between cougars and humans, nature and culture, the material and the symbolic, pose important problems for environmental communication theory and for communication theory more generally.

In his essay on "the question concerning technology," Heidegger (1977c) critiqued the reduction of nature to a "standing reserve" (*Bestand*), a stockpile of phenomena appropriated for human use and exploitation. Hanford is an archetypical example, as the place was taken from its former residents, farmers and ranchers who had taken it in turn from their Native American predecessors, by the government for use

as a plutonium factory. Hanford's plutonium "product," as it is known in the jargon of workers and officials, remains an essential element in the U. S. nuclear "stockpile." The example is even more fitting, however, because Heidegger viewed atomic energy as the quintessential expression of both modern technology and Western metaphysics, which he linked in an instrumental "enframing" (*Ge-stell*) of the natural world (Foltz, 1995; Heidegger, 1966, 1969, 1977c). Enframing involves a stance toward the world that "challenges," "regulates," and "secures" its elements to create a standing reserve of useable resources (Heidegger, 1977c, p. 16). Human intervention in nuclear processes enframes nature in a way that is historically unprecedented, but was already implicit in the founding premises of modernism (Kinsella, 2004, 2005).

Heidegger believed that the reduction of nature to a standing reserve alienates us not only from the elements of our environment, but also from our own most fundamental attribute, our very *being*.[ii] Human being—understood by Heidegger as both actor and activity—is always *being-in-the-world*, involving continuing engagement with the other phenomena of that world. To be authentic(ally), this engagement requires meeting the world not only on our terms, but also on its own terms; only through such meeting can we realize true being. Linking this concept of being to the problematic of technology, Heidegger (1977c) suggested that "the essence of technology is by no means anything technological" (p. 4); rather, it is manifested in modes of thinking, language, and action that are oriented toward enframing. These approaches alienate us from the radical otherness of the phenomena that surround us, disabling the possibilities for authentic being. Well aware of the hazards posed by nuclear weapons and nuclear wastes, Heidegger nevertheless saw an even greater threat in the prospect that human being might be reduced, along with the rest of nature, through the modality of enframing:

> The threat to man does not come in the first instance from the potentially lethal machines and apparatus of technology….The rule of Enframing threatens man with the possibility that it could be denied to him to enter into a more original revealing and hence to experience the call of a more primal truth (Heidegger, 1977c, p. 28).

Some environmental philosophers have proposed that these and other ideas from Heidegger's phenomenology might provide a foundation for a radical environmentalism that problematizes instrumentality and the reduction of nature to a collection of useful resources (Foltz, 1995; Haar, 1993; Langer, 2003; Naess, 1997; Rigby, 2004; Thomson, 2004; Zimmerman, 1983, 1990, 1993a, 1993b, 1994, 1997, 2003). To explore that possibility further, here I examine some implications of Heidegger's phenomenology for environmental communication and for communication theory more broadly. I begin by situating this inquiry within a theoretical framework established by Anton (1999), Deetz (1973), Stewart (1986), and others, who have applied phenomenology to questions of language and communication. These authors have used phenomenological principles to problematize representational views of language and communication, arguing for a range of constitutive views instead. I then link the questions these authors have raised to the field of environmental communication through the work of Richard Rogers (1998), who has grounded a valuable critique of constitutive views in ecological and feminist criticism and in Nietzsche's writings on truth and power. Like Rogers, I argue that environmental communication has special relevance to the representational-constitutive problematic, because considerations of human interactions with the natural environment force us to confront its obdurate, recalcitrant materiality. Although the program of Western culture, from Plato through modernism, has sought to deny or overcome that materiality, the contemporary ecological crisis indicates a failure of that program. Heidegger's phenomenology provides important insights regarding how we can revision our relationship with nature, the place of communication in that relationship, and the nature of communication itself.[iii]

After establishing this theoretical context, I outline a phenomenological approach to environmental communication utilizing a number of key concepts from Heidegger, including his notions of being, being-in-the-world, *Dasein*, throwness, projection, enframing, standing reserve, revealing, disclosure, unveiling, falling, humanism, building, dwelling, and care. Like Rogers' Nietzschean approach, this Heideggerian approach has relevance both to environmental communication and to the broader representational-constitutive problematic. Heidegger's concepts add significantly to the project established by Rogers, in ways that I elaborate below.

Although my objectives in this essay are primarily theoretical, Heidegger's concepts can be articulated most effectively when applied to a concrete example. Throughout this essay I illustrate my argument by applying it to the example of the Hanford reservation, viewed as a case study in enframing. As Heidegger

(*e.g.*: 1971, 1977c) frequently observes, a close scrutiny of language often provides insights into fundamental relationships that are normally hidden; in this regard it is significant that Hanford—the archetypical standing reserve—is officially designated a "reservation." There, institutional, political, and scientific discourses have worked together to foster instrumental relationships between humans and nature, as well as between humans and humans. The impact of instrumentality upon nature has been widely recognized at places like Hanford and in environmental discourse more generally, as have the material consequences for human *well-being*, understood in a non-Heideggerian, colloquial sense. However, Heidegger's concepts provide important insights regarding how human *being*, a more fundamental principle linked even more directly to communication, is also impoverished by these modes of relationship. Here I seek to extend these insights further, both to illuminate the role of communication in human being (as conceptualized by Heidegger), and to help clarify the essence of communication (as Heidegger sought to clarify the essence of technology).

Communication Theory, Phenomenology, and Environmental Communication

Heidegger's famous statement that "language is the house of being" (Heidegger, 1977a, pp. 193) provides a suitable starting point. Following Stewart (1972), Deetz (1973) argues that most models of communication have taken "derivative" views of language, presuming that words refer to things (the "referential" view) or concepts (the "ideational" view), or elicit behavioral responses (the "behavioral" view). Although Stewart offers the perspective of ordinary language philosophy as an alternative to these views, Deetz regards that perspective, also, as fundamentally derivative, because it views words as tools that can be subordinated to their communicative and practical functions. He identifies three deficiencies of these derivative views. First, "with this objectification and representation of experience, communication and control become inherently connected." Second, "[t]hese views seem inadequate to describe the formative human experiences of coming to see a thing in a new way or our understanding of the dissimilar experiences of another made available in language." Finally, "derived views of language do not demonstrate how words presented later…specify or shape the meaning of former words" (Deetz, 1973, p. 41). In light of these deficiencies, he concludes that "formalistic, nominalistic, derivative conceptions of language seem to be designed for a technological society intent on controlling the environment and mankind and for transmitting facts rather than generating insight" (Deetz, 1973, p. 51)

Beyond this one reference to "controlling the environment," Deetz does not connect these observations to the field of environmental communication, which had not yet emerged as an area of disciplinary focus. However, such connections can readily be made. The relationships among representation, objectification, and control resonate closely with Heidegger's concerns about enframing and the reduction of nature to a standing reserve, and with Rogers' ecocentric-feminist-Nietzschean critique. The inability of derivative views to account for our experiences of novelty and otherness is also pertinent to environmental communication, where encounters with nature provide some of the most obdurate challenges to our experiential horizons. Such challenges are evident, for example, in discourses of the sublime in nature writing (Oravec, 1996), in our recognitions of the radical otherness of non-human animals (Haraway, 2003; Heidegger, 1995),[iv] and in the quasi-theological discourses of nuclear energy (Kinsella, 2005). Deetz' third observation, regarding the emergence of meaning over time, is consistent with Heidegger's overall preoccupation with time and with his concepts of revealing, disclosure, and unconcealment, discussed later in this essay.

For Deetz, the representational, ideational, behavioral, and ordinary language views are all "derivative inasmuch as they are made possible by the sedimentation of primary language experience" (p. 41). That is, all of these viewpoints entail abstractions from the lived experience of language use, where language is "transparent, spontaneous, and exhausting itself in making apparent what is being said" (p. 42). To overcome this objectification of language, he turns to phenomenology as the basis for a constitutive model in which "language is not simply a tool used to share experience but is intrinsic to and involved in developing the possibilities for experience" (p. 41). As he notes (p. 42, n. 6), scholars in speech communication, interpersonal communication, and rhetoric have drawn on phenomenology (and on related work in existentialism) since at least the mid-1960s. Building on that foundation and on phenomenological concepts drawn from Schutz, Heidegger, Merleau-Ponty, and Gadamer, he outlines a constitutive model that does not replace derivative views, but rather, incorporates them. In that model, the open-endedness of language does, indeed, allow for its use to represent objects, to refer to ideas, to elicit behavioral responses,

or to act in the world. However, these uses comprise only a subset of the possibilities entailed by language, which provides the foundation for a much broader range of existential modalities.[v]

Deetz' position contrasts with more recent work by Stewart (1986, 1995, 1996), who argues for a strict dichotomy between constitutive and representational (or "semiotic," or "symbol") models of language and supports the constitutive view. Anton (1999) has taken a position similar to that of Deetz, drawing upon phenomenology as well as upon concepts from John Dewey's pragmatism to challenge Stewart's dichotomy. Although I need not elaborate that debate here, I wish to note its relevance to the next perspective I examine, the ecological-feminist-Nietzschean perspective offered by Richard Rogers.

Rogers (1998) argues that there is a special relationship between environmental communication and communication theory more generally, in part because environmental communication forces us to confront the obdurate materiality of the natural world. Repeating a familiar theme from deep ecology, feminism, and ecofeminism, he argues that nature has important truths to tell us, although our efforts toward mastery and control make us deaf to those truths. Sometimes, however, truths are manifested when our manipulation of nature turns back upon us dangerously; Rogers cites as one example the explosive and toxic effects that result when humans manipulate the elements uranium and plutonium.[vi] As others have done, he traces the origins of manipulative, instrumental attitudes toward nature to Platonic-Aristotelian-Cartesian oppositions between the ideal and the material, the masculine and the feminine, and the mind and the body, and to Baconian-Kantian epistemology with its privileging of human knowledge over the non-human world.

Rogers explicitly links this well-known critique of Western metaphysics with the representational-constitutive debate, but he is critical of constitutive models, arguing that they undermine their own relevance to ecology, as well as their broader emancipatory intentions, by centralizing the role of human agency. He argues that "an awareness of how objectification and claims to objective knowledge have enabled the subjugation of nature, women, and other oppressed groups has led many communication scholars to embrace theories of discourse that emphasize the social and political nature of knowledge" (p. 245). Nevertheless, he is concerned that there are "affiliations between constitutive theories and material attempts to order the earth, to bring it into line with idealist discourses such as logic and geometry" (p. 244). Essentially, Rogers' concern is that constitutive theories can legitimate unconstrained humanism in the worst sense of the term: if the world is constituted through human communication, then humans can constitute the world as they see fit. In an effort to deconstruct the "ideal/material distinction" and the "environmental violence" facilitated by that distinction, he seeks to lay the groundwork for a "transhuman, materialist theory of communication" (p. 244) that would overcome Platonic and Cartesian dualities, affirm life (understood in a Nietzschean rather than a humanistic sense) over the modernist values of order and control, and intervene in the progressive domination of nature by humanity. Rogers identifies four goals for such a theory:

> (1) the resurrection of a place for natural forces, traits, and structures in communication theory without a return to natural determinism; (2) an affirmation that we humans are embodied creatures embedded in a world that is not entirely [of] our own making; (3) a rehearsal of ways of listening to nondominant voices and nonhuman agents and their inclusion in the production of meaning, policy, and material conditions; (4) the deconstruction of common sense binaries such as subject/object, social/natural, and ideational/material, and a reconstruction of relationships as dialogic: recursive, interdependent, and fluid (Rogers, 1998, p. 268).

Heidegger's phenomenology can contribute to these goals in a number of important ways. First, Rogers grounds his project largely (albeit, not exclusively) in an axiological premise, namely, the moral necessity of challenging prevailing forms of domination. Without invoking axiological premises, Heidegger's phenomenology provides an additional, ontological basis for critique through his recovery of "nature in a primordial sense" (Heidegger, 1969; cf. Foltz, 1995). Proceeding from that ontological foundation, Heidegger offers an epistemological and metaphysical critique more thorough than that of Nietzsche (whom Heidegger called "the last metaphysician"). Indeed, Heidegger is an important source of inspiration for the feminist and ecological critiques that Rogers has drawn upon, although Rogers does not examine that connection in his essay. Heidegger's ontological foundation addresses the "materialist" aspect of nature that Rogers seeks to recognize, while also recognizing a broader range of phenomena that suffuse the natural world. While it is neither axiological nor moral, Heidegger's approach displays both materialist aspects and a kind of secular spirituality.

Additionally, and consistent with Rogers' search for a "trans-human" approach, Heidegger's phenomenology enables a powerful critique of humanism. That critique has direct relevance to the representational-constitutive problematic. Rogers has succeeded in challenging constitutive models of communication, but in my view, has not fully transcended the debate between advocates of representational and constitutive views. It is not clear whether he is suggesting a return to a representational perspective, or some other alternative. Heidegger's phenomenology challenges both the representational and the constitutive perspectives, and offers the basis for an alternative approach. By analogy with models of "bounded rationality" (March & Simon, 1958) and "bounded emotionality" (Mumby & Putnam, 1992) in organizational theory, such an approach might take the form of a "bounded constitutive" model of communication. In that model, humans have substantial power to constitute the world, but that power is constrained by, and must be responsible to, the other beings that inhabit the natural world. Consistent with Rogers' liberatory goals, such an approach opens up the discursive space for a broader range of voices and arguments in public environmental discourse, environmental conflict, and environmental policy debate. In that spirit, I now examine some key ideas from Heidegger's phenomenology and their potential for integrating concerns for nature, as conceptualized in radical ecology, with concerns for human welfare and emancipation. I then illustrate these ideas briefly through the example of the Hanford reservation, and conclude with some further comments on their value.

Heidegger's Phenomenology and the Human-Nature Relationship

Heidegger's phenomenology comprises a rich network of neologistic concepts that are often regarded as obscure and abstract. Abstraction, however, is the opposite of Heidegger's goal. Like Husserl, Heidegger seeks to recover the most fundamental qualities of existence in all their concreteness and immediacy, by bracketing theoretical analysis to reflect directly on experience. Thus it is not really accurate to characterize his phenomenology as "theory"; instead, it is an approach that seeks to avoid the pitfalls of theory while investigating experience rigorously through reflection (Heidegger, 1966). As I have suggested above, one of Heidegger's primary tools for that project is a close scrutiny of language, which he views as constitutive of experience (but not of the world, which retains its own essential properties). Accordingly, here I examine a number of key terms from Heidegger's phenomenology, selected and arranged to illustrate their potential for addressing issues of environmental communication. Although I present these terms sequentially for expository purposes, I wish to stress that they must be understood together, wholistically. My explication of these terms draws primarily upon texts by Dreyfus (2001); Foltz, 1993; Heidegger (1954/1975, 1947/1977a, 1954/1977c, 1983/1995, 1927/1996), Inwood (1999), Mulhall (1996), and Zimmerman (2003). It is important to note that the works by Heidegger span a period of more than five decades. Although I read this body of work as more continuous than discontinuous, Heidegger's concerns evolved considerably over that time period. Three related aspects of that evolution are Heidegger's increasingly explicit efforts to distinguish his position from a humanistic one, his increasing interest in the poetics and aesthetics of nature, and an increasing concern with the implications of modern technology for humans and for the non-human realm.[vii]

Being and Beings

Being (/das sein/) is the central problematic of Heidegger's project, especially in its earlier stages; he states that although being is "the most universal concept" and "the ether in which man breathes," it is also the most obscure concept of all. He believes that the question of being "is forced upon us," but has nevertheless been neglected or forgotten by the Western philosophical tradition. Although Heidegger is often regarded as a mystic, he insists that the question of being is absolutely concrete and finite: being exists only in specificity, that is, particular beings (/das seiendes/) exist. For Heidegger the phenomena "being" and "beings" are ontically, rather than ontologically, distinct, where ontic distinctions precede ontological ones. That is, all beings share the more general characteristic of being, while ontological differences distinguish particular beings from each other. Already, implications are evident for communication theory: at least one phenomenon, being, lies outside the realm of social construction and confronts us with its recalcitrant facticity.

Dasein, Being-in-the-World, Revealing/Disclosure/Unconcealment

Although Heidegger's concept of *Dasein* defies translation, two approximate meanings of the German word are "existence" and "being there." Heidegger, however, uses the term to refer to the essential character of human existence, and three common interpretations are "human being," "being-in-the-world," and "human-being-in-the-world." Although Heidegger sometimes uses this term to refer to an individual or to the human species, writing of "a *Dasein*" or "human *Dasein*," it more often describes the particular mode of being that characterizes human individuals and the human species. For Heidegger, that mode of being is not reducible to consciousness or subjectivity, in a Husserlian sense. *Dasein* is not the origin, nor the center, nor the producer of the world; instead, *Dasein* "lights up" or "opens up" the world and is therefore a mode of "revealing," "disclosure," or "unconcealment." A crucial aspect of this unconcealment, however, is its partiality or positionality: in disclosing certain features of the world, *Dasein* necessarily remains blind to others. Accordingly, nature simultaneously reveals and conceals itself.

Throwness and Projection

All beings (*das seiende*) share the characteristic of being, but only human beings exhibit the particular mode of being that Heidegger calls *Dasein*. The cumbersome expression "human-being-in-the-world" captures a key feature of *Dasein*, namely, an ongoing, practical engagement with the world that entails "throwness" (embeddedness in pre-existing conditions) and "projection" (action oriented toward practical projects and goals). Human beings meet, encounter, confront, respond to, and operate upon the world, and in doing so both change and are changed by the world. Here again it is evident that Heidegger's phenomenology is not compatible with radical social constructionism: these encounters with otherness are always grounded in the recalcitrant, obdurate characteristics of beings (whether animate or inanimate, material or immaterial) other than ourselves. Heidegger's concept of *Dasein* stresses that human being is a product of interactions with the world, even as it acts upon that world. Thus *Dasein* is not a static, unchanging phenomenon; rather, it evolves over time, recursively, as a result of its continuing practical engagement.

Enframing and Standing Reserve

Heidegger's concept of projection indicates that nature is always disclosed in light of its usefulness for *Dasein*'s practical activities. This characteristic of disclosure is fundamental and inevitable, and Heidegger is not critical of this human propensity to utilize the world. The technological attitude that he calls enframing, however, is a specific and problematic mode of utilization in which nature becomes a "standing reserve" (Heidegger, 1977c) or a "gigantic gasoline station, an energy source for modern technology and industry" (Heidegger, 1966, p. 50). Heidegger (1977c) illustrates this concept with a series of poignant examples:

> The revealing that rules in modern technology is a challenging…which puts to nature the unreasonable demand that it supply energy that can be extracted and stored as such. But does this not hold true for the old windmill as well? No. Its sails do indeed turn in the wind….But the windmill does not unlock energy from the air currents in order to store it.
> A tract of land is challenged into the putting out of coal and ore. The earth now reveals itself as a coal mining district, the soil as a mineral deposit.
> Agriculture is now the mechanized food industry. Air is set upon to yield nitrogen, the earth to yield ore, ore to yield uranium…uranium is set upon to yield atomic energy.
> The coal that has been hauled out in some mining district has not been supplied in order that it may simply be present somewhere or other. It is stockpiled; that is, it is on call, ready to deliver the sun's warmth that is stored in it. The sun's warmth is challenged forth for heat, which in turn is ordered to deliver steam whose pressure turns the wheels that keep a factory running.
> The hydroelectric plant is set into the current of the Rhine….In the context of the interlocking processes pertaining to the orderly disposition of electrical energy, even the Rhine appears as something at our command….What the river is now, namely, a water power supplier, derives from out of the essence of the power station….But, it will be replied, the Rhine is still a river in the landscape, is it not? Perhaps. But how? In no other way than as an object on call for inspection by a tour group ordered there by the vacation industry (pp. 14-16).[viii]

These examples do not reflect mere nostalgia. Instead, they illustrate a radical break in *Dasein*'s relationship with the earth. That relationship is now characterized by calculation, control, and deliberate

disruption of the natural order. Indeed, in the last two of these examples the natural order is displaced when steam and a tour group are "ordered," and ambiguously, this ordering can be understood as a calculated physical arrangement but also as an imperative command. I suspect that this same ambiguity is present in the original German text, and that Heidegger was well aware of its presence.

Another aspect of the enframing relationship is the loss of poetry, which for Heidegger is a form of language use crucial to *Dasein*. In his example of the appropriation of the Rhine as a power source he laments:

> In order that we may even remotely consider the monstrousness that reigns here, let us ponder for a moment the contrast that speaks out of the two titles, "The Rhine" as dammed up into the power works, and "The Rhine" as uttered out of the art work, in Hölderlin's hymn by that name" (Heidegger, 1977c, p. 16).

Here, technological control replaces poetic responsiveness, as "language surrenders itself to our mere willing and trafficking as an instrument of domination over things" (Heidegger, 1977a, p. 199). This concern for the loss of the poetic is not limited to Heidegger's later essays, but is already evident in *Being and Time*, written almost three decades earlier:

> The forest is a forest of timber, the mountain a quarry of rock, the river is water power, the wind is wind "in the sails."…But in this kind of discovery of nature, nature as what "stirs and strives," what overcomes us, entrances us as landscape, remains hidden. (Heidegger 1996, p. 66).

When enframing fully displaces "poetic dwelling" as the prevailing mode of human being, human beings are threatened with a fatal blindness, as mastery of the world blocks the fullness of being in the world. Heidegger (1966) concludes that "an attack with technological means is being prepared upon the life and nature of man compared with which the explosion of the hydrogen bomb means little. For precisely if the hydrogen bombs do *not* explode and human life is preserved, an uncanny change in the world moves upon us" (p. 52, emphasis in original).

Falling and Humanism

Heidegger refers to this hazard of human estrangement from primal truth, which is in part a product of the modality of enframing, as a kind of "falling." This falling involves more than a loss of connection to other beings; it also entails a separation of humanity from itself. Once adopted as a universal approach to other beings, enframing cannot stop there, but must proceed to colonize the human world as well. Heidegger links this fall, first, to the technological impulse to mastery and control, and then, to the related fall-acies of constructionism and humanism:

> As soon as what is unconcealed no longer concerns man even as object, but does so, rather, exclusively as standing reserve, and man in the midst of objectlessness is nothing but the orderer of standing reserve, then he comes to the brink of a precipitous fall; that is, he comes to the point where he himself will have to be taken as standing reserve. Meanwhile man, precisely as the one so threatened, exalts himself to the posture of lord of the earth. In this way the impression comes to prevail that everything man encounters exists only so far as it is his construct. This illusion gives rise in turn to one final delusion: It seems as though man everywhere and always encounters only himself. Heisenberg has with complete correctness pointed out that the real must present itself to contemporary man in this way. *In truth, however, precisely nowhere does man today any longer encounter himself, i.e., his essence* (Heidegger, 1977c, pp. 26-27; emphasis in original).

Thus we come full circle to the problematic that motivated my presentation of these Heideggerian concepts. Heidegger's critique of enframing leads to a broader critique of humanism, and in communication-theoretical terms, of the constitutive view of language and meaning. This critique appears consistent with Rogers' "transhuman, materialist" project, and Heidegger's concepts provide a valuable complement to the ecological, feminist, and Nietzschean foundations that Rogers has utilized. The Heideggerian perspective expresses a deep concern for the human condition, but does so without recourse to, and even in opposition to, humanism. Humans and nature are fundamentally connected and profoundly interdependent, and share a future that will emerge, in part, from human choices about how to enact that relationship.

Dwelling, Building, and Care

The final Heideggerian concepts that I present in this section, dwelling, building, and care, offer an alternative to the constricted mode of being inherent to enframing. For Heidegger, dwelling describes "the manner in which mortals are on the earth," and its fundamental characteristics are "sparing" and "preserving." Building is a particular mode of dwelling that encompasses both "erecting" and "cultivating," while cherishing, protecting, and conserving the beings that mortals encounter (Heidegger, 1975, pp. 148-150). Care (*Sorge*) is "the ontological correlate of our everyday [ontic] concern with the environment" (Foltz, 1995, p. 45), a foundational relationship that encompasses thrownness, projection, intentionality, and action. We are situated in the environment, which enables and constrains our projects; therefore we care *about* it. At the same time, we are called upon to care *for* the environment as "shepherd[s] of Being" (Heidegger, 1998, p. 251). Ultimately, our interests, and the interests of the other beings that surround us, depend on both of these aspects of care.

Enframing, Standing Reserve, and Being at the Hanford Reservation

As a product and component of what Arney (1991) calls "the atomic bomb system," the Hanford reservation is both a scientific and a technological artifact. Heidegger (1977b, 1977c) has stressed the links among modern science, technology, and enframing, viewing science as a representational system that discloses nature in a particular, but partial, way (Foltz, 1993; Glazebrook, 2000). While the roots of enframing may extend back to Plato, Heidegger views the rise of modern science as the crucial moment in its instantiation:

> [M]an's ordering attitude and behavior display themselves first in the rise of modern physics as an exact science. Modern science's way of representing pursues and entraps nature as a calculable coherence of forces….The modern physical theory of nature prepares the way first not simply for technology but for the essence of modern technology….Modern physics is the herald of Enframing (Heidegger, 1977c, pp. 21-22).

Multiple forms of enframing have converged at Hanford, all of them understandable as historical products of what Heidegger (1996) called "the mathematical project of nature" (p. 331). Throughout the first half of the 20th century a formation of nuclear discourse emerged, deploying "modern science's way of representing" and disclosing atomic energy as a seemingly inevitable implication of theory and experiment (Kinsella, 2005). Projecting that implication further, U.S. officials appropriated the nuclear domain as a technological solution to military and political problems posed, first, by Nazi Germany, then by imperial Japan, and then by the Soviet Union. Nature, in its newly-revealed aspect as a "calculable coherence of [nuclear] forces," was enframed as a standing reserve of both material and political power.

As a site for that violent intervention, Hanford exemplifies the concept of standing reserve even more fully than does Heidegger's power station on the Rhine. The Columbia River, flowing through the Hanford reservation, provided clean, cold water to cool nine plutonium production reactors, while further upstream it powered the newly-built Grand Coulee dam, supplying the electricity needed for construction and operations (Ficken, 1998). Thus Hanford contributed to an ongoing colonization of the Columbia, a once-wild river now transformed to serve multiple human projects including irrigation, transportation, electrification, and militarization (Harden, 1996; White, 1995). This particular colonization, in turn, was part of a larger appropriation of the American West that can be traced to the mappings and systematic inventories of Lewis and Clark, John Wesley Powell, and countless other explorers who enframed the wilderness through their scientific projects. Within this overarching framework, desert settings such as Hanford came to be seen as especially desirable sites for dangerous nuclear operations; not only were they remote and sparsely inhabited, but they were regarded as "wastelands" unfit for other "productive" uses (Fernlund, 1998; Hales, 1997; Hevly & Findlay, 1998; Kuletz, 1998; Limerick, 1998).

People, too, became part of the standing reserve of resources for plutonium production, including displaced farmers, ranchers, and Tribal members (Harris, 1972); "downwinders" exposed to radioactivity from Hanford's operations (Kinsella, 2001, Mullen & Kinsella, 2005); regional residents and occupants of the Indian reservations that surround the Hanford nuclear reservation, whose lifeworlds were transformed (D'Antonio, 1993; Loeb, 1982); and workers who received few disclosures regarding the hazards that accompanied their daily tasks (Hales, 1997). Hanford was only one geographic setting for this assimilation

by a nuclear system that comprised "more than 300 scientific and industrial sites employing more than 650,000 people" by the end of the Cold War (Taylor, Kinsella, Depoe, & Metzler, 2005, p. 366). That system enframed nature through uranium mining and refinement, conversion of uranium to plutonium in reactors, extraction of plutonium from irradiated reactor fuel, and the forcible production of energy from uranium and plutonium in two direct attacks on human populations and over 1000 explosive weapons tests, some of which distributed fallout over vast regions. Culture was equally enframed, as the symbolic components of the atomic bomb system extracted desired (as well as undesired) behaviors from governments and populations, both foreign and domestic. The enframing of global politics under the principle of "containment" was accompanied by a parallel containment of domestic culture (Nadel, 1995) and public discourse (Kinsella, 2001; Taylor *et al*, 2005), as the nuclear system fostered the production of a standing reserve of "docile citizenship" (Kinsella, 2005, p. 63). One value of phenomenological analysis is to demonstrate that these enframings of nature and culture, and these material and symbolic effects, are not dichotomous; science, technology, history, nature, and culture are disclosed together, through their mutual relations.

It would be erroneous and disabling, however, to conclude that these processes of enframing are total or complete. Nature, both nonhuman and human, persists in its ways of being and resists enframing, as indicated by continuing crises of containment at Hanford (Kinsella, 2001). Nuclear materials travel beyond their designated boundaries, carried by the animals that roam the reservation and transported by gravity through the soil, into the groundwater, and on to the Columbia river. Salmon spawn in the river in the shadows of decommissioned reactors, and the river flows on, to the Pacific. Threats of earthquakes and dam breaches complicate the plans for environmental cleanup and closure of the site. Scientific risk analyses are judged by critics as deficient; nature reveals itself as too complex for control by calculation. Dissident scientists, organizational whistleblowers, and determined downwinders breach the boundaries of discursive containment, insisting that their voices be heard and their perspectives be recognized. Although regarded by the enthusiasts of enframing as nuisances, these are hopeful signs. Nature, culture, and communication are not yet fully enframed, and the possibilities for the future remain open. Human choices, made in conflict or collaboration with nature, will contribute to the disclosure of that future.

Notes

[i.] My first visit to Hanford was in August 1999, as part of a group representing Hanford Watch, a public interest organization based in Portland, Oregon. Since 1999 I have represented Hanford Watch on the Hanford Advisory Board, which advises the U. S. Department of Energy, the U. S. Environmental Protection Agency, and the Washington Department of Ecology regarding the environmental cleanup program at Hanford.

[ii.] Here I refer to what Heidegger calls *Sein*. Although some commentators and translators highlight this concept by rendering it as "Being," always capitalized, I follow the lead of Dreyfus (2001), who maintains the lower case to avoid suggesting that being implies "some entity" or "supreme Being, the ultimate entity" (p. 11). On Dreyfus' reading those connotations, as well as connotations of "event" or "process," are inconsistent with Heidegger's concept. Stambaugh follows this same convention in her translation of *Being and Time* (Heidegger, 1996).

[iii.] A cautionary note is necessary here regarding continuing debates over the implications of Heidegger's troubling association with the German Nazi party. It is unclear whether that association problematizes his ideas as foundations for progressive projects, and whether an intellectual link can be demonstrated between his philosophy and his politics. Space constraints preclude adequate consideration of these questions here, but Foltz (1993) and Zimmerman (1990, 1993a, 1997) provide careful and nuanced discussions.

[iv.] That radical otherness need not preclude the recognition of commonalities between humans and non-human animals, as expressed, for example, in the discourse of animal rights advocates.

[v.] Deetz (1992) develops this phenomenological model more fully in his analysis of the politics of organizational communication. That project provides an example of how a parallel project in environmental communication might proceed.

[vi.] Ulrich Beck (1992, 1994, 1995) theorizes such dangerous outcomes as indicators of a condition of "reflexive modernity," in which modernist efforts to control nature routinely produce new hazards. Rogers' nuclear example lends itself readily to further elaboration, highlighting the ironies and

paradoxes inherent to the human-nature distinction. For example, plutonium is typically regarded as a human artifact rather than a natural element (although one small natural deposit has been identified), so is it accurate to state that manipulating plutonium is manipulating nature? Furthermore, public discourse and policy choices surrounding nuclear weapons and nuclear energy suggest that not everyone agrees that stockpiling plutonium is necessarily undesirable. For some, plutonium provides a handy technological tool for managing the recalcitrant phenomena of global affairs and an energy-intensive economy.

vii. Foltz (1995, pp. 33-34, n. 2) distinguishes between Heidegger's "early" and "later" writings, but also contests claims that the earlier work pays little attention to the natural environment. He suggests that a complex view of nature is already evident in *Being and Time*, where Heidegger identifies "primordial," "productive," and "objective" concepts of nature and criticizes prevailing emphases on the latter. According to Foltz, Heidegger's attention to the topic of nature, emphasizing its aesthetic and poetic dimensions, increased with his studies of the poetry of Hölderlin, beginning about 1931.

viii. A recent newspaper article provides the latest version of Heidegger's image of the Rhine as a standing reserve for the tourism industry, with ironic connections to this essay's nuclear example. Tourists are now paying to visit the site of the Chernobyl reactor disaster, drawn there by exotic features including, as at Hanford, the proliferation of wildlife in a region devoid of human residents (Chivers, 2005).

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The Hunt of Pan: Representations of Science and the Use of Wilderness

Jason Ingram
North Carolina State University

Sartre discusses scientific knowledge as a form of "appropriative violation," using the myth of Actaeon to illustrate the destructive impulse underlying knowledge. Wilderness resists possession but shelters useful knowledge, offering experience at a price. Sartre's theory shares with Heidegger an appreciation of the paradoxical nature of appreciating nature for its usefulness. Defenses of the wilderness that draw on the utility of preserving the wild face the danger of adopting _use_ as a basis for evaluation. This paper examines the desert as wilderness in Frank Herbert's Dune and in Lawrence of Arabia and T.E. Lawrence's Seven Pillars of Wisdom to illustrate the dangers of instrumental appreciations of nature. This paper concentrates on three aspects of the wilderness in these texts: its role in nation-building, its redemptive promise, and its peculiar value which requires scientific knowledge for proper use. In these texts the wilderness forms a national character based on a problematic ethnic basis. The wilderness demands craft and discipline for survival and offers shelter from oppression to those capable of attuning themselves to its mysteries, enabling yet constraining the formation of a new political entity. The wilderness also provides decisive resources for war. These texts offer contrasting images of the scientist in the wild that represent scientific knowledge as capable of using the wilderness to shape world history. This paper uses the example of the desert as wilderness to probe Sartre's analysis and to suggest that the wilderness' use remains problematic. Scientific appropriations of the desert represent the desert's value in limiting, sometimes self-disabling ways.

Ovid describes Actaeon's destruction by his own hounds in his *Metamorphoses* (III. 115-248). Actaeon, after a successful morning of hunting, calls off the day's chase at noontime. It's scorching hot, so he wanders around through dense woods in a valley and finds his way, unaware, into a sacred cave of Diana, who is bathing after her day of hunting. Diana's nymphs see him and are quick to surround Diana, so that she can only be seen "up from the neck" (1983, p. 83). Still, she is enraged at this disturbance of her modesty and throws water from the pool she was bathing in into Actaeon's face. This water transforms him into a stag, which flees into the woods. His hunting hounds catch his scent and race after him. They cannot recognize their master because he is a beast, deprived of speech. The hounds catch Actaeon and rend him to death.

Jean Paul Sartre uses this story in *Being and Nothingness* as a representative anecdote about scientific inquiry, which is premised on gaining knowledge of the natural world.[i] Sartre conceptualizes knowledge as a form of appropriation and argues that scientific knowledge often engages in a "violation by sight":

> We speak of snatching away her veils from nature, of unveiling her . . . . Every investigation implies the idea of a nudity which one brings out into the open by clearing away the obstacles which cover it, just as Actaeon clears away the branches so that he can have a better view of Diana at her bath. More than this, knowledge is a hunt. Bacon called it the hunt of Pan. The scientist is the hunter who surprises a white nudity and who violates by looking at it. Thus the totality of these images reveals something which we shall call the *Actaeon complex*. (Sartre,1953, p. 578)

Actaeon's story provides a figurative model of the dangers of scientific mastery of nature, and helps us to explore representational choices about wilderness spaces. This paper builds a basis for investigating representations of nature, and particularly of the desert wilderness, in two stories: *Seven Pillars of Wisdom* by T. E. Lawrence (2000), better known through the film adaptation *Lawrence of Arabia* (Lean, 1962), and

Dune by Frank Herbert (1965). Sartre's analysis explains some tensions characteristic of scientific knowledge and our knowledge of the natural world: We wish to possess nature—to control resources and to learn how to act effectively—and yet the world always escapes our grasp. We pursue knowledge by pushing the world to reveal itself to us. Such revelation can be harmful, and rests upon a troublesome split between knower and known.

Revealing Nature

Sartre discusses scientific research as a form of revealing, and adopting a phenomenological approach to exploring the ways we pursue mastery of the external world. Sartre argues that research reveals the world to us as knowledge, as the researcher's own thoughts and representations of the world:

> The truth discovered, like the work of art, is *my* knowledge; it is the *noema* of a thought which is discovered only when I form the thought and which consequently appears in a certain way as maintained in existence by me. It is through me that a facet of the world is revealed; it is to me that it reveals itself. In this sense I am creator and possessor, not that I consider the aspect of being which I discover, as a pure representation, but on the contrary, because this aspect although it is revealed only by me, *exists* profoundly and really. (1953, p. 577)

Scientific knowledge is not merely subjective: We learn about the world, and this knowledge is our own, but it also has external referents. Sartre's epistemological position, in this part of *Being and Nothingness* at least, is that "this thought which I form and which derives its existence from me pursues at the same time its own independent existence to the extent that it is *thought by everybody*" (p. 578). The world reveals itself to the scientist as individual thought, but in a way that is also anonymous because "it is thought by all from the moment of its appearance" (p. 578). Knowledge is both personal and objective, both part of the self and external to the self, something that "reveals itself to me" (p. 578). This duality represents a synthesis of self and not-self that Sartre describes as possession, such as we mean when we say that an object is "mine" (p. 578).

This is the point where Sartre brings in the Actaeon complex to explain the appropriate enjoyment present in discovery or the revelation of nature. He writes:

> What is seen is possessed; to see is to *deflower*. If we examine the comparisons ordinarily used to express the relation between the knower and the known, we see that many of them are represented as being a kind of *violation by sight*. The unknown object is given as immaculate, as virgin, comparable to a *whiteness*. It has not yet "delivered up" its secret; man has not yet "snatched" its secret away from it. All these images insist that the object is ignorant of the investigations and the instruments aimed at it; it is unconscious of being known . . . . Figures of speech, sometimes vague and sometimes more precise, like that of the "unviolated depths" of nature[,] suggest the idea of sexual intercourse more plainly. (p. 578)

The Actaeon myth presents an active object, a woman who becomes aware of the revealing gaze and who exacts revenge out of proportion with civilized norms for the violation. Sartre emphasizes the passive quality of nature in the imagination of the person pursuing knowledge, but this image of nature is negated by the external, impersonal aspect of knowledge.

Nature has consistently provided a contested scene for human development. Francis Bacon laid the groundwork for a scientific approach to nature that stresses invention's value for food, shelter and comfort by dominating nature. Discourses representing nature as passive before reason's active investigation are in some sense an attempt to create a self-fulfilling prophecy about human-nature relations. One of Bacon's famous metaphors from the *Advancement of Learning* is rather violent; it conceptualizes what we now call science as a conceptual rape of nature. He critiques earlier thinkers who sought to unravel nature's mystery, observing that due to their crude methods "it is no wonder that nature has not opened herself to them" (1902, p. 26). Bacon wishes to reveal nature "in a free state . . . but more particularly as she is bound, and tortured, pressed, formed, and turned out of her course by art and human industry. . . . for the nature of things is better discovered by the torturings of art, than when they are left to themselves" (p. 27). Bacon's position is familiar, in part through the work of Carolyn Merchant (1980), but I wanted to

recapitulate his position to provide some evidence that Sartre is not exaggerating, or at least that he is not the only author to exaggerate the sexual dimension of scientific investigation.

Sartre's analysis makes sense, at least as a partial description. But he has something more fundamental in mind when he presses the sexual aspect of possession, which can generally be interpreted to mean that all desire or motivation has some relation to identification. Specifically, he talks about the way knowledge incorporates objects into one's self through assimilation or consumption (1953, p. 579). In possession we hope for some sort of union that preserves the otherness of the other. Sartre notes that "the lover's dream is to identify the beloved object with himself and still preserve for it its own individuality; let the Other become me without ceasing to be the Other":[ii]

> It is at this point that we encounter the similarity to scientific research: the known object . . . is entirely within me, assimilated, transformed into myself, and it is entirely *me*, but at the same time it is impenetrable, untransformable . . . with the indifferent nudity of a body which is beloved and caressed in vain. It remains outside; to know it is to devour it yet without consuming it. (Sartre, 1953, p. 579)

Sartre could use the realm of the interpersonal as a possible resolution of the dilemma these extremes form, but instead he turns to conflicted desire. This is consistent with his existentialist bent and provides a useful heuristic for assessing certain representations of nature and the wilderness. We want to have our wilderness and consume it too, to make use of the wild while also maintaining it as inviolate space. Knowing may be a form of appropriation, a metaphorical ingestion and digestion of the other, and knowledge may involve a certain degree of appropriative enjoyment. But stressing the violation of sight proves too much: it expands violation to encompass all of being, at least for knowing subjects. Indeed, Sartre extends the critique to possession in general as well as to knowledge as a particular type of possession. Possession establishes a relation between self and other, but this relation is marred by the fact that to possess something it has to be external to me, apart from me. Sartre argues that "the desire *to have* is at bottom reducible to the desire to be related to a certain object in a certain *relation of being*," a relation that hopes for an ideal identification and is haunted by this ideal (p. 589). Possession rests on a movement between subject and object, what Sartre calls a "magical relation" that can lead to destruction as a paradoxical form of absolute possession. The recognition that we cannot fully appropriate objects, that "it is impossible to possess an object involves for the for-itself [subject] a violent urge to destroy it": "In annihilating it I am changing it into myself. Suddenly I rediscover the relation of being found in creation, but in reverse . . . . Destruction realizes appropriation perhaps more keenly than creation does, for the object destroyed is no longer there to show itself impenetrable" (p. 593). Sartre presents this phenomenon to explain some of the pleasures of consumption. *Dune* demonstrates the premise that true possession rests on the ability to destroy a precious resource, and the desert's ability to enable the destruction of Turkish resources provides a decisive advantage in Lawrence's strategy.

Sartre argues that instrumental appropriation of nature is the most complete form of appropriation (p. 583). In contrast, Heidegger claims that instrumental appropriation is not the best way to describe technological approaches to nature. Bringing Heidegger's analysis in "The Question Concerning Technology" (1977) into conversation with Sartre's treatment of scientific knowledge offers additional insight into our relation with the natural world.

Heidegger indicts the character of modern technology as in some sense "monstrous" (p. 16): We attempt to regulate and secure nature, so that we can attain reliable results and a sufficient reserve of power to sustain our way of life. One means by which science does so is representation: "Modern science's way of representing pursues and entraps nature as a calculable coherence of forces" (p. 21). Focusing on what can be calculated may distort other considerations. This mode of representing nature also involves *enframing* nature as a *standing reserve*: "Everywhere everything is ordered to stand by, to be immediately at hand, indeed to stand there just so that it may be on call for a further ordering. Whatever is ordered about in this way has its own standing. We call it the standing-reserve" (p. 17). Technology is not merely instrumental, not merely a tool to achieve a desired end, because it also involves a way of representing the world that disposes us to certain relations and courses of action. Heidegger's view that "whatever stands by in the sense of standing-reserve no longer stands over against us as an object" (p. 17) may be consistent with Sartre's analysis of the complex dialectic between subject and object at work in the relations established in scientific research; he is certainly discussing a relation between subjects and nature, and hopefully is not advocating a mystical fusion of self with world. It can be hard to tell at times. Certainly

Heidegger would prefer an alternative to a monstrous technology; he contrasts the regulation of nature with a different type of revealing, one less oppressive.

> The revealing that rules throughout modern technology has the character of a setting-upon, in the sense of a challenging-forth. That challenging happens in that the energy concealed in nature is unlocked, what is unlocked is transformed, what is transformed is stored up, what is stored up is, in turn, distributed, and what is distributed is switched about ever anew. Unlocking, transforming, storing, distributing, and switching about are ways of revealing. But the revealing never simply comes to an end. . . . Regulating and securing become the chief characteristics of the challenging revealing. (Heidegger, 1977, p. 16)

Rendering the natural world into a standing reserve of calculable force challenges nature to provide for our security, but a sort of false security for Heidegger. Letting nature reveal itself, or herself, provides a sort of indirect alternative. Sartre mentions a playful relationship as perhaps one way of avoiding the destructive threat brought about by possession. Various representations of the wilderness illustrate the dangers of a scientific appropriation of the wilderness, and particularly of enframing the desert as a calculable source of power.

Representations of the Wilderness

The wilderness has yet to be tamed by definition, and to an extent is untamable. Still, the wilderness shelters useful resources. Scientific knowledge makes use of the wilderness as a standing-reserve, potentially as a calculable coherence of forces. This section considers a number of different representations of relationships between humans and nature, then focuses on representations of the desert wilderness as a crucible for the development of national character, as a source of power, and as a scene for messianic redemption.

We can find many different positions on nature in mass-mediated representations or stock stories. The list that follows is by no means exhaustive, nor are the categories exclusive ; but they do suggest the wide range of uses that representations of the wilderness serve:

(1) The wilderness provides a refuge or sanctuary from the ills of civilization, offering redemption from decadence, hypocrisy and deception. Rousseau, Romantic poetry, and movies about idyllic life in nature offer different treatments of this theme.

(2) The wilderness provides a cautionary tale about the dangers of letting our civilized norms slip, as tales such as *Heart of Darkness* and *Lord of the Flies* demonstrate.

(3) The wilderness can moralize or educate us to appreciate the world around us. This theme need not be part of a spiritual or religious discourse; spending time in the wild has been thought to encourage self-reliance and offers new perspectives to urbanites. Boy Scouts, wilderness education camps for at-risk youths, and many retreats appeal to this representation of the wild. Oddly, were a substantial number of people to take advantage of this learning opportunity, the wilderness would be overrun. Its use-value requires a certain amount of scarcity or limitations on the presence of humans.

(4) The wilderness retains symbolic value. Forests, trees, hidden groves and creatures of the wilderness play important roles in various discourses of self-transformation; Jung mentions the primeval forest and the wild man as symbols that express the dangerous power of unconscious impulses, especially when repressed (See Jung, 1968, p. 90, e.g.). New relations with the wild threaten (or offer to enrich) civilization and tradition. Western frontier narratives illustrate the tensions created when frontiersmen or those used to living in the wild return ‘back’ to civilization, as well as the difficulty of retaining old ways of relating in new worlds.

(5) The wild provides a sexualized scene, either by providing an opportunity for private abandon or by suspending restraints on action. Romances involving a couple stranded in the wild, sometimes on a desert island, tap into this representation of the wilderness. Ancient tales about the seduction of

nymphs and about gods seducing maidens also fit. Similarly, certain films represent the desert itself as somehow erotic—*The English Patient* comes to mind. Thomas Pynchon's *Mason and Dixon* ties territorial definition to sex, along with a cluster of other desires.

(6) The wilderness shelters dangerous knowledge. For example, the wild contains great genetic diversity that, depending on the discourse in question, must be protected by or protected against scientific appropriation. Legal debates about patenting DNA, ownership of genetic sequences, and the rights that should be afforded to endangered species tap into this strand of wilderness representations. A host of B-movies featuring the catastrophic consequences of meddling with the wilderness do so as well: some intrepid adventurer transports a spider or a disease back to civilization, where it threatens disaster. A subset of these narratives depict the dangers of happening upon forbidden knowledge, a close match to Actaeon's tale. Films about giant snakes in the Amazon, giant crocodiles in a lake, a Sasquatch in the woods or even the Loch Ness Monster come to mind: gaining conclusive evidence of their existence is typically a bad idea within these stories, though the heroic struggle to present evidence of the uncanny to a skeptical world also crops up.

(7) The wilderness conceals buried treasure, either legendary or archaeological. The *Indiana Jones* films, as well as *Tomb Raider* and stories about gold rushes mine this vein. So do tales such as *The Mummy* and *King Solomon's Mines*. Even John Wayne and Sophia Loren starred in a film about a map leading to wonderful riches in the desert.

(8) The wilderness also contains impersonal destructive forces. The desert, the Australian outback, African savannahs and the Amazonian rain forests, not to mention the Arctic wilderness, provide typical scenes of danger.

(9) The wilderness is also represented as an as-yet unmanaged resource, a frontier to be tamed.

(10) The wilderness offers a scene of mortification or self-destruction, and occasionally of redemption. Religious parables about purification in the desert or variants of the sacrificial scapegoat fit in here.

(11) The spoiled wilderness offers a cautionary tale to motivate present action, or to cultivate sensitivity to various dangers. *Princess Mononoke* may be an example. Post-apocalyptic SF comes to mind, as do stories about global warming ruining life on earth. Specific harms in isolated areas are also clear examples, whether fictionalized to an extent or presented as documentary evidence—*Silkwood* and *A Civil Action*.

Dune and *Seven Pillars of Wisdom* represent several of these aspects of the desert. The desert is essential to nation-formation in these texts: Desert wilderness offers vast power, at ultimate risk to desert life. An extended overview of commonalities in the representation of the desert will be followed by a more specific analysis of each text.

These texts correlate harsh scenes with powerful agency, and especially with agents. The agents of change for Lawrence are not individuals so much as ideas, ideas made real through the struggle of individuals. The protagonist of *Dune*, Paul Atreides, also goes beyond individuals to consider broad sociological developments; the course of action each plots relies upon the desert for efficacy. Only those who submit to the desert's discipline can learn of its mystery, for the rest cannot dwell there but must pass through. Lawrence and Paul Atreides undergo a transformation into creatures of the wilderness which allows them to understand the true potential of the desert as a weapon, but this transformation estranges them from their former way of life. Actaeon becomes a stag; these three different fates illustrate the lesson that possibilities are rarely all sewn up; learning nature's secrets has any number of effects. But destruction is a common theme.

The desert sustains the development of an Arab revolt against the Turks, and it enables Paul to gain control not only of his fiefdom (the entire planet), but also of all known space. In these tales the desert provides power, and especially military power. Both texts feature the desert's purposiveness for guerrilla warfare. The desert shelters fighters from detection, allowing Lawrence to strike at railroad lines and isolated fortifications. It also harms those unfamiliar with it, helping to ensure escape for the Bedouin. The

desert serves a similar function in *Dune*, and "desert power" provides a recurring theme. More important, Herbert discusses the role the desert plays in toughening character and in winnowing the weak over generations, providing a potent reserve of power. Similarly, Lawrence discusses the psychological reserves and peculiar motivations enabled through desert life.

In these stories scientific knowledge is brought to bear on a people, to reconstruct their identity. Lawrence appeals to religious and cultural commonplaces to motivate the Arab revolt, and chose a leader to work with that he thought would be suitable for his project. Paul Atreides benefits from his parents' training and continues a project of ecological transformation developed by the scientist Liet Kynes. Unfortunately these new bases for identification are negative in character, and so provide little durable substance for new social formations. *Dune* leads to interstellar jihad, whereas the basis for the Arab revolt disintegrated with the end of the war: fighting off the Turk left little basis for reconstruction aside from a shared language and religion. Lawrence and Herbert portray the desert people they discuss as rooted in tradition, allowing very little change over vast spans of time (see Lawrence, 2000, p. 341).

The transformation of desert life carries messianic overtones in these stories. The film *Lawrence in Arabia* plays up this element substantially, even referencing Moses in a scene emphasizing the human ability to write one's own fate, though later scenes present a different take on the power of agency to transcend apparent limitations. Lawrence sets himself up as a prophet of an idea, though he is careful to root this idea in the soil of commonplaces. As Lawrence writes, "I meant to make a new nation, to restore a lost influence, to give twenty millions of Semites the foundation on which to build an inspired dream-palace of their national thoughts" (p. xlviii). Lawrence adds strategic vision and a detailed plan to the raw material of Bedouin fighters; Paul adds strategic vision, combat tactics, and an almost magical foresight to the raw material of Fremen warriors. Scientific knowledge works in both stories to transform the desert into a scene of possibility.

Seven Pillars of Wisdom

Desert narratives support the view that 'you need to learn discipline to be a real man', coupled with a respectful mistrust of the 'natives'. Lawrence upsets this narrative, showing a deep respect for indigenous culture even as he assesses its strengths and limitations. He moves between two worlds, two cultures, and gains insight as well as travail from the constant effort of mediation. "In my case, the effort for these years to live in the dress of Arabs, and to imitate their mental foundation, quitted me of my English self, and let me look at the West and its conventions with new eyes: they destroyed it all for me" (p. 5). The price of this transformation is that Lawrence is no longer comfortable as simply an Englishman; he rots in a sense after leaving the desert. His desires prey upon him as did Actaeon's hounds upon their transformed master.

Lawrence explicitly discusses the duality of possession in relation to one's environment: a foreign leader or servant lives a double life that threatens to betray both new and old cultures:

> A man who gives himself to be a possession of aliens leads a Yahoo life, having bartered his soul to a brute-mater. He is not of them. He may stand against them, persuade himself of a mission, batter and twist them into something which they, of their own accord, would not have been. The he is exploiting his old environment to press them out of theirs. Or, after my model, he may imitate them so well that they spuriously imitate him back again. Then he is giving away his own environment: pretending to theirs . . . In neither case does he do a thing of himself, nor a thing so clean as to be his own . . . (Lawrence, 2000, p. 5)

Lawrence observes that one risk of denaturalizing convention by adopting foreign customs is madness, which is "near the man who could see things through the veils at once of two customs, two educations, two environments" (p.6). Arguably we have internalized this madness to a considerable extent in postmodern times, as more and more forces work to shatter traditions.

The desert requires different rules than civilized life allows; the desert is too harsh to permit civilized justice. Lawrence writes that "when there was reason and desire to punish we wrote our lesson with gun or whip immediately in the sullen flesh of the sufferer, and the case was beyond appeal. The desert did not afford the refined slow penalties of courts and gaols" (p. 5). At the same time, Lawrence has to retain some refinements of civilization in order to negotiate his sometimes conflicted loyalties: some of his pledges to the Arabs perhaps lacked the best faith:

> It was evident from the beginning that if we won the war these promises [of Arab self-government, made by the British] would be dead paper, and had I been an honest advisor of the Arabs I would have

> advised them to go home and not risk their lives fighting for such stuff: but I salved myself with the hope that, by leading these Arabs madly in the final victory I would establish them, with arms in their hands, in a position so assured (if not dominant) that expediency would counsel to the Great Powers a fair settlement of their claims. (Lawrence, 2000, p. xlix)

Lawrence argues that the desert provides a sense of freedom tied to a religious belief in "the emptiness of the world and the fullness of god"; such a belief system made them useful servants of "the prophet of an idea" (p. 14). Accordingly, Lawrence attempts to become the secular prophet of the idea of an Arab nation, attaching himself to an established leader with high religious standing: Sherif Feisal.

He changes his design after doing so, but is able to convince Feisal that the new plan makes sense. In *Seven Pillars of Wisdom*, Lawrence recounts insights that came to him in the desert, the synthesis of Oxford knowledge and his intimate understanding of the desert. The fruit of his feverish musing marks what might be called the inception of modern guerilla warfare. He strategizes a war of ideas tailored to the desert situation he faces, where the desert provides a resource that renders individual lives less than important. Lawrence's strategy for the Arab resistance reflects both inspiration and doxa, a combination of Oxford training in military theory and his knowledge of the scene. Lawrence's *episteme* of revolt relies upon the destruction of the enemy's reserves, and in particular of material resources.[iii] Troops composed of men introduce a significant variable into warfare:

> The components were sensitive and illogical, and generals guarded themselves by the device of a reserve, the significant medium of their art. Goltz had said that if you knew the enemy's strength, and he was fully deployed, then you could dispense with a reserve: but this was never. The possibility of accident, of some flaw in materials was always in the general's mind, and the reserve unconsciously held to meet it. . . . it applied also to materials. In Turkey things were scarce and precious, men less esteemed than equipment. Our cue was to destroy, not the Turk's army, but his minerals. The death of a Turkish bridge or rail, machine or gun or charge of high explosive, was more profitable to us than the death of a Turk. (p. 149)

Scattered resistance could defeat a much larger force (Lawrence estimates 600,000 Turkish solders against 50,000 "zealots" with intermittent attendance) by destroying its standing-reserves. A parallel to *Dune* exists here, too. The spice remains much more important to the Empire than individual lives.

The rationalized philosophy of war to which Germany had introduced the Turks (Lawrence, 2000, p. 97) rested on calculation, an "essentially formulable" estimation of known variables and fixed conditions (p. 148). The Turkish army, in Lawrence's mind, also imposed a fixed model on the "biological" element of troops and had little flexibility when it came to the "psychological" dimension, creating an inflexibility that could be used against the Turks. First, Lawrence sought to deny the Turks targets. The revolt was to become a war of ideas, though Lawrence recognized the danger that individual casualties posed (p. 149):

> [S]uppose we were (as we might be) an influence, an idea, a thing intangible, invulnerable, without front or back, drifting about like a gas? Armies were like plants, immobile, firm-rooted, nourished through long stems to the head. We might be a vapour, blowing where we listed. Our kingdoms lay in each man's mind; and as we wanted nothing material to live on. So we might offer nothing material to the killing it seemed a regular soldier might be helpless without a target, owning only what he sat on, and subjugating only what, by order, he could poke his rifle at. (p. 148).

Accordingly, Lawrence developed a war based on the denial of presence. The second element of his resistance rests on dwelling in the desert. The desert offers shelter to knowledgeable troops and allows them to travel where railroads cannot, and where Turkish troops cannot easily or safely follow. Lawrence fought to minimize losses and not to consolidate territorial gains, though cities such as Akaba provided valuable bases.

The desert allowed desert forces to seize upon critical advantages and to deny presence to the enemy. Rather than engage in traditional battle, a "war of contact, both forces striving to touch to avoid tactical surprise," Lawrence developed a "war of detachment" (p. 150), where the desert itself served as a weapon:

> We were to contain the enemy by the silent threat of a vast unknown desert, not disclosing ourselves till we attacked. The attack might be nominal, directed not against him, but against his stuff; so it would not seek either his strength or his weakness, but his most accessible material. In railway-cutting it would be usually an empty stretch of rail; and the more empty, the greater the tactical success. We

> might turn our average into a rule (not a law, since war was antinomian) and never engage the enemy. (p. 150)

Calculation remains central to Lawrence's strategy—his plan required near-perfect intelligence about the enemy's location and movements. This was made easy by the desert. The Turks tended to remain in fixed positions and were relatively easy to track. The desert provided refuge from air attacks, given moderate preparation, and so the revolt could remain hidden until the proper moment for it to disclose itself by striking undefended resources. While such hit-and-run tactics are ancient, Lawrence added theory and inspiration. The conclusion of Lawrence's fevered thought was that the rebels could use advanced equipment, secrecy, speed, propaganda, and a friendly population to defeat their "sophisticated alien enemy" because it was disposed as "an army of occupation in an area greater than could be dominated effectively from fortified posts" (p. 152). Small, fast strike forces could attack along a very wide front, forcing the Turks to "strengthen their defensive posts beyond the defensive minimum of twenty men" (p. 177). This also served to minimize casualties, which helped morale.

The enemy was restricted by the requirement for dependable troops. Lawrence observed that military discipline required the "submergement of individuality" so that the unit becomes a unit, "in order that their effort might be calculable, and the collective output even in grain and bulk. The deeper the discipline, the lower was the individual excellence; also the more sure the performance" (p. 279). By contrast, the revolt was unpredictable. Tribal factionalism prevented combination of forces but allowed a wide dispersal of forces (p. 278). The lack of discipline and uniformity created insuperable problems after the Turks departed, but resisting calculability was key to the success of the resistance. Also, Lawrence argues that the discipline of a regular army erodes individual initiative and what he calls the "subjunctive mood"—the ability to think differently (p. 432). The Arab army could not know such discipline, and their desert discipline provided the mobility and secrecy needed to offset the coordination and responsiveness cultivated through conventional military training. An unanticipated consequence of the reactive nature of the Arab army was that it dissipated after the Turks were driven out. This failure to maintain force during relative peace-time occurred in part due to the lack of discipline—"the Arab Army, born and brought up in the fighting line, had never known a peace-habit, and as not faced with problems of maintenance till armistice-time: then it failed signally" (p. 433)

Lawrence promoted the ideal of an Arab nation alongside his war of detachment, building upon the existence of a common language and a shared sense of historical greatness to motivate the dream of freedom from Turkish domination (p. 276). Similarly, Paul Atreides used commonplaces of the desert culture he encountered to motivate massive change.

Dune

The will to knowledge plays out in different ways in these two texts. In *Dune* (Herbert, 1965), we witness a calculated transformation of the desert, the use of its raw material to control other planets, prescient knowledge of the future (by Paul), and access to ancestral memory (by a number of women; these memories drive Paul's sister mad). Here I want to bracket Frank Herbert's status as father of Earth Day and look at his vision of stewardship, which is premised on an assumption of realpolitik that requires constant struggle for survival even in a technologically-advanced future. A brief plot synopsis provides a framework for discussing representations of the desert in *Dune*. Dune is a desert planet, the only source of a drug (called "spice") that can extend life. It is also necessary for interstellar travel, because it provides certain pilots special vision and knowledge. Paul comes with his father to take over rule of the planet. They are betrayed and Paul flees with his mother into the desert, where they are taken in by the fremen, a tough group of desert dwellers. Paul is the product of a secret genetic program and was trained for command; with his mother's help he consolidates control over the fremen and eventually defeats the Baron and Emperor who caused his father's downfall. He gains control of the planet and, in various sequels, the fremen launch a jihad against other worlds and enhance the genetic diversity across many planets.

Paul gains power beyond control of a single tribe first as a skilled leader of warriors, and later as a sort of prophet devoted to fulfilling a vision of transforming the desert through patient ecological labor. A scientist, Kynes, persuaded the fremen that they could reshape the landscape with advanced knowledge and scientific techniques, albeit over generations. This represents a literal work *on* the desert, much more grandiose in scale in its fictional world than Lawrence's work to reform national identity in actual desert lands.

Lawrence's efforts to help Feisal build an Arab movement and to form an Arab nation rewrite the tribal identity of desert places, though tribal identifications create a stumbling block once they attain victory. Lawrence's efforts also founder upon European treaties, while Paul manages wider diplomatic issues adroitly because he possesses the power to destroy spice production by setting a destructive ecological chain reaction into motion.

Paul's rise to power rests upon the warriors he leads, who have been hardened by harsh conditions. The irony of the project to transform the desert is that it will erode this power base—one means Paul uses to secure his rule is to make conditions more comfortable in the area from which Imperial soldiers are drawn. *Dune* illustrates the scene/agent ratio Burke discusses (1945): military forces have been toughened by conditions to become stronger, more effective tools and weapons.

Dwelling in the desert instills strength of resolve, of body, and of populations—several scenes in *Dune* drive home the value of winnowing the weak for improving the strength of a people. One important motive for the Emperor to turn against Paul's father was that the Atreides were training fighters who were almost as good as the elite imperial forces. After finding refuge in the desert, Paul realizes that the desert fremen are superior to any other warriors. The eugenic implications of this ecological view of human evolution over centuries bothers me more and more each time I return to the text, and Paul's recognition that a future of bloody interstellar jihad is one of the best possible futures increasingly lacks narrative plausibility; but this is a tangential critique of the representation of the human 'genetic wilderness' as a standing-reserve to be exploited through planned breeding and to be tamed through scientific intervention.

The desert fremen have long been practicing a denial of presence, concealing their numbers from outsiders. They even go so far as to bribe the guild that has a monopoly on star travel to prevent any satellites from monitoring the desert. When Paul gains power he continues this policy, concealing the real strength of his forces. Incidentally, a strong desert storm provides an occasion for the final assault: natural forces, with well-timed assistance from select individuals, defeats the technological protections that the Emperor and his allies rely upon.

Paul's power comes at a cost. One price knowledge exacts is defamiliarization, as Actaeon's transformation indicates. His hounds no longer recognize him as master of the pack, and tear into him when he returns to them. Diana explicitly observes Actaeon's inability to speak—he cannot transmit knowledge, so cannot tell others what he saw when he surprised the goddess at her bath. Similarly, Lawrence faces resistance from British officers at the thought that he might have 'gone native'. He cannot fully communicate the British plan to the Arabs, and cannot translate desert conditions into a language that conventional military officials can understand. He is fully at home in neither world, dispossessed by his knowledge. Paul's new insight estranges him from those around him, though he has at least one loving wife with whom he can share. Ultimately, however, Paul is torn apart by his family: one wife doses the other with sterility drugs, his sister turns upon his mother and son, and his worst enemy turns out to be his uncle. More important, after gaining the knowledge enabled by his selectively bred genetic heritage *and* a catalyst provided by the desert spice of Dune Paul transcends normal human perception and can no longer see from an ordinary perspective. For various reasons he knowingly walks into a trap that leaves him blind, evoking the figure of the sightless prophet whose knowledge of the future compensates for his inability to see in the present. Paul's knowledge of the future dispossesses him of the present.

Conflicted Possession

Desert Power for Paul Atreides, or Muad'Dib, rests on the power to destroy. This clearly illustrates the tense relationship Sartre discusses. Desert Power in *Lawrence of Arabia* and in Lawrence's narrative rests on the ability to destroy valuable resources held by the enemy. Even the use of nature for conventional warfare deploys a standing reserve (in the form of weapons, logistical support, and support in extreme cases from civilian populations) to destroy, even if only in the form of a threat meant to deter. Also, strategy and tactics make use of features of the terrain to take best advantage of local situations. Destruction and the threat of destruction are wrapped up in the possession of nature.

Looking to the wilderness for instrumental gain risks involving us in the cycle of possession and destruction or consumption. However, some of the more persuasive justifications for preserving the wilderness rest on the utility of maintaining wild spaces. Heidegger warns us that adopting a purely instrumental view of nature blinds us to other dimensions of nature, but his reasons for opening ourselves to new relations with nature and with technology are difficult to convey. The main problem seems to be

defending mystery in an era of instrumental reason. Sartre's analysis presents paradoxes of knowledge and possession that might also incline one towards pessimism. If scientific research involved violation, or at least appropriation, and if the recognition of a wilderness sanctuary creates a relationship that courts an urge to master or destroy nature, it can be hard to see how we might improve these relations. That's one basis for resisting existentialism, perhaps. Sartre's analysis provides a useful way to think about the potentially destructive cycle instigated by attempts to gain scientific knowledge of nature, to force her to reveal her secrets (Bacon, 1962) or to harness desert power as a resource.

Contrasting instrumental versus aesthetic approaches to appreciating the wilderness might provide another hopeful route. Aesthetic approaches to nature remain problematic but offer a complementary perspective that can serve as a useful corrective to instrumental evaluations; a more full consideration of this line of inquiry would bring Adorno into conversation with Heidegger, which is a substantial undertaking. Defending the wilderness based upon aesthetics, however, typically involves arguing that nature serves some educating or refining purpose, similar to the forging of character by desert conditions that both Herbert and Lawrence present. These easily slip into instrumental justifications that say the wilderness provides valuable resources.

Sartre suggests that play might provide an alternative to possession. Play "releases subjectivity" and suspends purposeful activity in favor of "a certain desire to be" (Sartre, 1953, pp. 580-1). Play is a transitional state that "aims at a radically different type of being," though the moral quality of play remains in suspension during play: we assess the value of play from an external vantage. This conclusion is a crude attempt to suggest ways that we might allow nature to be, to reveal "herself" rather than forcing or challenging nature into particular representations. The hope is that of avoiding reducing the wilderness to a standing-reserve, either through calculation or through the imposition of appropriative knowledge.

Notes

[i] Kenneth Burke discusses the "representative anecdote" in *A Grammar of Motives*. Roughly speaking, an anecdote is representative to the extent that it captures the essential features of a situation or a relationship. For instance, Burke argues that drama provides a better model for discussing human action than talking about action in terms of a mechanistic model, or as a scientific process (1945).

[ii] This seems similar to the "sublime body" Slavoj Zizek discusses in his analysis of the Marquis de Sade (1989).

[iii] Lawrence uses the Greek terms episteme, doxa, and noesis to discuss leadership and strategy: great commanders require a sense of "the 'felt' element in troops," which is not teachable in school. Honing this instinct for the unpredictable quality of troops and other irrational components of war can consolidate doxa into episteme, which "the Greeks might have called *noesis* had they bothered to rationalize revolt" (p. 149).

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Trail Mix: A Sojourn on the Muddy Divide Between Nature and Culture

Jonathan Gray
Southern Illinois University Carbondale

This solo performance examines social constructions of nature as discussed by William Cronon, Neil Everndon, Klaus Eder, J. Baird Callicott, and others. Utilizing a mix of autobiographical performance, performative writing, persona monologues, and performance ethnography, the performance investigates the "muddy" boundary between nature and culture. This liminal space offers a playful yet serious place to interrogate multiple possibilities in the ways we use, consume, think about, construct, and operate within both nature and culture. In so doing, the performance also addresses the role performance specifically and the arts generally might play in raising environmental consciousness, engaging in environmental activism, and influencing environmental policy.

[The performance area set-up consists of a table and a chair in front of a traditional arrangement for the audience. The Performer walks into the performance space through the audience carrying a full backpack and a walking stick. All props and costumes are contained in the backpack.]

I. Hiking Breath

[Enter. Scan over the heads of the audience as if enjoying a view. Pause.]

Nice.

In the summer of 2002, I had the opportunity to make good on one of my New Year's resolutions for that year. The resolution in question went something like this: that I would take a multiple night, over-night backpacking trip in some backcountry somewhere. By summer I had made no plans for such a trip, I had done no training for it, and I was more or less resigned that this was one more resolution that would fall by the wayside. Then I was contacted by a former graduate student, Aaron Klemz. He and a friend were planning to do a 70 mile, 6 day hike on the Superior Hiking Trail in northern Minnesota. I told him I wasn't really in shape for such an adventure, but he was very persuasive. So, I joined them.

Now, none of us had much experience with long backpacking treks. We'd all done the one night thing, and we all did regular weekend daytrips. We'd all been accumulating gear in anticipation of doing this sort of thing. And we'd all read a lot about it. But this trip was mostly an opportunity to put theory into praxis in a trial by fire. One of my favorite bits of advice that we'd all heard was that, yes, the hiking would be torture for the first few days, but that on the third day the magic of the trail would descend. The pack would get lighter, we would no longer have aches and pains, and the hiking would become easier. As it turned out, that turned out to be folklore – or as Klemz put it, "fucking bullshit!" However, on the fourth day, I did discover something that is probably familiar to athletes, yoga instructors, and meditators: the power of breath and how controlled breathing can transform effort…

[Begin tapping walking stick at beginning of each phrase while doing "dance-like" warm-ups.]

In, two, three, four.
Out, two, three, four.
In, two, three, four.
Out, two, three, four.
Mmmmeditation

Hiking the trail
In, two, three, four.
Oh my god! Am
I doing it?
Out, two, two, three –
Shit! I lost it.
Out, two, three, four.
Ah, there it is.
Control, you know,
One breath, eight steps.
Out, two, three, four.
Bird! Two, three, four.
Tufted Titmouse.
In, two, three, four.
God! This pack is
Heavy as hell
Out, two, three, four.
Snake! Two, three, four.
Oh, stop looking.
Stick! Whew! Three, four.
Concentrate on
Even breathing.
Out, two, three, four.
Forget about
The fucking pack

In, two, three, four.
Oxygen is
Part of your fuel
Out, two, three, four.
Never too much
Not too little
In, two, three, four.
Out, two, three, four.
Here comes a hill
Out two three four.
Keep the same pace
Out two three four.
Don't start panting
Outtwothreefour
God, is it steep
Outtwothree-In
Fuck hell shit piss
Breathe right! Breathe right!
Outoutoutout
God let it end
Outoutoutout
Lost momentum
I'm giving in
Nearing the top
Do not give up.
Keep pushing on.
Keep climbing up
Do not give in!

In, two, three, four.

Out, two, three, four.
Hey, I made it!
Out, two, three, four.
Look at the view!
Out, two, three, four.
Don't stop to look
Out, two, three, four.
Keep in motion
Out, two, three, four.
Keep in control
Out, two, three, four.
Maintain rhythm
Out, two, three, four.
Maintain control
Out, two, three, four.

[Toss walking stick away.]

But wait.

What just happened there? Did I really give up enjoying the view so I could keep up my hiking rhythm? That's not me. That's not why I come to the woods. I come to the woods to enjoy the view, smell the flowers, maybe see some charismatic megafauna. I come here to slow down and enjoy freedom from social constrictions and the disciplined body. Maybe it is my liberal education, but I've come to associate "control" and "discipline" with "oppression" and "domination."

And yet, the pack did feel lighter. The miles of trail were zipping by. I was even able to take the lead for a while. I seemed to benefit from the control, from the discipline. It is a paradox, I guess. The kind of paradox I frequently encounter when I'm dancing down a trail or hiking on a stage. I experienced this particular paradox corporeally, but it seemed oddly familiar. It reminded me of a similar paradox I encounter cognitively in my work with environmental advocacy. See, we are fortunate to live in a country that can be proud of its progressive environmental legislation (even if we can't be too proud of the way it is being enforced, lately). And this country is also home base for several environmental advocacy groups that do important and significant work worldwide. But we also live in a country that consumes 40% of the planet's natural resources. We also live in a culture that all too often puts personal profit and gain above maintaining a sustainable relationship with our environment. How can both of these things be true?

As I said, it is a paradox. And not one that I have an easy answer for. Except maybe this (if it isn't too much of a cop out): I think it has something to do with choice. We make choices based on context, on environmental conditions, and on ethics. Sometimes we choose to stop and enjoy the view, and sometimes we know we need to boogey on down the trail to get to the next destination. Sometimes we enjoy the newest technological gadget, and sometimes we acknowledge that the global average temperature is on the rise and modern industry is one of the causes. Sometimes we choose the pleasures of consumption, and sometimes we choose the path of discipline. We make the choice and we live with the consequences…responsibly.

[Picks up walking stick.]

But most importantly, we keep open the option to choose. And sometimes that takes discipline and a deep breath…

[Tapping walking stick at start of each line.]

In, two, three, four.
But with each breath
In, two, three, four
See the choosing
Be the chooser
Out, two –

[Pause. Enjoys view, looking at as many members of the audience as time allows. Deep Breath. Sigh.]

Nice.

[Takes off pack and begins changing costume.]

I know some here might be a bit concerned about how much emphasis I've just placed on the visual. It is true, I enjoy a good view. I recognize that nature encounters should involve awareness of the full sensorium, and I think they do. But the visual experience is often the easiest to talk about.

I admit, I am guilty of going to the woods looking for views and for creatures, particularly big creatures. Popular culture has trained me to be this way. Think of all the movies that include some important scene where a character encounters an impressive animal in the wild. It's Wil Wheaton, pre- Star Trek, seeing a deer up close in Stand By Me. It's Alan Arkin proclaiming, "Good Moose" in Indian Summer. Or, the best example from a truly awful film, Harry and the Hendersons, that Bigfoot goes to suburbia flick. Remember? The opening credits start with a family leaving a backcountry campsite in the Pacific Northwest, complaining that they didn't see any big animals. The whole time they are speeding down the forest roads to home they bicker while passing all the creatures they wish they'd seen: moose, elk, cougar, bear, otter, etc. And then, bam!, they run over Bigfoot. As the audience, we are privileged to see and know something the characters do not – a pretty classic example of dramatic irony. But then, at the end of the film, when they finally return Bigfoot to his woods and he is walking off into them, the audience is confronted with our own inability to see. What looks like a forest scene conceals without actually hiding a Bigfoot nuclear family – we don't see them until they move.

The lesson? Even when you don't see something in the woods there is usually something there if you will just be quiet, be patient, and keep looking. And this lesson shows up again and again in our popular culture.

For myself, I try not to be too fixated on the big creatures, the so-called charismatic megafauna. I spend my time looking for birds and snakes and insects. But secretly, I always hope for the big creatures. In our trip on the Superior Hiking Trail, we had to prepare for moose and bear encounters, but we never saw either. Lots of scat and tracks, but no moose, no bear. I've encountered bears only twice in my hikes, and always at a very safe distance. I've seen more bears on the Castro in San Francisco than in the woods.

[Responding to audience laughter.]

Ah, good. I had a bet with my partner about whether a mixed audience would know what a "bear" is in gay culture. I am glad to see you catch the reference. You'll need it to make sense of this next piece.

II. Bear

[During the previous talk, the performer unpacks and changes into a black t-shirt with a "Bear" logo, a leather armband, a leather vest, a leather cap, and sunglasses.]

I am a charismatic megafauna! A celebrity. A star.

Yeah, right.

I am an endangered species, threatened with extinction by your value system, your weapons of enforcement, and your willingness to use both. Sure, you say you are trying to do something about that. You take my picture and put me on a poster or in a calendar. You put me on "the list." Ooooh, and aint that a privilege? The list. Like that gets me into any exclusive clubs. And anyway, 70% of the entries on that list are weeds. So…put that in your pipe and smoke it! God knows I do.

Yeah, I know. I'm *different* than a weed. You look at me and see yourselves or see something you can identify with. Identification? Fuck identification. To me, identification is a radio tag collar. Identification is a tattoo on my arm. Identification is surveillance, making sure you know where I am, can track my movements. You know, folks, sometimes a bear just wants a little peace and quiet. Sometimes a bear just wants to be alone. Sometimes a bear just wants to take a quiet crap in the woods – isn't that obvious?

I suppose I shouldn't be too grumpy. Celebrity aint so bad. Not everybody enjoys a crowd of paparazzi eager to take their picture. Yeah, I come out to the road. Yeah, I pose for the camera. Yeah, I've taken a swipe at a photographer or two. Hey, I learned from the best. Sean Penn told me you always have to keep those guys on their toes.

What chafes me, though, is how I'm *expected* to show up for these photo ops. Like that's some sign of appreciating nature! Or, how you expect me to stay confined in the few ghettos you've set aside for us. Don't get me wrong, the view is nice and I enjoy the community of other bears – some of them anyway –

but who wants to spend their life cramped in some "safe space" where my kind are merely tolerated? Welcome me into suburbia, then we can talk about appreciation.

But you folks freak out at that, don't ya? Cross that imaginary line between the place set aside for me and your space, so much larger, and suddenly there are rednecks with guns. "That bear is threatening our way of life!" "That bear is threatening our [*gasp!*] CHILDREN!" "Ooo, daddy, that bear is eating a dirty diaper." Yeah, well, I say: don't knock it until you try it, little girl. It's not like any self respecting bear WANTS to be in suburbia. I'm just passing through – and maybe taking advantage of some of the resources you people just throw away. So put that gun away!

Fortunately, though, I got my advocates. They stop the bashers with guns or, at least, come afterward to claim the body and hold the murderers somewhat accountable. It's something. And hey, I am on the list. That also counts for something. But even my advocates tell me I need to behave a certain way, otherwise I threaten the movement, threaten the safety of all my kind. They have quite an arsenal of tools to help me conform. Mostly, I just nod my head and wait for the sedatives to wear off. So far, I've been too cute, too charismatic for anyone to want to do serious harm. So far.

Yeah, you guys love us, don't cha? You may be scared for your kids when we stray from the ghetto, but you let them sleep with us, don't cha? Sure, cute little play versions of us, but still…you get my point. I know you'd never let *me* actually sleep with one of your kids. Oh no. Think of the media frenzy on the other side of that. Everybody wondering what parent would put their child in such danger all while they hand their own kid a little teddy bear … or turn on a "Thriller" video. Can anyone say "mixed message"? It's okay, though. Me and Michael Jackson know a thing or two about how celebrity can get you off the hook.

Oh, what? Did I cross yet another line? Do you think I am an inappropriate representation of a bear? What kind of bullshit is that? What, don't I do the stepnfetchit of Smokie for you? "Only you can prevent forest fires." Would you prefer some fat, philosophical honey-addict of a Pooh? "Oh, bother!" Or maybe the inarticulate but no less benign Gentle Ben? [*Pawing air*] "Aanghhh!" Or are you one of those folks who just generally object to "anthropomorphizing" animals? The so-called "problem" of personification. Personification, my furry ass! You know what I think personification is? It's a backpack. One big handbag that you people take on holiday when you come to my neck of the woods. One big "purse on a vacation." You put your opera glasses or attributions in those things and then use them to see me. You honestly think you can avoid seeing yourself in me? Even when you see an "other," you define it in your own terms, usually in relation to your own sense of being. The REAL question is why do you see me some ways and not others? Why are only some kinds of persons used to personify? Why didn't others make it in your pack? What? Not on the list?

Look, this is me. I will eat your garbage. I will pose for the camera. I will make rude gestures and challenge your sense of decency. Sometimes, I will eat the camera. Hell yeah, I'm dangerous. Hell yeah, I don't play by the rules. Fuck the rules. I didn't make them. I didn't even have a paw in making them. Nobody asked for my vote. You just came in to my home and said this is the way it's going to be. What if I don't like it? Well, I can always join the circus. Or go to the pits and die in the jaws of so many dogs. Great options. Hell yeah, I'm pissed.

So I see a hiker boy making his lunch on the trail. He spills a little honey on his pants. I think, "Mmmmm…bear bait!" So I see some camper napping in a hammock. And I think, "Mmmm…that's sweet ass in a backroom sling!" So I see a little blonde girl lost in the woods and I think to myself, "Mmmmm…not too little, not too much… juuuuust right!"

I do that too much, I act on any of those impulses, and you will eventually put me down. I know. I've learned discretion. Which is too say, I've learned to look over my shoulder and make sure the coast is clear before I indulge my instincts. Which is to say I've learned the value of good PR. That's the great lesson of "civilization," isn't it? Keep your public and your private separate. You know what cracks me up about that? Say I do indulge my impulses with the wrong person or in the wrong place. Say I am dubbed a "public nuisance." The reason I am so bad isn't because I am wild. Oh no, according to your field biologists, the reason I am bad is because I have "habituated." Think about that. I've been around you people so much that I've grown used to your presence, I've grown accustomed to your face. I'm comfortable with you. In truth, I've become a little like you. I am used to you and your sense of contradiction, your own tendencies toward violence, your own hypocrisy. Can't have that. Eeek. He knows the secret we won't tell ourselves. Gotta put an end to that "public nuissance."

Problem is, well, maybe I am little too habituated. I struggle with it everyday. I've learned to exploit the stereotypes, to play the game. Hey, I'm a celebrity. I'm charismatic. All I gotta do is stay in my

ghetto, work up some schtick for the cameras, maybe give some pointers on style, provide a little interior decorating, accentuate my cuddliness and you guys will give me all the garbage I want. You even like it when I growl and show some claws. Rowr! You'll even let me get some of my buddies together to parade with me down to the town dump, going in a group cuz, you know, we got pride. And you'll be there with your cameras, clicking your tongues in moral superiority in all likelihood, but there for the show, ready for the spectacle. I used to be shy about you people watching me, but now I just show my thick bear cock and do a dance for the cameras. Was I ever surprised when I got a bigger audience, and one that applauded with table scraps.

Oh, what now? Is that a cop out? Does that get in the way of your image of me preferring isolated, pristine locations and life away from the buzz and stink of, well, you? Hey, I admit…that does have some appeal. But like I said, I've habituated. Catching salmon is fun, but its hard work and I would prefer not to HAVE to go fishing. You know what I mean, right? *You* like to get away for a weekend, maybe, to fish – but it wouldn't hold its charm if you HAD to do it everyday, right? Cut a bear a break. Use those supposed powers of empathy to understand the appeal of not *having* to fish, not *having* to scrounge day in and day out and work the tiresome struggles of bear politics.

I am who I am. Only a species as fixated on the meaningless abstract as you are would worry over whether that is a result of nature or nurture. After all, your species is capable of casting "natural" as both authentic and subhuman. You turn your prejudice against each other, casting the hated other as *both* unnatural (and therefore wrong and to be hated) *and* too natural (and therefore a subhuman animal worthy of being exploited or exterminated). There are far too many of your kind who WISH they were charismatic megafauna, who wish they could get on the list.

All things considered, I think I have a lot of privileges. Appeasements for the oppressed, maybe, but whatever. I may live in a ghetto, but at least it is some prime real estate. And hey, never overestimate the power of being the standard for "obvious" – not that I understand that one, but you perverts seem to fixate on where a bear shits. We're toys, we CARE, we look cute in costumes, we're literary figures, we fight forest fires, and when we break all your rules and attack, well, that just means better ratings for a Fox reality show. All of us, doing our part for the great engines of human culture.

I am a bear. I am a charismatic megafauna. I am a bear. I am a subcultural stereotype. I am a bear. I am an endangered species. I am a bear. I am both a product and a victim of your global expansion. Hear me roar: *Fab*ulousss!

Assholes!

III. Reflection

Think Nickelodeon will be contacting me anytime soon to write children's programs for them? Yeah, me neither.

That's one angry bear. Bear out of place. I am not sure too many people would be happy to encounter that kind of Bear in, say, Yellowstone. Not exactly the kind of "pic-a-nic" we've come to expect.

Funny how we respond to a sense of something being wrong or in the wrong place. How do we know that something is out of place? What makes a scene authentically natural or wild? But we know it when we see it, right? It's like pornography that way, I guess. We've all probably felt the disgust of finding beer cans in a backcountry campsite. Or the surreal wonder of a hawk roosting in a crowded and noisy city. All hail "Pale Male!"

I experience a kind of disappointment when I realize that there is probably no place I can go to get away from the presence of other humans. It is in equal degree to the wonder I feel when something "wild" wanders through my oh-so-domesticated everyday landscape. And I am troubled by these feelings, because they seem to be evidence of my desire to keep boundaries firm between so-called wild nature and human culture. And so I have been trying to reflect on these tendencies, to trouble those boundaries. It's hard work; those category distinctions are pretty sedimented in our culture. But, for me, my biggest cognitive breakthrough happened on a summer walk through a local state park.

Hot afternoon in Giant City.
It catches my eye,
A sunlight distress signal,
A signal flash – but so small.

In disgust I discover
It is only trash,
The Mylar corner of a
Potato chip bag or
Energy bar wrapper
Caught in a spider's web.

No, not caught.
Used, incorporated.
Added like some new kind of leaf,
A fashion statement.
Queer eye meets spider home.
Not trash – just trashy!
A gaudy mirror
That *is* nature
Held up for my reflection.

And if I get close enough
I can see myself
Distorted and bulged
Trying so hard to see.
And if I look closer still
I can see a multitude
Of arachnid eyes
Slick hairy sparkle back
Warped in folded reflection
Or Mylar transparency

And if I shift my perspective,
It is no longer Mylar at all
But a fine crystal bowl,
A combination of lens and reflector.
So fragile.
Encouraging me to look through
And look back
See myself in the glass, in the web
In the woods, in the world.

A fragile thing that survives –
A crystal bowl in spider's silk –
Against all odds.
Delicate strong, a miracle always
On the threatened edge of collapse.
That *is* nature.

Held by strand after delicate strand
Break any one, two, or three
And it remains suspended
Break too many
And at some unknown point of no return
It falls, shattering
Never to be rebuilt exactly the same,
So slow to recover.

What is the cost

Of this lost
Reflection?

To see yourself
In the eyes of another
Is also, at the very least,
To see yourself being seen.

Friends tell me I need to be careful about how much time I spend in the woods. They say it changes me. I get a little "freaky." Personally, I take that as a compliment and encouragement to return. I think a lot of my friends could use a little more time in the woods, the freakier the better!

I am fascinated by how time in the woods changes me. For example, I am the worst slob at home. It is embarrassing. I cannot keep a neat house. I am shy about having people over because there is always a fair amount of clutter. But on the trail and at a camp site, I am Mr. Organized. My dishes are clean. Everything has its place. After every trip to the woods I promise myself that I will bring some of that order home, that I will keep a tidier house.

It never happens.

But I am nonetheless impressed with the changes the woods can work on you if you let them. And I deeply respect those people who, for whatever purpose, find themselves spending large amounts of time in the woods, embracing change and new possibilities.

IV. Tree and Forest

[The performer has changed into a rain shell and wool hat. Suspended behind him, a canvass, hand-painted sign reads: "Extinction Equals Death!" The following monologue is performed sitting on the table as if it is a platform in a tree.]

Why do I do it? Yeah, that is the question, huh? Pretty crazy. Well, I never intended to give five years of my life to sitting in a tree. But I wouldn't change a thing. And if I ever get my way, I'll give five years more… and more.

Yeah, I know what they say about me. That I'm crazy. That I'm too far "out there." That I've fallen in love with protest, the romance of resistance. Well, they're right about one thing. It does have to do with love. Deep and abiding. And you know what? I never saw it coming. Love is like that, I guess.

So, right, what do we want? Well, obviously you've read the headlines or heard the jokes. If you just came here to laugh at the freak, go ahead. I don't care. What's a little laughter? It's funny how the things that matter in this life change with a little shift in perspective. If you really want to understand what we want, you have to know what I wanted when I started this and how that changed. You have to learn what she taught me.

It started out the way these things always do. I was an active member of Earth Up! Yeah, I've been involved in direct action before. Some people think that's all Earth Up! is about. Interrupting people's lives with protests, shouting "Extinction equals Death!" to deaf ears. Industrial sabotage. Eco-terrorism. Really, though, it is usually kind of boring. Making field observations, doing research, filing petitions. I spent more of my time at a computer than in the woods, researching every legal standing, trying to protect vanishing resources. Fighting with corporations.

With, not against. It's an important distinction. See, a corporation is the worst form of group think, an organization of people (flesh and blood) whose primary concern is returning a profit to its investors. Nothing wrong with that in principle, except well, other values and concerns tend to get pushed to the side. A corporation has no conscience and rarely takes the long view. So we fought with corporations as a kind of conscience, a grassroots movement doing what the government should have been doing, but was too deep itself in the corporate pocket to really provide much moral guidance. So we used every legal means available to make sure corporations looked out for something more than profit. Yeah, we focused on saving trees mostly, but our efforts also benefited the people who worked for the companies – both were being exploited equally.

So, through much of the nineties I worked with my Earth Up! colleagues, raising public awareness, holding demonstrations, speaking out at public hearings. We were struggling to protect a particularly pristine section of the Oscar Wilde National Forest, tract 357. Despite two independent studies that located

endangered species habitats in the tract, the National Forest Service was busy building roads for timber extraction. Axe Incorporated had purchased the timber rights and were ready to move in. They pulled every legal trick in the book to block us, and we knew they weren't above ignoring a court order and paying a fine. In the fall of 1999 we knew we were running out of time, that the trees were running out of time.

So, I joined my first tree-sit. Yeah, sure, it was somethin'! Sneaking in on a full moon night. Constructing and setting up platforms high in the Douglas firs. Four in all spread out over little more than acre of old-growth timber. Having no fear of heights, I picked one of the biggest trees whose top branches enjoyed an exceptional amount of room above the rest of the canopy. Going against the practice of the rest of the group, I secretly named my tree: "Sunny." The rest of Earth Up! hates that. For them, it's all about the ecosystem as a whole and not about singling out life forms and certainly not about something so anthropocentric as naming the tree. Yeah, I used to think that way too. But something about this tree, Sunny… when I was up in her for less than a week, I felt, I don't know, a connection.

People have asked me when I first felt that connection. Personally, I think it was that first morning. She was just so beautiful covered in diamond dew and soft veils of mist drifting in the morning sun. Maybe it was that first week when, one afternoon, I stumbled and fell only to be caught so gently by a branch I don't remember being there before. Really, though, it might have been about three weeks in on a dark night when I was having doubts about what sitting in a tree could really accomplish. I felt so disconnected from the rest of my life, so alone, so pointless. And then, clear as a bell in my head, came this voice. And it said, "Thank-you. I appreciate what you're doing." And well, you know, after that, I never had any doubts. I guess that's when I really knew.

So anyway, the protest went along as usual. You know, lots of ground support sneaking in with supplies. You need to understand that you can't do a successful tree sit without good ground support. Those of us on the platforms get all the attention, but without the anonymous multitude on the ground we wouldn't be here! We got lots of threats from the Forest Service and local law enforcement. We got good at jeers. Life settled into a pattern of routines. Long stretches of quiet solitude punctuated by activity on the ground. And we were like Vaudeville squirrels, taunting the Forest Service and the lumberjacks, running the usual shtick for the media, *when* they showed up! For all the good it did. Around us, Axe Corp saws were busy taking down the portions of tract 357 that we couldn't protect. Our acre or so of timber quickly became an island in the middle of what they called, in all seriousness, a "partial" cut. And if a falling tree came close to one of our platforms or cross-wires, they didn't care. We were pests, scum. Our lives didn't matter – except, well, death is bad PR.

Anyway, the group stayed in our trees for nine months before a shift in the Market made Axe Corp downsize its operations and leave the area. Oh sure, everybody cheered, save the thousand or so workers out of a job. They mostly blamed us. Nevermind that the consolidation of Axe Corp was more a result of bad investments and a downturn in the market. Earth Up! brokered a compromise whereby the acre of trees we were in would remain standing and other forest plans would have to go through a more rigorous public review. Sounds good on paper, but it was hardly the victory we craved. Nine months is a long time to sit in a tree, and my fellow protestors were ready to get back to their lives.

They were concerned when I said I planned to stay on. They were doubly so when they learned why. They had tolerated my occasional slips during the official sit when I would refer to my tree as "Sunny" or, worse, "her." But they let it go. When at last the tree sit seemed to have accomplished its goal, they were eager to pack up and go. But I…just couldn't. I told them I would stay on. And they asked me why. And I told them.

You see, I love this tree. I care about it. I can't imagine living without it. I've searched my soul in the long, quiet hours for the right way to express that love. I'm not a freak. Really, I'm not. It's not like that. But…the only way that makes any sense for me is to, well, marry the tree. I know how that sounds. But in 2000, I made this vow: that I wouldn't come out of this tree until I had the legal rights to marry it, to be legally joined to it as a life partner.

What do you do when an idea you feel to the core of your being, that you KNOW is right, sounds crazy to the rest of humanity? How do you conform? Maybe you've had a similar experience: seen lights in the sky or something in the water, had a premonition come true, or felt you could really hear someone else's thoughts. What did you do? Did you talk about the experience? Or did you let it go? Talk yourself out of it? Forget about it and let the consensus of what is real take back over? Yeah, well, I'd do that too if I could, if it was just me. But I'm not alone in this thing. Really, none of us are.

Yeah, I know what you're thinking. You got all the usual questions. And there's the question you most want to ask but maybe can't bring yourself to. Well, friends, I gotta tell ya, I can't answer that question. It's a no-win situation for us. If I answer it one way, you'll be more convinced than ever that I'm some sort of pervert and work like hell to lock me away. If I answer the other way, you'll just nod sagely at my naiveté and tell me that, well then, it can't truly be love. Some of you may even hold that since there's no way we can create children, marriage isn't a possibility. But friend, that's just pure hypocrisy and you aint thinking about the varieties of marriages the state already sanctions. And anyway, all relationships have their private sides. Let's just leave this private between me and Sunny. You don't want us asking about the private parts of your relationship; you don't need to know about ours. Let's just leave it at that. 'Nuff said.

The hardest part of this whole thing has been the rejection of Earth Up! They publicly disavowed me, saying I had abandoned the root philosophy of the group. Earth Up! defends ecosystems and does not anthropomorphize nature. None of that "hippy-dippy" love nature shit. They said I was crazy and that my desires discredited the group and its larger mission. They told me that whackos like me made it harder for them to do their work – that I was hurting the movement.

I guess there's some truth to that. It sounds good in the abstract. But all I have to do is look at Sunny and their arguments fade. I love her. And I feel, in a way that only time in a tree can make you understand, that she loves me back. She is so old. And, if all goes well, she will be the widow in this relationship. My heart aches that my passing one day might cause her pain. From her perspective, our time together is so brief. How can I leave her?

It's not crazy to love. Despite what our culture tells us.

I've thought long and hard about the arguments against anthropomorphizing nature, about the arguments for ecosystems. I think my friends at Earth Up! and others have created a false dilemma. It's not think about the entire forest rather than the individual tree. It's got to be both. It's hard to love an ecosystem. Or, rather, it's hard to love an ecosystem as an ecosystem, alone. I respect, even love, this ecosystem because it supports my Sunny…and, well, me. Before, that was always an abstract, an argument of logical force that motivated my activism. And those arguments still matter to me. But I have found such motivation in allowing (like I had a choice!) an emotional connection to a particular tree, this tree, my dear, sweet Sunny.

And this isn't news, dammit. It's in our literature. Aldo Leopold called for it in A Sand County Almanac. Well, I know, he didn't exactly say go out and marry a tree. But he did say that human community needs to include the land as part of the community. That our well-being depends upon an ethical relationship with the land, but how can you have such a relationship and not actually have *a relationship*? And isn't marriage just a covenant that recognizes the highest form of commitment in a relationship? Plus, well, we know that developing a sense of connection to place has profound influence on our commitments to environmental preservation. We know this modern world creates for too many of us "geographic infidelity" as we move around, following careers and money. "Geographic infidelity." Nice term, eh? It's not mine. I heard it at a Bioneers conference. If "geographic *fidelity*" is the answer, then doesn't that imply a kind of marriage to the land? And if marriage to the land, then why not to a tree?

I don't know. Maybe marriage isn't the answer. Some have suggested to me that marriage is a problematic institution. Why would I want to bring such a primitive, patriarchal system of ownership into an enlightened relationship with nature. Can't I come up with another name for the bond I share with Sunny? Arboreal partner? Forest Union?

Yeah, maybe. But despite the baggage, "marriage" is the meaningful term. It resonates. It's a privilege that those who would cut Sunny down share. The only thing that makes it objectionable to them is that Sunny is not a person and, arguably, not a woman. So there you have it. Marriage doing its job to maintain the firm divide between humans and the rest of nature, keeping us separate. Making the work of exploiting nature that much easier.

So, I am sticking to my Sunny's limbs. I won't come out of this tree until the state recognizes my right to marry her. Yeah, I know it's pretty unlikely that that will ever happen. Too crazy. But I'll tell you something. Like I said before, I couldn't do this without the ground support. And every year, it gets a little bigger. Plenty of people come to gawk at the crazy man in the tree. But others come with food and water and gear. On more than one occasion, some progressive pastor or new age guru has come to perform a ceremony. It's nice. I like the ceremony. I appreciate the witnesses to our love. But I need the recognition of the state, because until my rights are conferred to the one I love, she will be vulnerable to rape and murder at the hands of the state. And I just can't allow that. I won't allow it. And I have a feeling that

more and more people on the ground won't allow it either. And maybe, who knows, some radical judge in town will "legislate from the bench" in our favor, for the good of Sunny and all her kind and the ecosystem they represent.

What do you think? Look at her. Won't she make a beautiful bride?

V. Backpack

[Performer hops off table and begins packing up costumes and props throughout next section.]

I think that guy is going to be up in that tree for a while. But it makes me feel good knowing he's up there.

That piece was inspired by a visit I made to an actual Earth First! tree sit in the Cascadia National Forest outside Eugene, Oregon. After the 2003 C.O.C.E., Kevin DeLuca and I went downstate to witness a protest that he heard about. When we arrived, after a considerable amount of maneuvering to figure out where the event was happening, there was a local news van and several National Forest and other officials there. The tree sitters weren't really talking to anyone, just yelling things from the tree. What struck me as odd was that at one point they were taunting the foresters and lumberjacks about their sexuality, positing that the men on the ground were checking out their asses or their nipples. That sort of thing. I tried to ask them about that, but they were reluctant to talk to me. My hair was shorter then and they were apparently convinced I was an undercover cop. Nothing I could say would convince them otherwise. It struck me as odd that a group of people so dedicated to preserving biodiversity were so blind and insensitive to the human diversity below them.

Later, Kevin managed to get them to talk with him. He asked them what they hoped the local news would do with their story and why they were so disruptive during the taping of the story. They generally dismissed the media as ineffective and a puppet of the multinational corporations. According to them, mass media is a part of the problem of our consumerist, trash culture. They had no use for the media and were more concerned with the actual trees their bodies were saving. Maybe fifteen minutes later, Kevin asked what motivated them to be activists and two of them discussed at length images of the student protest in Tiananmen Square, particularly the lone student standing down the tank. There was no sense of irony that a mass mediated image had motivated their activism – an activism that now saw no real use for the media.

As we left the protest, Kevin reminded me that the physical commitments of a tree sit often make it a young person's "game," and we should probably cut these folks some slack if their zeal led them into some contradictory positions. Even so, I worry that much of our progressive, liberatory politics these days suffers from similar short-sightedness.

My experiences with backpacking have taught me a lot about the porousness of the divide between nature and culture, and indeed, between most so-called "distinct" categories. It's especially good at revealing how literal a metaphor can be. Backpacking makes literal concepts like "carrying capacity" and "ecological footprint." For a few days, you are limited to what you can carry on your back, making choices carefully based on physical necessity, efficiency, and small comforts. Each of those decisions reveals the muddiness of the so-called divide between culture and nature. Two quick examples:

[Holds up a hiker's water filter.]

Who recognizes what this is? I promise, it is not a sex toy. This is a water filter and if you've done any backcountry camping for any length of time, you know it (or something like it) is a physical necessity. Many a trail guidebook contains a cautionary note that reads something like, "Gone are the days when you could simply dip your hat into the flowing waters of a stream and toss back a cool drink. To drink water on this trail you will need to filter, chemically treat, or boil your water. Preferably some combination of all three."

So it's a physical necessity, right? That pretty much puts it in the nature "camp." But what happened? Why did this change? What happened to those long gone days? Some sources tell us that domesticated animals, from dogs to livestock, have changed even our backcountry water supplies. Now Giardia, Ecoli, and other viruses and bacteria make water treatment a necessity. That's a pretty clearcut explanation of how our human practices have changed the landscape for us.

But it goes further than that. When you visit a developing nation, say someplace like Mexico, what's the first piece of advice you're given? Right, "Don't drink the water." Don't even drink a beverage with

ice cubes in it. But when you are there, you see the locals drinking water and enjoying ice. It's hard to remember the prohibition. How is it that we've lost the intestinal fortitude to handle their water? I learned recently that Crohn's disease, a chronic inflammation of the intestinal tract, is found almost exclusively in developed, industrialized nations. Further evidence that our cultural practices have changed our bodies, made our relationship to a fundamental consumptive act like drinking water highly, well, mediated.

I think it is significant that water is a primary constituent of mud. And we've all heard that water will be the thing we fight over in future wars. Something so basic to our being, so "natural" and yet so confounded by human cultural practices. So, well, muddy.

[Puts water filter away and finishes packing backpack.]

One last example, and then I think we are done. One of the things I marvel at every time I go backpacking is how enough stuff can fit in this pack. My first trip, I don't think I packed very efficiently. I've gotten better. But on that first trip, the guys I was hiking with weren't exactly close friends. We decided that we would each pack our own two person tent. It was summer, the weather was generally mild, and our gear needs were such that this was an okay arrangement. We reserved a minimal amount of space in each of our over-packed packs for carrying our portion of the communal food, but otherwise it was each man for himself.

Last spring, in contrast, I went on a March hike in the Great Smokey National Park. In March, the Smokey's are hardly done with winter and the threat of colder, wetter weather required me to rethink my gear. One of the guys I was hiking with was a pretty good friend and we realized we could overcome homosocial norms and deal with the intimacy of sharing a two person tent. As a result, a considerable amount of space was freed up in both our packs – space we used for some extra gear, some extra clothes, some comfort food, a flask.

Solo backpacking is different, but when backpacking with others (in my experience) there is always a mix in your pack of your own personal gear and communal materials for the group. You always want *some* redundancy of gear, but too much redundancy just isn't efficient. And every pound counts.

And in that is an important metaphor, I think. See, call this pack and its various contents my identity, my politics. Call it the things I care about. I am, literally and figuratively, the combination of things that go into it. But when we are working together, there has to be some room in there to carry some stuff for someone else. Extra food. Extra fuel. Maybe the trash we're packing out. Maybe the shelter we will share. And if we work together, we free up more space for more things we may need or may contribute to our comfort on the trail.

Today's progressive politics – call it "liberal" or "leftist" or whatever – seems like a group hike where we haven't done a very good job of sharing much space in each other's packs. If we did, we might find that we carry some pretty common burdens. We might find that there is more in common between us than really different. More in common, say, between: wilderness preservation and eco-justice, African Americans and GLBT rights, Latina/o, the working poor, peace activist, women's rights, and so forth. All I know is that if the radical capitalists and the radical religious fundamentalists can see past the contradictions in their positions to create a coalition that forms the dominant power bloc today, then surely the rest of us can see past our individual interests to the larger concerns that unite us. Don't we have to?

[Straps on backpack and picks up hiking stick.]

So I am here today to tell you that I have room in my pack for you, and to ask, "Do you have room in yours for me?" There's a storm coming – some say it is already here – and there are quite a few steep hills between us and whatever destinations we're collectively headed to. It's a hard trip that will require negotiating some choices, pausing to reflect, and sometimes just the discipline to keep in motion. So let's take a deep breath, and…

[Resumes "dance-like" warm-up exercises.]

In, two, three, four,
Out, two, three, four.
I am a mix.
You are a mix.
Diversity
Human and Bi-
Ological

Is the –

The what? The better view?

[Scans the audience as if looking at a great mountain view, pausing to look into the eyes of as many audience members as possible.]

Nice.

[Exits.]

Breathing an Airshed: The Intersection Between Air Pollution and Human Health in the Salt Lake Valley

Deborah C. Callister
University of Utah

This essay is a critical historical analysis of the intersection of local media, air pollution, and human health effects in the Salt Lake valley in Utah. After delineating historic air pollution problems, it details scientifically grounded claims regarding connections between air pollution and increased morbidity/mortality rates. It then examines media frames, leadership roles and the tacit assumption underlying the long-standing dominant discourse that air pollution is a requirement for economic development and convenience. The study extends claims made by previous communication scholars that media frames directed at changing social behavior (change frames) are driven by leadership discourse. The author argues that, absent leadership direction explicating air pollution health effects on everyone who breathes the air, status quo media frames will continue to communicate air pollution health risks primarily for "at risk" populations. These frames leave most individuals in the region unconscious of the critical triangle connecting their transportation choices with air quality and human health.

Introduction

The link between air pollution and human health became evident as early as the 1940s in the United States. In 1948, an air pollution inversion in Donora, Pennsylvania killed twenty individuals and made over 5,000 citizens sick. Moreover, in 1966, an air pollution inversion in New York led to the death of 168 people (American Lung Association (ALA), www.californialung.org/spotlight/cleanair03_milestones.html, retrieved October 16, 2004). Inversions occur when a warm air mass (or high-pressure system) traps a cold air mass underneath it in a valley or basin. The trapped, cold air mass becomes increasingly polluted as mobile and single point emissions, consisting of fine particulate matter (PM), accumulate within the airshed.

The Salt Lake valley is no stranger to air pollution. Its basin shape makes it prone to inversions during the fall and winter months. Inversions in the valley can last for weeks and usually occur November through February. Summer, too, brings air pollution problems. High-pressure systems over the Salt Lake valley and the surrounding region often result in weeks of ambient air temperatures exceeding ninety degrees Fahrenheit. This heat combines with particulate matter emitted from combustive sources like automobile engines and power plants to create ozone (O_3) pollution. The O_3 accumulates during these prolonged high-pressure systems and irritates human lungs.

This essay focuses on the intersection of air pollution and human health effects in the Salt Lake valley. My research questions are threefold. How long has air pollution been a problem for humans in the Salt Lake valley? To what degree are air pollution and human health effects explicitly linked in the scholarly literature, the historical Salt Lake valley print media, and contemporary Salt Lake valley airshed decision-making discourses? Under what conditions might a critical mass of citizens change their daily transportation habits to consciously improve the air quality in the Salt Lake valley for health purposes? Historical print media research reveals that air pollution issues began in the Salt Lake valley during the early twentieth century and that local leaders took action to mitigate the problem in 1941. A review of contemporary literature indicates that the link between air pollution and human health effects is explicit in the scientific literature, framed as a concern for specialized populations in contemporary news print media, and predominantly tacit in the contemporary discourse of influential decision-makers. I will argue that to

affect social change toward the improvement of air quality and human health in the Salt Lake valley, the print media must foreground social change frame stories (Durfee, 2003) that feature scientific studies and political leaders who advocate the need for public education on the health risks associated with daily transportation choices.

This study is relevant to future air quality conditions in the Salt Lake valley. If a better understanding of the conditions under which social action might improve air quality standards in Salt Lake valley can be developed, then these social conditions might also have some application value in other metropolitan areas with similar cultural or politically conservative ideologies in the West.

McKerrow (1989) provides a useful principled guide for a critical rhetorical approach to the problem:

> History teaches us that there are no certainties, there are no universalizing truths against which we can measure our progress toward some ultimate destiny (Clark & McKerrow, 1987). In consequence, the most we can do is to ever guard against "taken for granteds" that endanger our freedom -- our chance to consider new possibilities for action (McKerrow, 1989, p. 131).

Conveniently transporting oneself by car every day is something that most Americans take for granted. Rarely does the average citizen consider the critical triangle connecting their personal transportation patterns (or choices) with air quality and human health. Before exploring this critical triangle, it will be beneficial to review relevant literature.

Literature Review

A proliferation of air pollution articles published by one of Salt Lake City's (SLC's) original newspapers, the *Salt Lake Tribune (SL Tribune),* parallel significant air pollution events over time. Pioneers settled the valley in the 1840's. By the early 1900's valley inhabitants were heating their homes with coal during the winter months. This created heavy black smoke from the coal combustion. In 1941, the *SL Tribune* published approximately 93 articles relating to air pollution. This marks a year when the political leaders and the citizens of Salt Lake City took action to do something about the unhealthy, smoke filled air they were breathing due to prolonged winter inversions.

In 1970, the *SL Tribune* published approximately one hundred articles on the topic of air pollution. This proliferation of media activity corresponds with increasing national concerns over the link between air pollution and human health, which culminated in the 1970s when Congress formed the Environmental Protection Agency (EPA) by passing the Clean Air Act. The EPA's primary purpose was to control pollution. Toward this end, the EPA developed attainment standards for air quality, and fiscally penalized metropolitan areas in the United States that were in non-attainment.

Additional national legislation occurred in the 1980s when Congress passed the Indoor Air Quality Act, and the Indoor Radon Abatement Act (ALA, www.californialung.org/spotlight/cleanair03_milestones.html, retrieved October 16, 2004). Clean Air Act amendments extended national regulations, and the EPA declared Salt Lake valley a non-attainment area. Non-attainment, at this time, related to densities of particulate matter (PM) less than ten microns (μms) in diameter ($<PM_{10}$). Non-attainment status precludes federal funding for a range of transportation related expenditures by state governments and requires an expensive and exhaustive state implementation plan (SIP) to abate the non-attainment condition (Ginsburg, 1992; Lillquist, 2004).

In 1990, the EPA revised its measurements with respect to particulate matter. Scientific research indicated that particulates less than 1 μm in size ($<PM_1$) were responsible for pulmonary distress and premature mortality (Archer, 1990; Pope, 1989, 1991a, 1991b, 1992a). Thus, the EPA chose 2.5 μms ($PM_{2.5}$) as a new standard capturing about 90 percent of the small particulates ($<PM_1$) produced through fuel combustion in car engines and roughly 10 percent of the larger particulates ($<PM_{10}$) caused by abrasion activities, such as tires rubbing on road surfaces, gravel pit/mining activities, dust, smoke from fires, and other related sources. In addition to $PM_{2.5}$ and PM_{10}, the EPA standards require non-attainment areas to monitor and report ozone (O_3), carbon monoxide (CO), and sulfur dioxide (SO_2) levels (Shprentz, 1996).

Since the 1990's scientists have increased understandings of the intersection of air pollution and human health effects. For example, in 1994, Robert Phalen of the Department of Community and Environmental Medicine and Center of Occupational and Environmental Health at University of California, Irvine, co-organized a colloquium on Particulate Air Pollution and Human Health with Jeffrey Lee, of the Rocky

Mountain Center for Occupational and Environmental Health and the Department of Family & Preventive Medicine at the University of Utah. A second colloquium focused on the same subject, was also held in Park City, in 1996. Of the roughly 140 abstracts and papers that were submitted for this conference, thirteen had the words, mortality, morbidity, or death in the title (Lee & Phalen, 1996). Many of the abstracts focused on epidemiological strengths and limitations (e.g. Pope; Rodan & Karch; Lipfert, & Wyzga), as well as the interaction between small particulates and respiratory system conditions in children (e.g. Ranson & Pope), chronic obstructive pulmonary disease (COPD) patients, non-smokers, seniors, and location specific hospital patients (e.g. Bennett & Zeman; Asgharian, Zhang, & Anjilvel; and Bennett, Zeman, Kim, & Mascarella). Lillquist provided insights in a comparison of indoor/outdoor PM_{10} concentrations measured at three Utah hospitals with a centrally located monitor, and evaluated $PM_{2.5}$ and PM_{10} with AIRmetrics MiniVol samplers (Lee & Phalen, 1996).

Lipfert summarized the knowledge that accrued between the first and second colloquia in the conference proceedings as well as a summary of the second colloquium findings, in which he asserted "with regard to the epidemiology of urban PM, neither the responsible agents nor the critical concentration levels have been identified with certainty" (Lee & Phalen, 1996, pp. 5-31 &32).

By 1996, there were well over 90 peer-reviewed articles on PM_{10} published in the United States. Archer (1990) studied "air pollution and fatal lung disease in three Utah counties", while Lamm, Hall, Engel, Reuter, and White (1994) studied pediatric respiratory admissions in Utah County with respect to PM_{10} implications. Lyon, Mori, & Gao (unpublished) looked at causal links between mortality and PM_{10}, in relation to location, year, season and cause of death. Olson, (1995) researched levels of particulate concentrations of oxygenated gasoline in SLC/Utah Counties during the winter, and Pope published the most articles specific to Utah. Pope's (1989, 1991) early articles related to steel mill emissions, hospital admissions, and PM_{10} in three Wasatch Front valleys: SLC, Cache and Utah. Another article (Pope, Schwartz, & Ranson, 1992a) focused on a study of daily mortality and PM_{10} pollution in Utah valley. Pope and Dockery (1992b) discussed findings on the acute effects of PM_{10} in children and, in a fourth article, although not Utah-specific, Pope, Thun, Namboodiri, Cockery, Evans, Spiezer, and Heath (1995) discussed the use of "particulate air pollution as a predictor of mortality in adults." Ranson and Pope (1992) also did a study involving elementary school absences and PM_{10} pollution in Utah. Recently, Pope (2004) wrote an editorial on air pollution and health in *The New England Journal of Medicine* in which he claimed "studies have shown that long-term, repeated exposure to air pollution is associated with an increased risk of death from cardiopulmonary causes in broad-based cohorts or sample of adults" (p.1133)

Additional trends in air quality research include serious concern over unprecedented levels of carbon dioxide (CO_2) in the atmosphere. The September issue of *National Geographic* reads, "Global Warning: Bulletins from a Warmer World." In this issue, authors Glick, Montaigne, and Morell (2004) claim that CO_2 levels are 100 parts per million (PPM) higher than they have ever been since the year of 1000 AD. Carbon dioxide, a green house gas, serves to trap the sun's heat close to the earth. As a result, polar ice caps are thinning, sea levels are rising, and many scientists are projecting wild changes in the earth's climate, including the possibility of a sudden reverse from a warm inter-glacial period to an ice age.

The University of Utah is conducting an interdisciplinary urban trace gas emissions study (UTES). As part of the outreach for this multi-year study, communication and science scholars conducted a series of workshops using a collaborative learning approach (Daniels & Walker, 2001). During these workshops, policy makers, decision-makers and opinion leaders built a comprehensive Salt Lake valley airshed model informed by current scientific knowledge.

At a 2004 UTES[i] workshop, Pataki presented findings on the relationship between global climate change and CO_2 emissions along with her current data from CO_2 monitoring in the Salt Lake valley. Pataki's methods are capable of distinguishing the anthropogenic carbon dioxide isotopes from those that are produced by natural sources such as plants and trees. Pataki predicts that the EPA will begin monitoring CO_2 in the near future. These new standards could prove extremely difficult for cities to attain, since high CO_2 concentrations are associated with growth and suburban sprawl. For example, in July of 2004, Salt Lake valley CO_2 levels peaked just under the currently unregulated EPA .08 PPM standards.[ii] In summary, the scientific literature links long-term exposure to small particulate matter (emitted from combustive processes) with increased risk of death in general adult populations.

However, most of the 2004 *SL Tribune* newspaper articles caution only susceptible populations when discussing the health risks associated with air pollution. Journalists usually reference Utah's Department of Air Quality's warning that children, seniors and individuals with COPD are at risk, and should not

exercise or even be outdoors. These status quo news media frames leave average citizens perceiving a relatively moderate to low personal risk because they don't fall within the "at risk" population.

Additionally, few political leaders espouse the need to decrease levels of $PM_{2.5}$, O_3 and CO_2 associated with suburban sprawl, increased vehicle miles travels (VMT) and development infrastructures in the Salt Lake valley. For example, the UTES project does not have one legislative representative attending the workshops, in spite of multiple invitations. What is to be made of the lack of interest here? Although advocacy groups, such as the Natural Resources Defense Council and Future Moves, are sounding the alarm about the connection between human transportation, air quality and health, it seems to be falling on deaf ears.

Durfee (2003) found that a news story about unhealthy air quality directed at changing social behavior (a change frame) produced "a greater perception of risk than a status quo or balanced frame story" (pp.69-70). Moreover, Durfee found that social change frames produced "the highest level of risk perception ($\underline{M}$ = 5.13 on a 6-point scale)" among readers and that status quo frames produced "the least amount of risk perception ($\underline{M}$= 3.85)" among readers. Specifically, "readers of the social change treatments reported a level of risk perception significantly different than the readers of the status quo...and the balanced...treatment according to the Bonferroni post hoc test" (p.70). Durfee also measured a positive relationship between self-efficacy and risk perception. "The greater the self-efficacy reported, the greater the level of risk perception reported." (p.74) Finally, Durfee concluded:

> When influential leaders decide that unhealthy air quality is a problem, then the media will present that information for the public with a social change frame. In the meantime, people live in a constructed reality where the media are agents that are dependent upon the power sources to address environmental and health risk issues (Durfee, 2003, p.82).

Durfee's conclusion is relevant to this essay because in 1941 social action did result in SLC from the mobilization of "power sources" interested in solving the air pollution problems caused by extreme winter inversions. This initiative for social change was reflected in the myriad of *SL Tribune* articles quoting leaderships interests in social action. Before turning to 1941 scenario, a description of the artifacts and methods used for this study follows.

Methods

During the winter of 2004, I worked with one of the principle investigators for the UTES project and another research associate to plan communication outreach interviews. In the spring of 2004, I conducted, recorded, transcribed and analyzed seven interviews. Interview participants were influential individuals embedded in decision-making processes relating to the Salt Lake valley airshed. Two participants were scientists in advisory roles (one regional and one state), three were planners (one each at a regional, state, and local level), and two were industry leaders - both in separate businesses that create metallurgical materials through resource extraction and combustion processes. All participants signed an IRB consent form. Six of the seven interviews were audio recorded. One, I captured using detailed notes from a phone interview. I transcribed the audio recordings and conducted a thematic analysis of the texts. Additionally, I searched the notes and transcriptions for the word health, counting the number of occurrences, and analyzing the context in which the word appeared.

Historical research led me to the microfiche archives in the University of Utah's Marriott Library, where I identified 1941 as a year with significant press coverage on the topic of air pollution. In 1941, the smoke became so thick in the Salt Lake valley, that leaders and citizens acted together to pass a smoke abatement ordinance. I then narrowed my search to fifteen newspaper articles involving the passage of this ordinance and conducted a textual analysis of these *SL Tribune* articles, as described below.

Historical Analysis

In January of 1941, the Salt Lake Council of women met to discuss possible ways of abating the smoky inversions in the Salt Lake valley, and they explored the possibility of erecting a "million-dollar smokeless fuel plant" (Staff, 1/23/41, p. 11-5). Within two weeks of this meeting, the Governor of the State of Utah, Herbert Maw, "promised to give full support to any feasible program that may rid Salt Lake City of the

winter smoke nuisance" (Staff, 2/7/41, p.15-7). Butler, SLC's Smoke Abatement Engineer, reported that St. Louis had developed an effective smoke abatement program worth considering as a model. "Newspapers carried on a ceaseless publicity campaign, city officials backed up the various groups battling smoke, and all classes of citizens joined in the campaign," claimed Butler upon his return from visiting St. Louis to study their abatement methods (Staff, 2/14/41, p.17-4*)*. Within five days of Butler's proclamation, the Salt Lake Council Board ordered a "sweeping program" to eliminate "the smoke blanket which costs 'more than a million dollars a year' to Salt Lakers in cleaning bills" (Staff*,* 2/19/41, p.21-8). An excerpt from the article reads:

> Mr. Backman, congratulating the commission on sending Mr. Butler to St. Louis, reported that [the] city has been "'ruthless" in enforcing smoke ordinances against individuals, industrial plants and railroads, but had been backed up by public opinion. He indicated the program need not be quite so drastic here and that it could "preserve" the state's coal industry.
>
> "Southern Illinois, where bituminous coal is produced, boycotted St. Louis business at first," he said. "But the city had not been growing for 10 years because of its bad smoke conditions and business men [sic] realized they had to make a change and were willing to undergo some hardships. Today one would never think St. Louis had ever had a smoke problem – and it has pacified Illinois by importing most of its stoker fuel from there" (pp. 21-8, quotation marks as published).

Backman's remarks reflect the doubly bound relationship that exists between economic development and air pollution. Economic growth had stalled for ten years. While Backman blamed "bad smoke conditions" for economic stagnation (implying citizen aversion to polluted air), he foregrounded economic development interests as St. Louis citizens' primary motivation to comply with "ruthless" government mandates. The connections between bad air and human health concerns remain tacit in Backman's remarks. As I will discuss later, this same phenomenon occurs in the interview transcriptions.

On March 7, The Women's Legislative Council voted to "oppose the smoke bill" (S. B. 261) indicating that the group had lost faith in the past twenty-five years of "ineffectual" abatement efforts, and expressed concern over the requirements that the bill would create. Instead, they wanted a "fuel processing plant that would eliminate the smoke menace" (Staff*,* 3/7/41, p.17-8). On March 8, the Salt Lake Commission held a public hearing marked by conflicting views. Commissioner McConckie formed a representative committee to draft a plan for the commission to consider (Staff, 3/8/41, p. 19-8). The flurry of community discourse drew the attention of Mayor Jenkins. He, on March 14, also called for "written reports from citizens to "speed" the "campaign" (Staff, 3/14/41, p. 17-5). Additionally, an editorial from the *SL Tribune* warned of the "danger" in delaying the program (Staff, 4/9/41, p. 6-1 & 21-8). On May 15, 1941, the Salt Lake City Commission unanimously passed a smoke ordinance to stop the "nuisance," including plans to address oppositional concerns expressed by the Women's Legislative Council (Staff*,* 5/15/41, p. 22-3). Subsequently, *The SL Tribune* editorial board released a sizeable and supportive editorial, using spring as a metaphor for clearing the air: "With the coming of spring the murky pall has generally vanished to let in the cheerful sunshine; with adoption of this ordinance the whole community is heartened by rays of hope and high resolve to continue advertising the natural beauties of Salt Lake valley" (Staff, 5/17/41, p. 8-2). This passage also suggests that the primary motivation for cleaning the air was economic, as it is difficult to market "natural beauty" when smoke prevents the eye from seeing it.

The number of newspaper articles associated with the campaign to regulate smoke emissions in Salt Lake City (SLC) dropped off dramatically after the SLC smoke abatement ordinance became law. An entire year passed before newspaper articles covered the women's repeated call for a power plant. In fact, only three newspaper articles appeared in *The SL Tribune* in 1942 on the topic of air pollution. One *SL Tribune* article "Women Rap Move to Burn Rubbish: Letter Disputes City's Claims of Smoke Reduction" contained the following excerpt:

> The lack of appreciable improvement in the city's smoke condition and the destruction of health and property because of the smoke as well as the spending of $25,000 per year without benefit to the people, has caused the women of the city to protest, the letter reads. They are asking for relief from this destruction through the industry of coal processing and are asking that Salt Lake City build a plant and receive benefits through the industry (Staff, 4/10/42, p. 10-8).

This text is unique because it places health concerns alongside economic issues with respect to air pollution in the valley. By June of 1942, Butler, who had been named the Director of the Smoke Control Division, was quoted in a defensive posture. At a meteorological conference held at the University of Utah, Butler asserted:

> When an industrial community realizes that keeping the air clean is a project of similar magnitude to keeping the streets clean, providing clean water, removing city waste or guarding the moral atmosphere, then there may be some hope of real success," he said. It is useless to look for a spectacular cure," the smoke control director emphasized. Success comes only after long-continued highly skillful effort. When a new plant goes in which proves to be a 'smoker,' it is difficult to remedy the condition. The community probably will have to stand smoke for a long time while the owner spends money temporizing with weak expedients.
>
> The remedy is to provide such engineering direction on new installations as to insure a smokeless plant to begin with. It is of little use to complain of smoky stacks and allow new ones to be added daily, and it is not often that smokelessness is one of the main objectives in an installation. Capacity, *convenience*, efficiency and low cost come first, with a weak but laudable hope that smokelessness can be had also at no increase in cost (Staff, 6/19/42, p. 17, italics added).

Butler's remarks reflect the hand in glove relationship between economic development and air pollution. One might ask: Why is it that some 93 articles were published on the smoke problem in 1941 and only three articles were published the subsequent year when health concerns and "smoky stacks" were still a problem? The absence of air pollution articles, when the smoke problem persisted in the valley, certainly supports Butler's claim that convenience and economic interests trumped efforts to abate air pollution.

This analysis of the 1941 *SL Tribune* smoke abatement articles also concurs with Durfee's (2003) findings. Recall that the governor, the mayor, the smoke abatement bureaucrat, the Salt Lake Chamber of Commerce, and the Salt Lake City commissioners, all supported the ordinance. They wanted to change the way SLC inhabitants heated their homes. As such, the print media presented social change frames to the public. Adjectives such as: "nuisance", "dangerous", "unhealthy", and "evil" were used in conjunction with headlines such as: "SLC Comms Orders City's Smoke Abatement Engineer to Submit a Sweeping Program Aimed at Controlling the Smoke Nuisance in the City." Recall Durfee's (2003) findings that such change frames are particularly influential because they increase personal risk perception and subsequently, the potential for social change.

History illuminates the conditions under which major social action occurred with regard to air pollution problems in Salt Lake City. Grassroots initiatives existed. Leaders advocated the need for change, and the media published over ninety articles, using change frames to echo the call for public action. Social action ensued in the form of a residential heating ordinance. This study also reveals a tacit assumption still prevalent today; air pollution is a necessary "nuisance" or side effect of economic growth. I will explore the implications of this assumption, next, in the context of early twenty-first century discourse.

Contemporary Analysis

Scientifically grounded evidence from studies conducted in the 1990's and early 2000's indicates that repeated long-term exposure to air pollution increases human morbidity and mortality. The next research question asks: To what degree are the connections between air pollution and human health effects explicitly articulated in the contemporary discourse of influential individuals embedded in air pollution decision-making processes? The interview transcriptions served as texts for this analysis. Six of the seven interview participants held the tacit assumption that growth is necessary for economic development and continued quality of life in the Salt Lake valley. Only one of the informants shared a critical perspective of everyday taken-for-granted knowledge regarding the modern assumptions of increased population growth and economic development. The others implicitly assumed that these are non-negotiable elements of the system.

All seven participants identified fine particulate matter and vehicular emissions as the top two critical issues with respect to SLC air quality. Additionally, all seven individuals grasped the complexity of the airshed system, but some of them were more holistic in their understanding than others.

The industry leaders were the most optimistic about changing human transportation activities to reduce vehicular emissions. These individuals probably have a greater degree of self-efficacy, because of their position in the business elite. Additionally, they may share an interest in allowing industry a larger percentage of the "pollution pie."

The interview texts comprised 45,076 words, in which the word "health" appears only twenty-four times, or five one hundredths of one percent of the combined texts. An industry leader and a state scientist each mentioned it once. Fifteen references occurred during interviews with planners, and the remaining articulations occurred during the interview with a regional EPA science advisor. Moreover, the research questions often provoked these references. In conclusion, the intersection of air pollution and human health effects was predominantly tacit in all seven texts.

The following text, from an interview with a planner, illustrates one of the interchanges where the word health appears seven of these twenty four times.

> Q[iii]: So, if people were coming in [to downtown] without that car and it was structured on a walkable community, could you elaborate a little bit on how those errands might look?
>
> DC2[iv]: Well, first of all, if you weren't going to have a car, then you would plan ahead a little more. So what would happen is people would probably make, make lunch a little more often, or ya know, they would carpool with, ya know, co-workers cars. And that has a lot more positive side effects - umm, probably eat a lot healthier and get to walk a little more. Other than air pollution it has *health* benefits.

Below, I broached the subject of human health with respect to people's daily transportation habits:

> Q: umhm. I think we touched on this last time, when we met - last week. I'm wondering about how, as another category here. We've got scientific. Maybe it would fall under that. Social, economic, historical and you've added political.
>
> DC2: Political, like even just the perception of why you are making even certain decisions.
>
> Q: umhm. Perceptions are a big factor in the political arena. Uh...how about *health*? Do you think - - I'm trying to follow up on your comment about impacting people's lives directly.
>
> DC2: I think *health* is the biggest argument that supports, um reducing emissions. I think that really can have, ya know, one of the, ah *health* and economic ya know I think are, are - that's the way you can kind of paint a picture of how this affects your individual life and your family.
>
> Q: um hm. Okay. Individual lives and family.
>
> DC2: *Health, health* is huge, now.
>
> Q: *Health* and economics.

Prior to the researcher naming health as a category in the latter interchange, the connection between air pollution and health effects remained tacit in his discourse. The next interchange with the EPA scientist includes six of the twenty-four utterances referencing human health:

> Q: What are the most important issues related to management of air quality in the Salt Lake valley?
>
> DC3: Fine particle concentrations - - We get spikes in the winter, with very high concentrations of $PM_{2.5}$ and fewer microns in diameter. There are periods during the winter, in the basin, when the emissions from motor vehicles and industry get trapped under a cold air mass. The state does a good job of issuing *health* advisories. The number one issue is $PM_{2.5}$, and the number two issue is ozone in the summer time, but it is not as big an issue as $PM_{2.5}$.
>
> Q: Are some decisions more difficult to make than others... and what makes these more difficult?
>
> DC3: Politics and the complexity on the technical side of things - - for example, you can control one pollutant and in controlling one you can aggravate another. Assumptions get made in models, there are judgment calls that can reflect politics. These greatly impact outcomes from the models on policy

decisions. . . . Arden Pope has done one of the most extensive studies on premature deaths. He estimates 65,000/year in the US die prematurely due to air quality related *health* issues. In Utah, he suggests there may be as many as 400 -500 per year that die prematurely because of $PM_{2.5}$. The eye can see some of these particle concentrations because of the way they refract the light. The eyeball is actually a very good indicator. We used to think there was a threshold below that which you'd have no *health* affects, but we've learned that there is more of a linear response, with no real threshold that we can determine.

Q: What additional resources would you like to have?

DC3: More technical data in other categories
More detailed scientific work
Air pollution control
Arden Pope type studies
What portion of $PM_{2.5}$ is most hazardous to public *health*?
Organics versus sulfur nitrate (power plants) - - There's controversy here.
On a practical level – *health* studies
We submit ambient air quality standards and update them every 5 – 10 years.
We're setting a standard for $PM_{2.5}$ - - being influential in setting 2.5 standards.

Q: Who are the key stakeholders in the air shed system?

State air quality agency
Dept. of Environmental Quality in Utah
EPA
Metropolitan planning organizations
Industry (smelting industry, electrical power, Geneva Steel, cement plants, gravel plants, miscellaneous industry
Environmental groups
Health (American Lung Association)
Medical Community
Tourism
Land managers - - BLM & USFS
Universities
Public School systems – air quality advisory interface with public schools

In the latter text air pollution and human health effects are explicitly articulated as being critically linked. However, it is not surprising to find this linkage in the discourse of a science advisor for the EPA, a national agency founded for public health concerns. In contrast, a state science advisor rhetorically argued that air pollution and human health effects, are secondary to economic development interests. The following interchange illustrates this example, where the word health is only uttered once.

Q: um hm. You talked about particulate matter, and the inversion issues.

DC6: Yeah, yeah. But ah, but also the need for ah, [clears throat] ya know, for evaluation of understanding and balancing the ah[clears throat], different components that are in part technical, and in part economic.

Q: Okay [long pause] Great!

DC6: Ya know it is interesting to stop and ask yourself, questions like, if the ah, [clears throat] city and state governments for Los Angeles

Q: um hm

DC6: Okay, ah, had the privy to modeling data, that would have allowed them to look into the future, ya know, twenty, thirty years,

Q: um hm,

DC6: and see what would become of the airshed, ya know, there, okay? Would they actually have made different decisions, or not?

Q: Now that's a great question! Is that something the media should be =[v]

DC6: Because the fact is

Q: = posing?

DC6: Because the fact is, right, that ah, although [clears throat] ya know, if the ah, to those for whom the environmental and *health* issues are first and foremost in the lives, in their, their minds, they would say: "well, obviously not!" - kay? But, ya know, for those, ya know, whose ah worked lives are primarily, ya know, involved in economic development, ya know, ah I think you might say: "Well, you might be surprised." (italics added)

Q: Different perspectives.

DC6: Yeah.

This science advisor linked the word "health" with the word "environmental." He then categorically separated those with either environmental or health interests from individuals whose "worked lives are primarily . . . involved in economic development." Next, he argued that individuals who privilege economic development interests would not alter their actions even if they had access to knowledge illuminating the adversarial impacts their actions might have on air quality and human health.

The final interview, with a state planner, succinctly frames human tolerance of air pollution:

Q: Okay. How would you describe those communications, um oral – written, frequency, quality, relevance, is it information dissemination?

DC7: Primarily oral and to be honest with you air quality is something that is not discussed very often.

Q: Why do you think that is?

DC7: Because it's not a crisis. [chuckles]

Q: [chuckles] I knew you were going to say that. What would make it a crisis?

DC7: An inversion that lasted all winter long.

Q: hm [pause] And um, ya know the answer might seem obvious and it is implicit, but I don't want to put words in your mouth. So if we had an inversion that lasted all winter long, why would that be a crisis for the people that live here? What's the connection?

DC7: Because people could see and feel the problem?

Q: How would it affect them? I mean, I mean what's the concern? If we have an inversion, what's the concern?

DC7: Well then, well they can see that the air is thick and heavy and polluted. They don't, it's depressing [chuckles].

Q: Okay

DC7: So, then, they would want to solve the problem. [pause]

Q: Any *health* connections? [laughing]

DC7: Well, of course, there are all kinds, but

Q: [laughing] That's what I was wanting to hear you say.

DC7: Okay. Well

Q: I mean it's so obvious,

DC7: I guess that is so obvious

Q: [laughing] but nobody ever says it. I don't want to put words in your mouth.

DC7: Well that is so obvious that it is implied.

Q: So there is the *health* issue.

DC7: The *health* issue, certainly.

Q: Do you think that would tie into, um, some of your earlier suggestions about education?

DC7: I guess there is no doubt about that. People need to be educated on the *health* effects of bad air. We wouldn't put up with, ah, bad water for a second. We seem to be much more tolerant of bad air (italics added).

Q: hm I wonder why that is?

DC7: I don't know. Something to ponder, I guess.

In light of these comments, I ponder, how much of Salt Lake citizens' (un)conscious willingness to breathe polluted air is related to the daily convenience of automobile transportation? By comparing the conditions for social action in 1941 with those of 2005, one might predict that individuals will continue to take for granted the convenience of automobile transportation along with the assumption the air is healthy enough to breathe until such time as people start dropping dead during a severe winter inversion, or leaders and media change frames indicate there are serious health risks associated with continued suburban sprawl and increased vehicle miles traveled per year.

Discussion

McKerrow (1989) suggests that a critique of power should look at discourse that contributes to the interests of the ruling class, because it empowers the ruled to present their interests in a forceful and compelling manner. As such, the subjugated practice a conditioned response, interpellated by dominant ideology.

Discourse, McKerrow (1989) claims "is the tactical dimension of the operation of power in its manifold relations at all levels of society, within and between its institutions, groups and individuals (p.133). Building on McKerrow's claim, I argue that the absence of explicit linkages between air pollution and human health effects in the discourse of interview participants is material evidence of dominant ideological influences at work.

During the 1940's, it took extreme air pollution to mobilize the public. Is a crisis then necessary to precipitate enough tension between material reality (prosperity/air pollution) and what most Americans tacitly desire (freedom to breathe healthy air)?

Conclusion

Air pollution has been a problem in Salt Lake valley for most of the twenty-first century. The scholarly literature is replete with explicit connections between air pollution and human health effects, especially since the 1990's. The connection between air pollution and human health effects is also present in both historical and contemporary print media, but air pollution is rarely framed as a major concern for anyone other than seniors and "at risk" individuals. Thus, the risk perception for healthy individuals is fairly low due to these status quo or balanced media frames. One exception to this general rule occurred in 1941, when a severe winter inversion created an air pollution crisis, which mobilized the leaders to collectively enact a smoke abatement ordinance. During 1941, the *SL Tribune* presented the issues using social change

frames. These findings extend Durfee's claim that social change will not likely occur without leadership interests influencing them. A textual analysis of seven different interviews with influential individuals embedded in policy development and decision-making for air quality issues in the Salt Lake valley indicates that the connection between air pollution and human health effects is predominantly tacit in the discourse.

Building on Durfee's claims (2003), and McKerrow's call for rhetorical criticism (1989), I conclude that to improve air quality in the Salt Lake valley, mass media must foreground social change frame stories by broadening the limited focus beyond specialized "at risk" populations. This can be accomplished by featuring scientific studies and quoting knowledgeable sources on the critical triangle connecting transportation choices with air quality and public health. Given the prevailing cultural and political ideology for local control, grassroots advocacy groups must provide strong support for public education initiatives. Absent this, it will require a crisis for elected officials to lead and for social action to occur. Perhaps the crisis is around the corner, given evidence of global warming and the potential for wild climate changes. In the meantime, with CO_2 monitoring looming on the horizon, one might persuasively argue that economic development strategies, which mitigate fine particular matter and CO_2 levels, are surely the wisest.

Notes

[i] The UTES web site contains a wealth of resource information about the project; http://www.slvairshed.utah.edu/

[ii] Ozone 8 Hour Highest Values, July 2004, & 3 Year 4th Highest Maximum 8 Hour Averages 2001-04 (as of 8-30-04, Utah Division of Air Quality, http://www.airquality.utah.gov/)

[iii] Q signals the researcher question (or comment).

[iv] DC# signals the interview participants' comments. All identities remain confidential.

[v] The symbol = indicates the continuation of a phrase.

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Tourism, Local Economy, and Ecosystem: The Contribution of the Press to Conflicts

Xinkai Huang
University of Utah

The tourism industry plays a pivotal role in local economies of many places of China. The study of media coverage of tourism tries to explore the relationships between tourism, local economy, and ecosystems in China. The Chinese government regulates a seven-day period at the time of National Day, Spring Festival Day, and Labor Day. Excessive travelers overcrowd a few popular scenic spots at the three holidays, which endangers the ecosystems of the areas. Premised upon the agenda-setting and framing function of the press, readers may get the misrepresented information from the press and crowd to a few popular sites in condensed time periods. The author argues that the press contributes to the conflicts among local governments, tourism, and natural environment, although the degree of contribution needs further investigation. The research finds that the selected newspapers focus on a few popular scenic sites in their tourist sections and advertisement sections. They give little attention to other less popular sites. The coverage of the trendy sites is biased. The articles intentionally ignore that the hosting capacities of the sites and the transportation facilities cannot accommodate excessive tourists. The promotion of the traveling package to popular sites exacerbates the situation. From the editorial perspective and the views of the local governments represented by the newspapers, environmental integrity should surrender to tourism boom. At the end, the author suggests that the press and local governments could make combined efforts to better manage these conflicts.

Introduction

Tourism is becoming an important social activity in China. The tourism industry plays a pivotal role in local economies of many places of China. The study of the effects of media coverage upon tourism will provide insight in understanding the relationships between tourism, local economy, and ecosystems.

The effects of tourism on natural environments are contradictory in nature. Yu-Fai, Marion, and Farrell (2001) argue that tourism can impact the environment positively or negatively. Although tourism gives rise to local economy, overcrowding travelers may deteriorate natural environments, thus damaging the sustainability of both the tourism industry and the environment. Human activities brought by tourism do affect the natural surroundings of scenic spots, including national parks, protected areas, and nature reserves in mainland China. From the early history of human civilization, people have transformed nature to better fit their desires for living and development, despite the fact that sometimes this transformation endangers the environment. On the other hand, the prosperity that comes from this transformation can stimulate local economy and in return protect and even improve the natural environment.

To solve the problem of an excess labor force and encourage consumption, Chinese central government determined that people should only work five, instead of six days a week, in 1995. The two day weekend policy greatly stimulated the tourist economy. Later in 1999, the government regulated that people should enjoy seven days off at the time of *National Day, Spring Festival Day,* and *Labor Day.* A large percentage of the urban population now travels to a few popular scenic spots at the three holidays. These places have been unable to accommodate the overabundant tourists at the holiday periods, and this endangers the ecosystems of the scenic areas.

The environmental integrity of the scenic areas is in conflict with the local governments' economic concerns. The governments are not aware of or are reluctant to admit that too many tourists can seriously damage the environments and thus affect the sustainability of the attraction sites in the long term. The local officials are unlikely to do anything that may affect this capital flow. They desire to maximize tourism profits, while they are not well educated about the interaction between tourism and preserving ecosystems.

Media are capable of influencing the relative importance of news events, issues or personages in the public mind through the order of presentation or relative salience in news reports (McQuail, 2000). It is assumed that the agenda-setting function of newspapers can tell readers what scenic sites to think about in their destination selections. Biased media presentation may encourage travelers to congest a few trendy sites and add to the undesirable environmental effects of tourism. The author argues that the press contributes significantly to the conflicts among local governments, tourism, and natural environment, and could also contribute to better management of these conflicts. Two research questions are addressed in this paper:

(1) Do the selected newspapers highlight a few popular scenic sites in the three holiday periods?

(2) Is the coverage about the popular sites biased or misleading?

The conflicts can be improved though not resolved, when nature and tourism are considered equal partner and interested groups cooperate with one another. It is critical that mass media and local governments make combined efforts to prevent overuse in certain areas and promote sightseeing at less popular places.

Importance to Communication

Mass media can be used as a tool to facilitate managing the conflicts among various interested groups. Chinese newspapers have developed and operate differently from those of the Western world. Political concerns and government control largely influence the operation of Chinese newspapers. At the same time, Chinese academia is not fully aware of the interaction between mass media and environmental conflicts. The author expects that the research findings may assist Chinese mass media's performance in improving social welfare by educating and motivating readers. Media can promote environmental awareness of the public and motivate people to visit alternate less-congested areas. The project tries to adapt appropriate aspects of the Western experience of environmental conflicts management to the Chinese situation.

Literature Review

Harris (2004) suggests that mass media have behavioral effects on readers/audiences. Harris is concerned about the agenda setting function of mass media, saying that media tell audiences what to think about through heavy coverage of certain issues. Harris feels that through the use of framing mass media are able to affect how people respond to a problem or situation. Kahneman and Tversky (1984) suggest that the power of framing comes by selecting and highlighting some features of reality while omitting others. Entman (1993) analyzes the uses of framing:

> To frame is to select some aspects of a perceived reality and make them more salient in a communicating text, in such a way as to promote a particular problem definition, causal interpretation, moral evaluation, and/or treatment recommendation for the item described. (p.52)

Thus, the misrepresented media images may lead audiences, who are not well-informed, to act, think, and behave incongruently with real world situations.

Chapman, Kumar, Fraser, and Gaber (1997) state that mass media enjoy the power of agenda setting about environmental issues. Through their studies of the relationships between environmentalism and mass media in Britain and India, they deny a simplified model of the circulation of ideas. Rather, they suggest, "the media help in propagating and distilling a commoner world-view of these projects (environmental), or in giving limited opportunities for propagating the new ideas which may challenge them" (p.287). Gartner and Shen (1991) consider that a newspaper as a major image change agent has a considerable market

penetration and receives a high degree of credibility. "It consists of second-party sources, generally media, that deliver messages about an area. Depending on the source (e.g., national news), the level of credibility and market penetration – and consequently impact on image change - can be considered to be very high" (Gartner & Shen, p.47).

In China, mass media is influential in setting the agenda of information consumption of audiences. Harris suggests, "The meaning of something in the media, at either a cognitive or an emotional level, depends on how that information is processed during our experience of interacting with the medium" (p.52). Traditionally, most Chinese people take newspapers as credible information sources. In the survey conducted by *Beijing Journalism Association* in 1982, about 80% of respondents said that newspaper coverage is credible or fairly credible (Womack, 1986). Zhao, Zhu, and Bleske (1994) find strong relationships between mass media exposure and attitudinal outcomes in China. They argue that mass media might be more likely to induce a powerful impact in China because of "the state monopoly of the media and a resulting high degree of homogeneity in media content and the relative novelty of much of the information in the media to a population that suffered a blackout of news and information from the outside world for a quarter of century" (p.79). Rosen (2003) asserts that Chinese press plays an important role in shaping negative views of the United States among Chinese youths after the May 1999 embassy bombing incident.[i] In China, mass media are powerful to affect opinions of audiences.

People often rely on external channels to locate their traveling destinations. Gartner and Shen say that mass media can inform the visitors selecting specific travel routes and patterns of traveling. Mayo (1973) and Hunt (1975) suggest that a positive image will lead to increased visitation of natural landscapes. The media messages regarding scenic spots help people make decision in their traveling plans.

When travelers visit scenic spots for recreational purposes, their stays affect the natural surroundings of these places. "Visitor activities result in a variety of impacts affecting vegetation, soil, water and wildlife resources" (Yu-Fai et al., p.23). Yu-Fai et al. say "impacts may occur wherever visitor activities are concentrated: on trails or campsites, along riverbanks and lakeshores, and at attraction features such as waterfalls, coral reefs or wildlife viewing areas" (p.26). Runyan (1991) says that tourism may lead to deteriorating water quality, urban pollution, and many other negative environmental impacts. Scholars (Cresswell & Maclaren, 2000; Weaver, 2000) consider that the dynamism of tourism is internally contradictory between economic impetus and ecological integrity. "The potential costs include environmental degradation, erosion of local culture and socio-economic instability" (Cresswell & Maclaren, 2000, p.285).

Since the 80s, developing tourism has become an effective way to promote local economies in China. "As a developing country, China is backward economically and technologically when compared to most industrialized countries. These abundant resources, many of which are unique to China, serve the country well in developing tourism" (Lew & Yu, 1995, p.13). Lew & Yu state that developing tourism facilitates local economy and is in line with national economic development policies.

On the other hand, Runyan finds Chinese people lack the understanding that tourism does depend on its natural surroundings. The political trend of decentralization and deregulation in China allows the regional and local authorities, who are little concerned about the negative impacts brought by tourism, more freedom in developing local tourism developments (Xu, 1999). Xu (1999) says:

> Policymakers at both national and local levels are interested primarily in projecting tourism growth and devising tourism policies and long-term strategies which supposedly should be conducive to 'healthy' development of tourism and, more recently, 'market-confirming' in nature. . . . On the whole, neither policymakers nor indeed tourism researchers have taken an adequate account of the impact issues. (p.6)

Furthermore, residents in those scenic places do not care whether the incoming tourists affect the natural environments. Oakes (1998) observes, "Mountains have long been regarded a curse by the poor people who must live on them" (p.9). To those local villagers, the geography is a primary culprit for backwardness. Oakes suggests that local people are worried more about getting rid of poverty rather than the aesthetic qualities of natural landscapes.

To address the conflicts between economic efficiency and protecting natural environments, scholars put forward the concept of sustainable tourism. *World Tourism Organization* defines that sustainable tourism is a suitable balance between environmental, economic and socio-cultural aspects of tourism development to guarantee its long-term sustainability.

Strategies have been proposed to deal with the conflicts based on this concept. Yu-Fai et al. (2001) state, "One important criterion for evaluating the ecological sustainability of tourism is the extent to which undesirable environmental effects of tourism development and tourist activities are prevented or minimized" (p.21). They suggest that protected-area managers can avoid or minimize visitor impacts by influencing factors related to both visitation and the environment within which use occurs.

The literature review demonstrates that overabundant tourists may lead to degradation of ecosystems. Keeping an adequate number of visitors to ecologically vulnerable places becomes critical in managing the conflicts between economic developments and ecological concerns. In China, people often resort to mass media as their information sources of traveling. Understanding how mass media influence travelers' destination selections and trip planning can help propose improvements to the conflicts.

Methods

The author conducted a close textual analysis of newspaper articles. Two dailies, *Beijing Evening News* (http://www.bjd.com.cn/BJWB/20041130/GB/default.htm), and *Huaxi Daily* (http://www.wccdaily.com.cn), are selected. Not perceived as representations of Chinese newspapers, the two papers are taken as influential regional newspapers, which may reflect certain dimensions of Chinese press. *Beijing Evening News* is a local newspaper of Beijing, the capital of China, and *Huaxi Daily* is a local newspaper of Chengdu (the central city in Southwestern China). They both target readers of all ages. According to the *World Press Trend 2003* published by World Association of Newspapers, in 2003, *Beijing Evening News* enjoys a daily circulation of 950,000, and *Huaxi Daily* has a daily circulation of 600,000. Both newspapers are the largest in their local areas in terms of circulation. Moreover, they both have online databases, which store previous publications (*Huaxi Daily* since 1998, *Beijing Evening News* since 2003).

The author focuses on the articles published in the three periods in 2004 (January 13th to January 28th, *Spring Festival Day* is on January 22nd 2004*;* April 15th to May 5th, May 1st is *Labor Day;* September 20th to October 5th, October 1st is *National Day)* . Most newspapers publish more articles about traveling prior to and on the three long holidays than in any other time.

The units of analysis are the newspaper articles, which address tourism issues in one of the following areas: transportation, presentation of specific sites, promotion of travel agencies, traveling tips, and local governments' efforts to improve tourism industry, and the advertisements for travel packages posted by local travel agencies on the two newspapers. 377 articles and 873 advertisements have been analyzed. The author analyzed how the newspaper articles encourage travelers to certain scenic spots, and how the articles contribute to overheating tourism in certain areas in the three holiday periods.

Results

Firstly, the newspapers concentrate on a few popular scenic sites. Among the 377 articles being analyzed, 175 articles talk exclusively about a few popular sites, 22 articles cover less popular sites exclusively, and 165 articles focus on popular sites though they give accounts of less popular sites.

The newspapers usually provide readers with the weather forecast of a few popular scenic spots. Readers cannot get any weather information of other equally wonderful sites. *Beijing Evening News* updates the weather reports of 15 popular sites daily; while, it seldom informs readers of the weather forecasts of other sites. Though *Huaxi Daily* does not have a column that presents weather forecasts of scenic sites, the articles that talk about the popular sites often include the sites' weather forecasts.

From November 28th, 2004 to October 2nd, 2004, *Huaxi Daily* has 5 articles, one on each day, that introduce *Xiling Snow Mountain* or share the reporters' traveling experience there. Considering that *Huaxi Daily* had only 22 articles in the traveling section in the five day periods, the paper took an unbalanced attitude towards the selection of scenic sites. Although the paper has briefly recommended several scenic sites with little popularity, readers are more likely to visit Xiling Snow Mountai*n* with detailed information of the mountain (transportation, weather, landscape, traveling routes, and many other details of the trip). In the *Spring Festival* period, the newspaper informed readers that the few natural parks have some excellent activities to celebrate the festival (*Spring Festival Traveling*, published on January 20th, 2004). The article does not include any message about the sites that are less popular. The problem is that the few popular sites are always crowded on the long holidays. One article, *200 Thousand Chengdu Citizens Travel after the*

Spring Festival Break, published on February 1st 2004, admits that these sites were overcrowded in the break.

Beijing Evening News takes a similar attitude to that of *Huaxi Daily* in its presentation of scenic sites. Most of the articles on the long holidays introduce the sites within 100 miles of Beijing. Those scenic sites, which are more than 100 miles away from Beijing, are almost excluded in the coverage. The twenty million citizens in Beijing can overcrowd any sites close to Beijing, if they do not go elsewhere. Even worse, *Beijing Evening News* urges readers to visit the parks in Beijing. In the article, *Scenic Sites and the Celebration of the National Holidays*, published on September 29th 2004, it tells readers that the parks can manage excess visitors by prolonging opening time, adding extra ticket offices and temporary water closets, providing sufficient food and water, strengthening security protection, and deploying emergency task forces. The paper even claims that the Summer Palace, the world famous scenic site that enjoys a perfect integration of nature and human constructions, is prepared to create a new record of hosting 100 thousand visitors daily. It is crazy to host so many people in a park that only has 725 acres.

Secondly, the newspaper coverage may mislead readers to believe that the traffic to popular scenic sites may not be a problem on the long holidays. Transportation information is critical for individuals to finalize their traveling plans and destination selections. The two newspapers provide readers with information about the schedules of trains, buses, and airplanes to a few popular scenic spots. In the one week before the holidays, the articles informed readers that extra trains, buses, and airplanes would be available on the long holidays. The article, *More Excitement in Xiling Snow Mountain on October 1st*, published in *Huaxi Daily* on September 29th 2004, reported that more buses would be available from Chengdu to the site and the driving time would be shortened because of the completion of an expressway. Xiling Snow Mountain is less than one hundred kilometers away from Chengdu, the second largest city in Southwestern China with more than seven million citizens. The mountain is among the most popular sites in the area, and the facility there could not accommodate the excess visitors on the long holidays.[ii]

Such information greatly encourages individuals, who might not like to take public transportation, to drive on their own. This puts extra burden on the facility and the ecosystems of the site. Some articles talk about the traffic jam of the roads to the few popular sites. In the article, *Happy Journey but Unpleasant traffic Jams*, published on October 1st, 2004, it reports that several roads have been blocked because of bad weather and excess vehicles. However, the article does not discourage travelers to take the routes, instead it tells readers that local governments make efforts to improve the situations. It warns that vehicles in poor mechanical condition should not take the blocked roads; because if these vehicles are out of order, they can make the traffic jam even worse. It also asks travelers to drive gently and avoid rush hour. The purpose of the article is to help travelers arrive in the sites on time. It has no intention to persuade citizens to cancel the trips because of the heavy traffic. Some articles manipulate the information to encourage tourism. In the article, *Sufficient Flight in the Holidays*, published on May 1st, 2004, it comforts readers that there are sufficient seats for travelers as airlines have added many extra flights to major scenic sites on the long holidays. The truth is that individuals pay at least 30% more in the holiday periods and they often cannot catch the desirable flight. In the article, One *Million Travelers in Beijing at the Golden Week*, published on October 2nd 2004 in *Beijing Evening News,* it boasts that the Beijing airport has set a new record of serving visitors, which are mainly travelers; while it does not cover the negative impact of the overwhelming travelers, for example, the delay of the flights.[iii] None of the articles discuss that the overabundant visitors may hurt the environments of scenic spots and even the ecosystems of the city. In general, transportation systems in China can hardly match the sharply increasing moving populations, mostly travelers, in the holiday periods. These articles focus on the efforts to manage excess travelers but seldom consider that the transportation facilities cannot accommodate so many people. From this perspective, the tourism boom is weighed far more seriously than protecting natural environments.

Thirdly, the advertisement posted by traveling agencies on the papers focus on the few popular sites. The advertised package tours only target a few trendy sites. In *Huaxi Daily,* the package tours usually include the popular sites, such as Xiling Snow Mountain, E-Mei Mountain, and Jiuzhai-Gou, in Sichuan Province (*Huaxi Daily* is published in Chengdu, the capital of Sichuan Province) and the major scenic places in other provinces, such as Tibet, Lijiang, and the Great Wall. Travel agencies do not promote their packages that cover less popular areas. Readers are prone to follow the packages suggested by the advertisements because the advertisements offer discounts or promotions. However, travelers with the package have to pay much more than those who visit the less popular sites. In the long holiday periods, all the hotels in the trendy sites will double or even triple their rates, and the dining expenses will be much higher. The owners of the hotels, restaurants, and other utilities in the popular sites are not worried that they

will lose customers when there are too many visitors. Meanwhile, the traveling expenses of the less popular sites remain the same as that of the regular time because the local governments and the business owners expect to attract more visitors. The newspapers seldom mention this pricing difference between the trendy sites and other sites; instead they post soft ads of the travel packages to the trendy sites. For example, in the article, *10,900 Chinese Yuan Super Jiuzhai-Gou*[iv] *Package*, published on April 30th, 2004 in *Huaxi Daily,* it suggests that the package is worth more than the cost. In this sense, travel agencies' commercial preference drives readers to a few popular places, which pressures the hosting capacities of the sites.

Fourthly, to inexperienced travelers, traveling instructions from a reliable source may greatly affect their behaviors in traveling. Several articles in the newspapers offer traveling tips, which address the issues of shopping, safety, drinking/eating patterns, medical care, clothes, communication, and various other things. None of the articles indicate that visitors should protect environmental integrity of scenic spots. But several articles do recommend readers should behave properly in specific sites because of non-environmental concerns. For example, an article (*Tips of Traveling in Maldive*) in *Beijing Evening News* on September 20th, 2004 warns that travelers should not fish or corrupt natural coral in their stay at Maldives. It highlights a $5,000 fine for the violation and that's the reason that people should avoid damaging natural environments. Travelers may not be aware of the importance of preserving environmental integrity, if there is not a reminder from the credible guide-like articles.

Finally, local governments of scenic sites only take the economic contribution of the tourism boom seriously, and this point of view is reflected in the two newspapers. Several articles in the two newspapers speak highly of the efforts of local governments to improve the facilities and the service of the popular sites and to arrange local officials and police forces to help accommodate incoming travelers. The article, *Panzhihua Tourism Promotion*, published in *Huaxi Daily* on October 4th, 2004, although it expresses the government's concern that the facilities and the natural environment cannot hold so many tourists on the long holiday, it never says that excess tourists may hurt the ecosystems and local economy on the long term. None of the articles cover that local governments are concerned about protecting environmental integrity of the sites. The articles demonstrated that the governments were only interested in promoting the business service standards of the sites.

Discussion

The analysis demonstrates that the two newspapers focus on a few popular sites in their tourist and advertisement sections. The newspapers give little attention to other less popular but equally beautiful sites. The coverage of the trendy sites is biased. The articles intentionally ignore that the hosting capacities of the sites and the transportation facilities cannot accommodate excessive tourists. The promotion of the traveling package to popular sites exacerbates the situation. From the editorial perspective and the views of the local governments represented by the newspapers, environmental integrity should surrender to tourism boom. Based upon the agenda-setting and framing function of the press, readers may get the misrepresented information and crowd to a few popular sites in the holidays. In this regard, the author's argument that the press contributes to the conflicts among local governments, tourism, and natural environment is supported, although the degree of contribution needs further investigation.

Nature of Conflicts, Conflicts Management, and Newspaper Coverage

The author feels that the press has the potential to contribute to better management of the conflicts. In essence, it is impossible to resolve the conflicts between the short-term economic interest and environmental integrity. The more people visit the popular sites, the more financial benefits the local governments of the sites can get. Tourism development has greatly contributed to economic growth in China (Liu, 1998).

Wen and Tisdell (2001) suggest that China's economic reforms have come at an environmental cost. They observe that local governments have been permitting polluting activities which adversely affect neighboring regions and reduce overall national welfare. The senior officials in the local governments have seldom been educated of the knowledge, values and perception of ecosystem health. They are not evaluated by whether the ecosystems of the sites have been damaged or not. Their superiors judge their capabilities by economic gains. Boosting local economies has become the primary goal of Chinese local governments. At the same time, the Chinese government has a tight control of non-governmental organizations. In China,

there are only a few non-governmental organizations, which aim to protect environmental integrity. These organizations can not exert any influence upon the local governments. In this sense, there is not any entity working on behalf of environment health in the process of policy formation and execution.

As long as the tourism industry precipitates local economic growth and the environmental damage brought by excess visitors are not serious enough to threaten the living conditions of a large numbers of people, local officials will not mind 'minor' environmental problems of the sites.

The success of maintaining environmental integrity of scenic sites also depends on how villagers perceive the issue. Many local residents have become better-off financially because of the tourism boom. Before the government started to promote tourism, most local citizens of the popular sites were afflicted with extreme poverty (Wen & Tisdell, 2001). These people have experienced the great improvements in their life brought by tourism. They stand firmly against any policy that restricts the number of tourists because most of them are not well-educated and have little knowledge of environment health.

Alongside villagers' resistance of limiting excess travelers, the degradation of the environments may not obviously affect the number of incoming tourists. Many people do not care about deteriorating ecosystems of scenic sites. They are not aware of the causal relationship between environmental integrity and the long-term well-being of human beings and thus not inclined to sacrifice their personal interests for the purpose of protecting the nature.

In short, the emphasis on material wealth and economic prosperity at the local level, both the governments and individuals, and the lack of environmental awareness make it difficult to deal with environmental problems of scenic sites.

When all interested parties fail to recognize the seriousness of protecting the environment, newspapers, which are capable of promoting environmental awareness and setting the agenda of presenting specific scenic sites as desirable, can motivate visitors to minimize their damage to the environments and largely affect the flows of tourists. Currently, the newspaper coverage deteriorates the situation by limiting readers' traveling options. Guided by misrepresented information, people congest a few popular places in condensed time periods without adequate knowledge of environmental health.

It is necessary to link tourism with conservation of the natural environment. The Chinese government states that ecotourism should be promoted as a means to conserve biodiversity and nature (State Council, 1994, p.177). It has realized the importance of a sustainable development of tourism. On the other hand, on the long term, only when the local economies of the popular sites rely less on tourism income, will the local governments begin to control the overabundant tourists.

Maintaining the tourism income of the popular sites is critical to win the support of the local governments in protecting the natural environments. In general, the visitors of the popular sites can be divided into two groups: those who live close to the sites and those who are far away. Most of the travelers from distant places can only visit the trendy sites on the long holidays, while the travelers from nearby areas can visit the sites on any weekends. If the people from nearby areas avoid the long holidays in their traveling of the popular sites; the amount of incoming travelers will be greatly reduced at that time, while the tourism gross income may remain the same. The local governments can adopt this strategy to encourage people from neighboring areas to visit these sites off the peak times. Mass media, especially newspapers, can greatly help the local governments' effort in this promotion.

Since the political and economic reforms in China, Chinese media has gained more independence from political restrictions. The local dailies are less controlled by the local governments compared with ten years ago. The papers enjoy the freedom to promote specific scenic sites. Thus, the dailies can develop their own agenda of covering specific sites and persuade citizens to go to less crowded sites on the long holidays.

Local newspapers play a central role in improving the conflicts between local economic growth and environmental integrity by building a partnership with local governments of scenic sites. The local governments should build constant two-way communication with daily newspapers. The local governments of the popular sites should adopt policies that promote traveling from neighboring areas at any time other than the long holidays. They can provide the dailies of the neighboring areas with a package of information, which lists the promotional activities and the benefits of visiting the sites off the peak times. Thus, in the long holiday periods, the governments will focus on attracting travelers from distant places. The local governments of the less popular sites should prepare detailed descriptions to the sites located in their precincts. The descriptions should be ready-to-go, meaning that daily newspapers can use the materials without much revision. It is crucial that newspapers promote other equally wonderful sites in the holiday periods. As citizens are already familiar with the trendy sites, they can get the information about the sites from many other sources, such as the Internet and print traveling guides. From this perspective, daily

newspapers can replace the articles about the trendy sites with the articles about the less popular sites. The alternative options of less popular sites will gratify those travelers who do not like overcrowded places. If they had been informed that there would be excess travelers in the sites, they might change their destinations.

The newspapers should maintain a position that will not be manipulated by specific local governments. The selection of the sites in coverage may greatly affect the tourism income of specific sites. Interested parties may strive to influence the stand of newspapers, for example, bribing editors of the tourism section. Consequently, travelers may congest a few highly-promoted sites, which may lead to serious ecological and social problems. Several strategies may work to manage the problems.

First, the central government may need to offer workshops that teach the fundamentals of environmental protection. The editors should be aware of the importance of maintaining environmental integrity. When the editors learn the relationships between environmental integrity and the welfare of all human beings, they will strive to educate readers of appropriate behaviors that may reduce negative impacts of their traveling on natural environments. The papers can also provide readers with strategies and tactics that help them avoid visiting overcrowded sites on the long holidays.

Second, the central government should set up a database that stores the information of the natural environments, the ecosystems, the maximum hosting capacities, and the historical records of visitors of all scenic sites in China. Through the database, the editors should be able to evaluate whether the promotion of specific sites will lead to excess visitors of the sites, and they can also easily locate other equally wonderful sites which are capable of hosting a large number of visitors. The database should be free to public, and individuals as well as editors can access it online.

Third, the central government should encourage the local governments of less popular sites to use mass media to promote the tourism industry. The local governments of less popular sites may be more likely to focus on media promotions than that of the trendy sites because trendy sites can easily attract many visitors without media promotion. The central government may need to subsidize the local governments of less popular sites in their spending on media promotions, especially on daily newspapers.

Alongside the promotion of alternate sites, the newspapers should educate readers about the symbiotic relationships between humans and the nature. Specific columns should address the negative impacts of unrestricted tourism developments upon natural surroundings in plain words. Thus, people will be aware that regulating the amount of the visitations of current popular sites is for their own good in the long run, because excess visitors may quickly damage the ecosystems of the sites.

Meanwhile, individuals should be given a chance to voice their support of protecting environments in daily newspapers. The opinions of specific individuals, in a friendly tone, can be more persuasive than the detachment of editorial stands in environmental issues. The first- hand observations of conscious travelers may resonate with readers in their perceptions of protecting environments.

In conclusion, a resolution to the problems of overcrowded scenic sites is not feasible because China's political and economic systems place economic interest above environmental concerns. Local governments, daily newspapers, and individual travelers can cooperate to improve the degrading natural environments brought by excess travelers. Daily newspapers are the key to this conflict management. The newspapers can promote environmental awareness and encourage travelers to visit alternate sites. The local governments can use the newspapers to maximize the benefits of the tourism industry while controlling the flow of visitors. Through the newspapers, individual travelers can become more environmentally conscious.

If the central government releases the control of public participation in policy formation, it may realize that environment protection is as important as economic advancement. Then, more creative strategies will be proposed to manage the conflicts between the nature and the economic development through a collaborative framework that invites all interested parties.

Notes

[i] On May 8th 1999, the Chinese Embassy in Belgrade, Yugoslavia was bombed by an American missile.

[ii] The author's uncle runs an inn at the site. In the long holiday periods, even if he doubles the room rates, the rooms are sold out quickly.

[iii] In the long holiday periods, more flights are delayed than other times because many extra flights are added at that time.

[iv] It is the most famous national park in Sichuan Province.

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The Controversy Over the Legacy Highway in Utah: An Opportunity for Invitational Rhetoric

Carlo A. Pedrioli, J.D.
University of Utah

Disagreements over how best to relate to nature and its resources can lead to charged rhetorical exchanges among stakeholders, and Utah has been no exception to this type of conflict. Beginning in the mid-1990s, residents of the state began to argue over the merits of the "Legacy Highway," a large highway that would run near the Great Salt Lake in an attempt to alleviate the clogged commute on Interstate-15, which passes north/south through Salt Lake City. Given the extensive rhetoric in the controversy, this paper suggests invitational rhetoric as an alternative approach to help improve the discourse.

Disagreements over how best to relate to nature and its resources can lead to charged rhetorical exchanges among parties who are concerned primarily either about the environment or about using nature's resources for human benefit (Peterson & Horton 139). Utah has been no exception to this type of conflict. Beginning in the mid-1990s, residents of the state began to argue over the merits of the "Legacy Highway," a large highway that would run near the Great Salt Lake in an attempt to alleviate the clogged commute on Interstate-15, which runs north-south through Salt Lake City, the state's capital. Perhaps not surprisingly, environmental groups were upset with this proposed governmental project, and groups like the Sierra Club, Stop the Legacy Highway, and Utahans for Better Transportation faced off against Advocates for Safe and Efficient Transportation and the Utah Department of Transportation. Generous amounts of rhetoric, including public discussion and litigation, resulted from this controversy. At stake for Utah's residents were both transportation and environmental issues.

In light of the extensive rhetoric in this controversy, this paper suggests invitational rhetoric as an alternative approach to help improve the discourse involved in the ongoing disagreement over the Legacy Highway in Utah. Sonja K. Foss and Cindy L. Griffin define *invitational rhetoric* as "an invitation to understanding as a means to create a relationship rooted in equality, immanent value, and self-determination" (5). One of the benefits of invitational rhetoric is that it can help parties work towards developing ongoing relationships (Mallin & Anderson 130-31), which could be useful in the case of the parties to the Legacy Highway conflict since both major sides have to co-exist with each other in Utah. Hopefully, an invitational approach would allow parties to open doors to new possibilities rather than keeping open the same doors that have led to repeated clash. The paper will advance its thesis via several sections, including a more detailed statement of the conflict, methods employed in the study, discussion of the rhetorics of the two major sides in the conflict, an explanation of invitational rhetoric, and an application of an invitational approach to the environmental conflict at hand. Each section will receive consideration in turn.

Statement of the Conflict

The controversy began with intensity in 1996 when then-Governor Michael O. Leavitt of Utah announced plans for what he called the Legacy Highway ("Legacy Parkway"). The Highway was supposed "to be a four-lane, divided, limited access, state-funded highway" that would run from near Salt Lake City north along the eastern shore of the Great Salt Lake and connect with U.S. 89 (*Utahns for Better Transportation v. U.S. Department of Transportation* 1161). The aim was to alleviate strain on the north-

south commute along Interstate-15, which is the only major north-south corridor that runs through Salt Lake City and the surrounding communities. Estimates were that by 2020, the population and travel demand in that particular area, which consists of five counties, would increase by 60 percent and 69 percent each (*Utahns v. U.S. Depart. Trans.* 1161).

While transportation issues have been one aspect of this conflict, environmental issues have been another aspect. Specifically, the Great Salt Lake, which lies directly west of the proposed site of the Legacy Highway, is home to "a variety of birds, reptiles, amphibians, and mammals, some of which are endangered" (*Utahns v. U.S. Depart. Trans.* 1161). On an annual basis, approximately two to five million birds make use of the Great Salt Lake, almost exclusively on the side where the proposed Legacy Highway would go (*Utahns v. U.S. Depart. Trans.* 1161). This particular area of wetlands makes up three-quarters of all wetlands in Utah, a state in which wetlands comprise under two percent of the surface area (*Utahns v. U.S. Depart. Trans.* 1161).

During the late 1990s and early 2000s, the government and the public considered the wisdom of the proposed project ("Legacy Parkway"). For example, in 1997 the Utah Department of Transportation (UDOT) began an environmental impact study for the project ("Legacy Parkway"). From 1997 until 2000, public meetings in which citizens had the opportunity to speak their minds on the issue took place, and in 2000 UDOT completed the environmental impact study ("Legacy Parkway"). In 2000 and 2001, respectively, the Federal Highway Administration (FHWA) and the U.S. Army Core of Engineers (COE) approved the project ("Legacy Parkway"). Because the proposed Legacy Highway would intersect with the U.S. interstate system and called for filling in wetland areas, both the FHWA and the COE had to issue approval for the project (*Utahns v. U.S. Depart. Trans.* 1161).

The matter took a major legal turn in January 2001 when Utahns for Better Transportation, Mayor Rocky Anderson of Salt Lake City, and the Sierra Club sued to challenge the issued FHWA and COE permits ("Legacy Parkway"). Although limited construction took place throughout 2001, in September 2001 the plaintiffs filed for a federal court injunction, but the next month the trial judge denied the plaintiffs' request ("Legacy Parkway"). In November 2001, the plaintiffs appealed the denial of the injunction to the Tenth Circuit U.S. Court of Appeals in Denver, and that court granted a temporary injunction on construction ("Legacy Parkway"). In March 2002, the appellate court heard oral arguments on the controversy ("Legacy Parkway").

Six months later, the federal appellate court in Denver ordered the federal agencies to review some of their findings. Although it accepted most of the agencies' findings, the court had problems with implications for two federal laws: (1) the National Environmental Policy Act (NEPA), which requires that federal agencies prepare environmental impact studies before taking large-scale federal action and (2) the Clean Water Act (CWA), which prohibits filling wetlands without a permit from the COE (42 U.S.C. §§ 4321-4370(d); 33 U.S.C. § 1344(a),(d)). In terms of the final environmental impact statement, the court took issue with the elimination of an alternative possibility to the Highway, failure to consider alternative sequencing of the overall plan to remedy transportation, lack of consideration of integration of the Highway with other forms of transportation, and failure to address impacts on wildlife (*Utahns v. U.S. Depart. Trans.* 1192). In terms of the COE permit, the court expressed concern with insufficient consideration of several items, including alternatives to the Highway, a narrow median on the Highway, a right of way matter, and impacts to wildlife (*Utahns v. U.S. Depart. Trans.* 1192).

Upon remand of the case to the lower court, the injunction remained in effect pending consideration of the areas with which the appellate court had taken issue (*Utahns v. U.S. Depart. Trans.* 1192). In December 2004, a draft version of a supplemental environmental study came out, and governmental authorities requested public comments before submitting a final version of the environmental study for court review ("Details about the Legacy Parkway Dispute" B06).

Methods Employed in the Study

As suggested above, this study considers some of the rhetoric that has surrounded the Legacy Highway. To do so, the study will address the rhetoric of several of the major players in the lawsuit that went to the 10th Circuit U.S. Court of Appeals. In the written decision for that case, the names of several different groups that have opposed and supported the project appear as parties to the case or as amici curiae. Amici curiae are non-parties to a legal case but have interests in the case at hand and so file briefs with the court ("Amicus Curiae" 83). The parties and amici include groups such as the Sierra Club, Utahans for Better

Transportation, Advocates for Safe and Efficient Transportation, and the Utah Department of Transportation.

Indeed, an examination of the available web pages of the groups in interest, as posted in fall 2004, will reveal how those major players in the legal conflict have seen the Legacy Highway matter. One major advantage of studying web pages over other sources of rhetoric like television news reports is that web pages offer uninterrupted instances of groups' rhetoric. Much like a national political convention, a group's web page is about as pure an instance of a group's message as possible because no outside party like a news editor cuts up the message and juxtaposes the message next to an opposing group's message. Thus, a web page gives a group one of its best chances to make its case in a relatively extensive, direct manner. As such, by studying web pages a critic readily can get to the heart of a group's message.

Another possibility that will not receive attention here is the public response to the controversy. For example, the *Deseret Morning News*, a major newspaper in Salt Lake City, contains a search engine that would no doubt locate many letters to the editor. Because members of the public can impact public policy through public outcry, a much larger project might want to consider the rhetoric of the public. However, the public was not a party or an amicus to the legal suit. Rather, the parties named above and others were. Since this particular project is limited in scope, consideration of the rhetoric will remain limited to the rhetoric of the groups that were either parties to the lawsuit or amici curiae in that suit. The rationale is that parties before a court with the power to evaluate public policy action for compliance with federal law can have a more direct impact on the outcome of the lawsuit and thus public policy.

The Rhetorics of the Parties to the Conflict

As noted above, various groups have argued over the merits or lack thereof of the Legacy Highway. Based on a study of the web pages of the respective organizations, this section will look at the rhetorics of several groups on the two major sides of the Legacy Highway conflict. These groups, among others, include Advocates for Safe and Efficient Transportation, the Utah Department of Transportation, the Sierra Club, Stop the Legacy Highway, and Utahns for Better Transportation. The discussion begins with proponents' rhetoric and proceeds to opponents' rhetoric.

In terms of proponents of the Highway, although the Federal Highway Administration and the Army Core of Engineers had allowed the Legacy Highway to proceed, the web pages of these two groups did not specifically advocate the building of the Highway. Rather, each web page merely posted bureaucratic paperwork that federal agencies tend to produce during the normal course of operations. For example, one document on the FHWA web page explained that a public meeting had taken place on October 28, 1998 ("FHWA Utah Division Project Activities"). Also, a document on the COE web page explained that a public comment meeting regarding the Highway had taken place on April 17, 2003 ("Public Comment"). Because the web pages did not place emphasis on advocating for the Highway, these two web pages will not receive further consideration in this paper.

FHWA and COE aside, proponents of the Highway have offered rhetoric that makes at least three major arguments in favor of the Highway. The first argument is that the Legacy Highway will be a great benefit to residents of Utah. The American Road & Transportation Builders group, through the construction industry and organized labor legal alliance known as the Advocates for Safe and Efficient Transportation, has argued for "needed road improvement projects" in the greater Salt Lake area ("Construction Industry Litigation"). This approach would "promote public health and safety, reduce traffic congestion and improve air quality" ("Construction Industry Litigation").

Along these lines, UDOT has maintained that the Highway "is a critical part of a long-term 'shared solution' to serious transportation issues in northern Utah" ("Frequently Asked Questions"). Unlike mass transit alone, a combination of the Highway, mass transit, widening of I-15, and other approaches would be greatly effective ("Frequently Asked Questions"). In short, the project is necessary "to alleviate congestion in one of Utah's most heavily traveled freeway corridors" ("Legacy Parkway Project: History").

The second major argument that proponents of the Legacy Highway make is that the project conforms to relevant legal standards. At one point, UDOT noted that the project "received all necessary legal approvals and permissions before construction work started" ("Legacy Parkway Project"). For example, the FHWA issued a final environmental impact statement in June 2000, and the COE issued a permit for filling wetlands in January 2001 ("Legacy Parkway Project"). Despite what UDOT might describe as a few minor snags, which were the problems the Tenth Circuit U.S. Court of Appeals in Denver had with the

project, UDOT points out that the federal appellate court found favor with "41 of 46 issues" related to the appeal ("Legacy Parkway Project: History"). These items were "'limited deficiencies'" through which the federal agencies had to work ("Legacy Parkway Project: History"). However, UDOT's web page suggests that when the federal agencies work out these problems, the highway will be fully compliant with federal law.

The third argument that proponents of the Legacy Highway make is that the project is really environmentally friendly, despite what opponents of the project maintain. For example, UDOT's web page focuses on the Legacy Nature Preserve. UDOT notes that it "has set aside 2,098 acres of land within the Great Salt Lake ecosystem as environmental mitigation for the 14-mile Legacy Parkway Project from northern Salt Lake City to Farmington" ("Legacy Nature Preserve"). UDOT argues, "[T]his unprecedented mitigation effort is focused on enhancing, restoring and preserving this diverse wildlife habitat" ("Legacy Nature Preserve"). To justify such a statement, UDOT maintains that the "Great Salt Lake ecosystem is a biological treasure" and "[f]or centuries . . . has been home to a wide variety of plant and animal life, including millions of birds from hundreds of different species" ("Legacy Nature Preserve"). UDOT acknowledges that "[d]uring the past century, man's impact on the Great Salt Lake ecosystem has been significant," specifically with regard to the industrialization and dumping on the eastern shore of the Great Salt Lake ("Legacy Nature Preserve").

In light of the importance of the ecosystem and threats to it, UDOT has undertaken the establishment of the Legacy Nature Preserve ("Legacy Nature Preserve"). To do so, UDOT has removed "905 tires," "3,614 large dump truck loads of trash and debris," "five abandoned car frames," and "10,000 feet of existing fence" ("Legacy Nature Preserve"). Naturally, UDOT removed this debris in a proper and legal manner, and UDOT even "crushed and recycled" portions of the removed "concrete and dredge material" ("Legacy Nature Preserve"). In sum, UDOT sees the Legacy Nature Preserve as "[p]erhaps the most enduring legacy of the Legacy Parkway Project" ("Legacy Parkway Project"). The Legacy Nature Preserve, then, goes to show that the Highway will take shape in light of environmental concerns.

Just as proponents of the Legacy Highway have made their arguments on-line, so have opponents of the Highway. Opponents of the Legacy Highway whose web pages received consideration for this study have made at least two major arguments against the Highway. To begin with, opponents have argued that the Legacy Highway will harm Utah's environment. On its web page, the Sierra Club notes, "The proposed 125-mile-long freeway project would cut across Great Salt lake wetlands and adjacent farmland" ("Court Rules"). In turn, the project would "degrade crucial habitat and promote sprawl" ("Court Rules").

In a similar manner, the Stop the Legacy Highway group's web page argues that the Highway would cut "a terrible swath through world renowned wetland and fertile farmlands, contributing to automobile-dependency and sprawl" ("Appeals Court Swats"). The group behind this web page describes the Great Salt Lake Wetlands as "one of the most important inland shorebird breeding grounds in the world," noting that one-third "of the 10 million ducks of the Central and Pacific flyways and 500 bald eagles utilize these wetlands each year" ("Appeals Court Swats"). In terms of farmland, the group behind the Stop Legacy Highway web page argues that the Highway and its ensuing sprawl "will cause the last remaining farmlands along the Wasatch Front to disappear," which in turn will impact milk production in the region ("Appeals Court Swats"). Finally, the group notes that the Highway will make Utah's air "increasingly unhealthy to breathe" ("Appeals Court Swats").

In addition to the Sierra Club and the Stop the Legacy Highway group, the group Utahns for Better Transportation (UBT) also has argued that the Highway would do great harm to the environment. In an on-line letter to potential supporters, UBT suggests that damage will occur to "internationally significant wetlands and wildlife" because a number of "critical flaws" appeared in the environmental impact statement that the government completed before approving the project ("Support Transit First"). The environmental impact statement was simply inaccurate. In another on-line document, UBT argues that "the wetlands adjacent to Great Salt Lake are among the most important in the entire Western Hemisphere" ("Legacy Parkway Litigation"). On that note, UBT's web page explains the following: "This wetland ecosystem forms part of the Western Hemisphere Shorebird Reserve Network, 'a distinction afforded to only five areas in the lower 48 states,' and has been characterized by the United States Fish and Wildlife Service as 'an irreplaceable and unmitigable resource due to its size, and ecological features'" ("Legacy Parkway Litigation"). In light of this rhetoric, UBT argues that the relevant government agencies that assessed the environmental impact of the Highway did not do an adequate job of identifying potential harms to the environment ("Legacy Parkway Litigation").

This harm to the environment stands in sharp contrast to the beauty that opponents of the Highway see along the Wasatch Front. For instance, UBT reflects on "the legacy we inherited" ("What Legacy . . . ?"). The group quotes several early visitors to the Salt Lake Valley who toured the area soon after the arrival of the Mormon pioneers in 1847. One such visitor from Pittsburgh wrote that the Valley would "'remain on my mind as the most beautiful spectacle I ever behold'" ("What Legacy . . . ?"). Another visitor of that era, a journalist from the East Coast, described Salt Lake City as "'a large garden laid out in regular squares'" ("What Legacy . . . ?"). Co-opting the rhetoric of former Governor Michael Leavitt and others, UBT calls this natural beauty "the legacy we inherited" ("What Legacy . . . ?").

In addition to arguing that the Legacy Highway would lead to great environmental harm, opponents of the project have argued that better alternatives to the Legacy Highway exist. For example, the Sierra Club suggests that "light rail and other forward-thinking transit solutions" would be much preferable to the Legacy Highway ("Court Rules"). The group Stop the Legacy Highway proposes that an alternative to the Highway would include "integrating vastly increased mass transit with bicycle and pedestrian oriented development" ("Appeals Court Swats"). This group posits that alternatives would help to avoid the increased sprawl that the Highway allegedly would bring about ("Appeals Court Swats").

In the same way, UBT argues that alternatives to the Legacy Highway would allow for better transportation. For example, light rail would allow a student to return from her family home in Farmington to her studies at Brigham Young University, an architect to commute from her home in Ogden to Salt Lake City, and a Bountiful family to attend the semi-annual Latter-Day Saint General Conference in Salt Lake City ("What Legacy . . . ?"). All of these examples from UBT are essentially devoid of traditional automobile transportation and focus on the merits of light rail. With these examples, UBT attempts to make alternative modes of transportation more appealing to residents of Utah who presently may be inclined to prefer automobile transportation in all or most cases.

UBT contrasts its vision of the light rail alternative with the UDOT vision of the Legacy Highway. In this hypothetical future, "[c]ongestion on I-15 and the Legacy Parkway is as bad or worse than it was in 1999 before the widening of I-15," mass transit is not in place in the North Corridor until 2021, and UDOT has failed to integrate mass transit with the pre-existing highway system ("What Legacy . . . ?"). Additionally, "[f]ull buildout through the North Corridor" will have occurred, destroying "the last vestiges of farmland and rural life in Davis and Weber County," and "Salt Lake City [will] suffer[ ] from oppressive congestion" ("What Legacy . . . ?"). Although UBT admits that growth along the Wasatch Front is inevitable, the group refuses to admit that the growth must be as harmful as developing the Legacy Highway allegedly would be ("What Legacy . . . ?"). Like its fellow opponents to the Legacy Highway, this group sees other alternatives to building the Highway.

As the above examples of the rhetoric suggest, the two major sides in this conflict see the situation in sharply distinct ways. Proponents of the Legacy Highway argue that the Highway will be a great benefit to residents of Utah, that the project conforms to relevant legal standards, and that the project is really environmentally friendly. Meanwhile, opponents of the Legacy Highway argue the Highway will harm Utah's environment and that better alternatives to the Legacy Highway exist. In this type of situation, another genre of rhetoric besides traditional Aristotelian rhetoric may be helpful.

Invitational Rhetoric as a Potential Approach to the Conflict

As a means of helping participants work through their distinct perspectives and towards potential resolution, or at least management, of the Legacy Highway conflict, this project will suggest invitational rhetoric. As noted above, invitational rhetoric can work in situations in which traditional rhetoric has failed or in which parties remain bogged down with their positions, especially since invitational rhetoric can help parties work towards developing rich ongoing relationships (Mallin & Anderson 130-31). However, before a discussion of invitational rhetoric becomes appropriate, it is necessary to have a better understanding of traditional Aristotelian rhetoric and some of its limitations. Such an understanding will help justify why invitational rhetoric may be of value to participants in the Legacy Highway conflict.

Traditionally, rhetoric has involved attempting to persuade an audience to accept an advocate's position. In his treatise *On Rhetoric*, Aristotle defines the term *rhetoric* as "an ability, in each [particular] case, to see the available means of persuasion" (36). Hence, a skilled advocate endeavors to find multiple modes of persuasion rather than just one (Golden, Berquist, & Coleman 28). Much more recently but still in the Aristotelian vein, Michael Leff has described the term *rhetoric* as an endeavor whose goal is

persuasion (6). As the reference to Aristotle suggests, the study of traditional rhetoric dates back to ancient Athens, where the 5th Century B.C. Greeks began to study and teach rhetoric, and ever since Greek citizens of the ancient world called upon rhetoric in the process of bringing and defending legal suits, debating matters of public policy, and speaking on special occasions, rhetoric has been important (Golden, Berquist, & Coleman 6 & 8).

Such traditional rhetoric involves justifying why a particular position is appropriate and, frequently, why another position is incorrect. Today, for instance, rhetoric manifests itself in political debates and legal trials and appeals (Golden, Berquist, & Coleman vii), as well as in advertising (Larson 5 & 8). Naturally, some rhetorics are more fully supported with evidence than other rhetorics. In many rhetorical situations (Bitzer 6-8), advocates seek to change audiences to serve the advocates' own ends. One can think of politicians who want to gain or retain office, lawyers who want to win large contingency fees, and advertisers who seek to sell a seemingly endless stream of consumer products. Not only do such examples of traditional rhetoric often involve justifying why a particular position is "right" (Makau & Marty 84), but frequently by necessity such examples involve explaining why another position is "wrong."

Scholars, including many feminists who have acted on a developing feminist consciousness in this area of study (Carlson 17-18), have problematized such an understanding of traditional rhetoric. For instance, they maintain that when advocates seek to change the minds of audience members, advocates implicitly, if not explicitly, can seek to dominate audience members (Foss & Griffin 3). In such circumstances, the concern is not for the members of the audience but for achieving the rhetor's goal of influence.

Along the same lines, scholars have observed that traditional rhetoric frequently is steeped in confrontation (Palczewski, "Special Issue" 164). Indeed, traditional rhetoric can be "an adversarial activity governed by war metaphors and infused with a win-lose ideology" (Mallin & Anderson 121). Terms like *attack*, *defend*, and *counterattack* play key roles in the discussion and practice of traditional rhetoric (Palczewski, "Special Issue" 164). Thus, at least one scholar has described rhetoric as the practice of engaging in "verbal conflict" (Zarefsky 288-89). To the alarm of some scholars, the rhetoric-as-war understanding of such discourse has proven prominent (Palczewski, "Argument in an Off Key" 1), especially since the "winner" of such war-like rhetoric often feels accomplished at the expense of the "loser" (Makau & Marty 84). On a relatedly brutal note, one scholar has even drawn an analogy between heated rhetoric and rape (Brockriede 2-3).

Scholars have problematized traditional rhetoric further by noting that traditional rhetoric is not as welcoming of personal testimony or experience as traditional rhetoric is of other forms of evidence like "facts, examples, expert testimony[,] and statistics" (Pickering 1). Within the domain of traditional rhetoric, "facts, examples, expert testimony[,] and statistics" are frequently considered "objective" and thus assume a higher status than personal testimony (Pickering 1, 19). Although not all scholars agree about the value of personal testimony in rhetoric (MacKinnon 535; Elshtain 612), or even how carefully to consider personal experience (Pickering 1), some scholars maintain that personal experience can be "the consciousness that emerges from personal participation in events" or even one's own "'experience as [one's] truth'" (Foss & Foss, "Personal Experience" 39). Consideration of personal experience is important because it can lead to deeper understanding of discursive participants and can open up the door to multiple truths (Foss & Foss, "Personal Experience" 41). In turn, diversity often flourishes (Foss & Foss "Personal Experience" 41). While individuals can call upon personal experience in private discourse, some scholars have noted that personal experience can play a role in public discourse, too (Pickering 3). Nonetheless, traditional rhetoric has not offered the rhetor's personal experience a prominent place at the rhetorical table.

In various ways, invitational rhetoric is very different from traditional rhetoric. Foss and Griffin define *invitational rhetoric* as "an invitation to understanding as a means to create a relationship rooted in equality, immanent value, and self-determination" (5). Invitational rhetoric offers the audience of the rhetoric a chance "to enter the rhetor's world and to see it as the rhetor does" (Foss & Griffin 5). When communicating, the rhetor refrains from judging the perspectives of audience members, and the audience attempts to refrain from judging the perspectives of the rhetor (Foss & Griffin 5). Rather than seeking to gain assent from an audience, the invitational rhetor seeks to help the audience understand the rhetor's perspective (Foss & Griffin 5). The audience members become empowered because they have a chance to express themselves. The process, which is akin to bilateral dialogue (Bile 62), is about offering perspectives and not about telling others to take a given action or understand that their ideas are flawed (Foss & Griffin 7-10; Mallin & Anderson 130). Because this is a process of rhetoric as inquiry (Faass 220), any change in perspective that takes place occurs when members of the audience choose to make such

change but do so without the influence of a rhetor who presses for that change (Foss & Foss, *Inviting Transformation* 13-14).

Although invitational rhetoric will not succeed in all cases in which advocates employ it, when invitational rhetoric is to succeed, it tends to consist of at least three external conditions: safety, value, and freedom (Foss & Griffin 10). Foss and Griffin define these conditions in the following manner: *safety* as "the creation of a feeling of security and [absence of] danger for the audience"; *value* as "the acknowledgment that audience members have intrinsic or immanent worth"; and *freedom* as "the power to choose or decide" (Foss & Griffin 10-13). To this work, Sonja and Karen Foss have added openness as a fourth condition that helps to foster invitational rhetoric; Foss and Foss define *openness* as the process of "seek[ing] out and consider[ing] as many perspectives as possible" (*Inviting Transformation* 39).

To help foster the conditions of safety, value, freedom, and openness that can lead to invitational rhetoric, Foss and Foss suggest the process of re-sourcement, which is finding a new source of "energy and inspiration" (*Inviting Transformation* 44). Re-sourcement involves disengaging oneself from an interaction frame of conquest or conversion of one's audience and then engaging that audience from a non-conquest and non-conversion interaction frame (Foss & Foss, *Inviting Transformation* 44-48).

Of note, invitational rhetoric offers several benefits to its participants. This genre of rhetoric is particularly well-suited for fostering "cooperative, nonadversarial, and ethical communication" because invitational rhetoric accepts multiple perspectives as valid (Foss & Griffin 15-16). Also, invitational rhetoric is especially helpful when one is engaged in discourse with another person with whom one has an ongoing relationship (Mallin & Anderson 130-31), although invitational rhetoric is not necessarily limited to this situation. In contrast, when one goes to court and hopes never to see one's opponent after the trial, then traditional rhetoric may be more appropriate (Mallin & Anderson 130). This, then, is an overview of invitational rhetoric, which is quite different from traditional Aristotelian rhetoric.

Application of Invitational Rhetoric to the Legacy Highway Controversy

As noted above, this study of web pages of several of the major parties to the conflict points to various main arguments and in turn interests of some of the groups who are stakeholders in the ongoing controversy. Proponents of the Legacy Highway claim that the Highway will be beneficial to Utah residents, is legal in nature, and actually will help the environment. Opponents of the Highway maintain that the project will harm the environment and that other more viable options are available. In terms of the web pages of some of the major parties and amici from the legal case that received consideration in this study, these are the major parameters of the conflict.

To this point, traditional rhetoric has gone only so far. While both sides have presented their cases through traditional rhetoric, neither side has been completely successful. For example, proponents of the Highway have had to address legal concerns, and opponents of the project merely have delayed the project. In this sense, traditional rhetoric has had its impact but has not fostered a mutually satisfying resolution or management of the conflict. Also, while the federal agencies have held public hearings during which groups had the chance to communicate their ideas, public hearings often are problematic for participants because the participants, even if they feel comfortable giving short speeches in front of crowds, which many people do not enjoy doing, frequently complain that government agencies do not listen to groups' concerns (Daniels & Walker 8-9). Indeed, two-way communication can be missing in such a communication context (Daniels & Walker 9). Nothing at this time suggests that traditional rhetoric will help to provide that sort of mutually satisfying resolution or management of this conflict.

Given this situation, invitational rhetoric is one potentially viable alternative to the traditional rhetoric of the legal proceedings and the web pages. An invitational approach might play out in this manner. Several individuals from the groups on each side of the conflict could spend time together in a removed third-party location in which the individuals would have an opportunity to explain their perspectives to each other. This third-party location would offer a degree of safety because neither side would be on its "home turf." Since people often relax when food is available, food may help establish the communication climate, too. At some point in time, concerned members of the community who may not belong to one of the parties or amici to the lawsuit may want to meet with the parties or amici, although the logistics could be more complex. Nonetheless, although explanations no doubt took place during public commentary on the proposed project, more than mere explanations can be beneficial, as the individuals from the groups potentially would benefit from the opportunity to begin to understand each other. This is the engaging two-

way communication that some observers believe is missing from public hearings (Daniels & Walker 9). Such understanding is not easy, but it can be possible with appropriate effort and is worth that effort because understanding reinforces the value of discursive participants.

Foss and Griffin offer a helpful example of invitational rhetoric that suggests this type of rhetoric may be productive in the conflict over the Legacy Highway. Encountering each other at an airport in New York, a woman, who favored abortion, and a man, who opposed abortion, began to scream at each other until they almost needed separation (Foss & Griffin 14). One hour later, as the woman boarded a bus, she discovered that the only available seat was next to the man with whom she had just had the verbal altercation (Foss & Griffin 14). Instead of resuming the same type of discourse, the woman began to ask the man about his life, and the man responded in kind (Foss & Griffin 14). While neither changed her or his perspective, over the course of the dialogue each developed a deeper understanding of and appreciation for the other (Foss & Griffin 15). In a case where traditional rhetoric had proven destructive, invitational rhetoric had succeeded in fostering the external conditions of safety, value, freedom (Foss & Griffin 15), and openness. Each speaker promoted safety by respecting a differing perspective on a highly charged issue; each speaker promoted value by legitimizing, although not adopting, a different point of view; each speaker promoted freedom by allowing the other to continue to feel as she or he chose to feel with regard to this subject (Foss & Griffin 15); and each speaker promoted openness by looking at a different perspective.

In Foss and Griffin's real-life example, two individuals engaged in invitational rhetoric over an issue that goes to the heart of some people's personal philosophies on life as much as almost any other issue. If parties can communicate about abortion in a respectful and beneficial manner, communication about transportation and environmental issues should be possible, too. Thus, in theory the potential for explanation and understanding exists within this ongoing conflict in Utah.

In being appropriate for the conflict over the Legacy Highway, invitational rhetoric offers several benefits. No doubt the participants in the Legacy Highway controversy want their perspectives heard because putting a message on a web page is not necessarily the same as being heard. When parties have an opportunity to understand the relevant perspectives in a controversy as opposed to focusing on being "right," the parties can begin to work towards possible resolutions or a possible means of management that will consider all parties' needs. While ultimately the parties retain their freedom to decide what to believe and do, ideally they still are able to open themselves up to new possibilities. For instance, another location for the Highway may be possible, as might some of the alternatives to the Highway. A different combination of alternatives that would not include the Highway could be a possibility, too. The point is that fresh ideas can begin to develop when individuals see each other in a new, and often more positive, light.

Another benefit of adopting invitational rhetoric in the case of the Legacy Highway relates to the ongoing relationship that necessarily has developed among the various groups that are parties to the controversy. For better or worse, parties with environmental and transportation concerns probably will need to deal with each other in the future because, given the belief about the importance of large families that the majority of the state's population holds, Utah's population most likely will continue to grow in the future. More people will lead to more transportation needs and thus more potential concern from environmentalists. Accordingly, invitational rhetoric is one possibility for fostering a positive ongoing relationship in which all parties seek to understand, and hopefully work with, each other. Instead of being about a quick victory or a quick loss, the situation becomes one of long-term vision.

Despite the various benefits that can flow from implementing invitational rhetoric in the Legacy Highway conflict, a few notes of caution are in order, too. First, because invitational rhetoric relies upon the willingness of the parties involved, when the parties are unwilling to engage in invitational rhetoric, invitational rhetoric cannot be helpful. For instance, some environmental groups may be so environmentally-focused that they might refuse to talk with groups that are more industry- or infrastructure-oriented. Unfortunately, one party can ruin the chances of successful invitational rhetoric. If parties are unable to make attempts to understand each other, then invitational rhetoric cannot help them.

Second, invitational rhetoric brings with it the risk that the parties may hurt each other or their relationship in some way. This would be the case if environmental groups and proponents of the Highway were to speak freely with each other and then, due to old feelings of animosity, take advantage of that openness. Hence, risk is an inherent part of invitational rhetoric.

Nonetheless, these risks are not as great as they may be in other circumstances. For example, in a case of invitational rhetoric in an interpersonal context, the parties might be more likely to uncover sensitive or intimate feelings and beliefs, the opening up of which could lead to harm. This could be the situation in a

case of two friends who are experiencing tension in their relationship. However, the case of the Legacy Highway conflict is more of a public rather than private controversy. If the parties in this public controversy are willing to explain themselves to each other and try to understand each other in good faith, then invitational rhetoric can help the parties to push the limits of imagination and open doors to new possibilities. By having the opportunity to see views about environmental and transportation issues through the eyes of individuals who hold those beliefs, the parties on both major sides of the conflict would have the chance to understand each other more completely. While overarching perspectives may not change, means of achieving goals might. This process can get the parties away from focusing on their positions and instead towards considering interests that may need attention (Fisher, Ury, & Patton 40-43). Accordingly, while invitational rhetoric does have some limitations, it has several desirable qualities that could be beneficial to the parties in the conflict at hand.

Conclusion

Without doubt, the Legacy Highway matter in Utah has been controversial. To this point, much of the rhetoric has been about competing priorities, and the usual legal processes have received attention. In some ways, legal decisions can resolve conflicts. In a modernist sense with which the U.S. legal system is very familiar, a problem comes to a conclusion with the end of litigation, which often is the end of the final appeal. While one sort of end, a legal end, has come about, no one really may be satisfied. The "winning" party will have had an expensive and perhaps not entirely pleasing experience, and the "losing" party will not have had its way.

Although perhaps needed in some situations, litigation is not necessarily the best option for groups that will have to relate to each other in the future. Particularly for, but not exclusively for, individuals who are tired of and frustrated with trying more conventional means of discourse like traditional rhetoric, invitational rhetoric can open new doors to understanding and perhaps even major change. When parties seek to build ongoing working relationships through understanding, they can avoid much of the inevitable animosity that comes from legal resolutions to conflicts. The conflict over the Legacy Highway in Utah can be one such situation if the parties are willing to venture into the new terrain of invitational rhetoric and open wide the doors to less familiar, but nonetheless exciting, possibilities.

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Disclosure Under the Bush Administration: Environmental Whistleblowing and the Reporter's Privilege

Cara Wieser
University of Utah

The public relies on the media for much of its information about environmental issues. Disclosure in the form of environmental whistleblowing plays an important part in helping the media inform the public. This paper first provides an overview of the Critical Infrastructure Information Act of 2002 and its effect on disclosure and the free flow of information. The paper also reviews environmental cases in which whistleblowing to the media stimulated communication between the government and the public, and then discusses current movements on the part of the public and government officials to amend the act.

In environmental conflict management, stakeholders must have access to information in order to work toward resolution. The public, as a major stakeholder in the environment, relies on the media for much of its information about environmental issues. However, the Bush administration has created an obstacle for this type of communication, called the Critical Infrastructure Information Act of 2002 (CII Act), which is part of the Homeland Security Act.

Disclosure in the form of environmental whistleblowing plays an important part in helping the media inform the public. Under the current CII Act, information pertaining to America's infrastructure, which includes the food and water systems, agriculture, energy (electrical, nuclear, gas and oil, dams), transportation (air, road, rail, ports, waterways), and the chemical and defense industries, could become classified after being submitted to the Department of Homeland Security, making it illegal (punishable by fines and up to a year in jail) for people to disclose any information to the media or the public.

The paper first provides an overview of the CII Act and its effect on disclosure and the free flow of information as guaranteed by the First Amendment. Next, the paper addresses the legal issues involved in disclosure, including an overview of legal protection under the Whistleblower Protection Act (WPA) and statutory protection for both journalists and whistleblowers. The paper also reviews environmental cases in which whistleblowing was influential in stimulating communication between the government and the public. Finally, the paper discusses current movements to amend the CII Act and also suggests means by which the public can become better informed in order to more effectively deal with environmental conflict despite the CII Act.

Environmental stakeholders must have access to information in order to effectively monitor and manage environmental conflicts (Kinsella, 2004). The public, as a major stakeholder in the environment, relies on the media both for discovery and for mass dissemination of pertinent environmental information. However, the Bush administration has created a major obstacle for journalists and therefore for the free flow of information as guaranteed by the First Amendment: a part of the Homeland Security Act called the Critical Infrastructure Information Act of 2002 (CII Act).

One of the more important roles in the information-sharing process is that of the whistleblower. Many recent environmental abuse cases came to the public's attention through "whistleblowing," which is the act of calling "attention to negligence, abuses, or dangers that threaten the public interest" (Bok, 1982). During the past decade, whistleblowers alerted the media to threatening environmental conditions ranging from drinking water contamination to military incinerator safety violations. In one case, an employee of a company responsible for destroying aging ammunition went public with safety concerns relating to plant operations (Lieberman, 2001). In another case, six officials at the federal Bureau of Land Management complained internally that several mineral-rich land parcels had been recorded as having little or no mineral

value during a land swap agreement between the federal and Utah state governments (Grunwald & Eilperin, 2002).

However, under the current CII Act, any of the aforementioned information could become secret after being submitted to the Department of Homeland Security (Library of Congress, 2003). The act also overrides any statutory or administrative protection of whistleblowers; previously, whistleblowers could rely on the law to protect them against job termination and retaliatory behavior from employers or coworkers. Now if someone releases information that has been classified under this act, the person could face a fine and up to a year in jail (Library of Congress, 2003).

The concept of information disclosure, especially during times of corporate or governmental secrecy, plays an important part in helping the media inform the public. This paper first provides an overview of the CII Act and its effect on the disclosure process, and it compares and contrasts different parties' perspectives on the role of the CII Act. The paper employs agenda setting theory as its method to discuss the influence policy-makers have in controlling public knowledge about the environment, and it uses the First Amendment as a theoretical foundation to discuss the journalist's privilege, or right to protect sources and information, and the public's right to a free press. Next, the paper addresses the legal issues involved in disclosure, including an overview of legal protection under the Whistleblower Protection Act and statutory shield laws. Third, the paper reviews environmental cases in which disclosure was influential in stimulating communication between the government and the public. Finally, the paper suggests means by which the public can become better informed in order to more effectively deal with environmental conflict.

Overview of the Critical Infrastructure Information Act

The CII Act was signed into law in the fall of 2002 following the September 11 attack. The act is part of many measures taken by the Department of Homeland Security to protect America's infrastructure. According to the department, the act encourages "information sharing between public and private entities about threats and vulnerabilities to critical infrastructures" (Library of Congress, 2003). More specifically, the act is designed to "enable the federal government and industry to share information about potential threats to the nation's critical infrastructure without the fear that the data would be released under the Freedom of Information Act," which enforces the public's right of access to federal records (Caterinicchia, 2002).

"Infrastructure" is broadly defined to include food and water systems, agriculture, health systems and emergency services, information and telecommunications, banking and finance, energy (electrical, nuclear, gas and oil, dams), transportation (air, road, rail, ports, waterways), the chemical and defense industries, postal and shipping entities, other federal agencies, and the private sector (Library of Congress, 2003). The act requires that any information, (which is not limited to the submission of records; it also includes telephone calls, conversations, or verbal answers), submitted to the Department of Homeland Security immediately be classified (Leahy, 2003). Once the information is submitted, it cannot be directly used in governmental or private party civil suits. To explain the potential negative impact of the act, Senator Patrick Leahy, a major opponent of the act, said "…if a company submits information that its factory is leaching arsenic in ground water, 'that information no longer could be used in a civil or criminal proceeding brought by local authorities or by the neighbors who were harmed by drinking the water'" (as cited in Daugherty, 2002).

Even more pertinent to this paper is that the act overrides both federal and statutory whistleblower protection acts. The act:

> generally prohibits the disclosure of protected critical infrastructure information, except for the purpose of criminal investigation or prosecution or to disclose protected information to Congress or the General Accounting Office, such a disclosure would subject the [federal employee protected under the Whistleblower Protection Act] to criminal sanctions under the CIIA" (Library of Congress, 2003).

Criminal sanctions include jail time, fines, and job termination. Members of Congress are the only people who can argue exemption from CII Act criminal sanctions (Library of Congress, 2003). At this time, if anyone leaks information via the press or by any other means, they will face criminal sanctions; the whistleblower will have no protection from retaliation in the workplace and cannot use the Whistleblower Protection Act to sue for damages as a result of job termination (Leahy, 2003).

Theoretical Foundations

On one side of the argument, stakeholders, including members of the press, public interest advocates, environmentalist groups, civil libertarians, advocates of open government, and right-to-know organizations, believe First Amendment rights to freedom of press and information have been violated (McMasters, 2003). Many of the groups oppose the act because they believe it "would jeopardize the ability to obtain information about abusive government practices" (Library of Congress, 2003).

Another argument is that FOIA exemption 4 already provides protection for companies against mandatory disclosure of certain material. The exemption protects "trade secrets and commercial or financial information obtained from a person [that is] privileged or confidential" ("Freedom of Information Act Guide: Exemption 4," 2004). Companies can voluntarily submit the information by promising the government the information is reliable. The information can also be submitted to protect against competitive disadvantages that may arise if it is disclosed. Opponents of the act argue that there is no need for the CII Act if the FOIA exemption already provided this level of protection (Leahy, 2003).

First Amendment advocates and media interest groups have joined together to increase public awareness of the issue. Web sites for groups like First Amendment Center, OMB Watch, and the Reporter's Committee for Freedom of the Press regularly publish information about the act and its First Amendment restrictions: "We have to make sure that policy makers and the public understand what's at stake: a core democratic principle of openness," said Gary Bass, executive director of OMB Watch. "We can't undo in the name of homeland security basic democratic tenets that have lasted more than 200 years" (McMasters, 2003). OMB Watch also published online a letter to Janice Pesyna, DHS Under Secretary for Infrastructure Analysis & Infrastructure Preparedness, so the public can understand the communication between the two groups. The letter expressed OMB Watch's concern that the CII Act "overlooks what should be the primary purpose of the program and instead caters to the interests of industry" (Moulton, 2004).

As for the role of the media, there are journalists currently facing jail time, or already incarcerated, for refusing to make public the names of their confidential sources, because they believe they are constitutionally protected from doing so in order to maintain a free flow of information (Penrod, 2004). Turning over the informants' names would be violating the public's constitutional guarantee to a free press in two ways, according to Alexander (2002): (1) "subpoenaing a journalist threatens to transform the independent press into an investigative arm of the government," and (2) "it silences potential confidential sources, which reduces the flow of information to the citizenry" (as cited in Berger, 2003). Because the U.S. lacks a federal shield law to protect journalists from having to turn over confidential information, the media cannot protect its whistleblowing sources or their information now that the CII Act has been implemented; the CII Act overrides all statutory shield laws and the federal Whistleblower Protection Act (Leahy, 2003).

On the other side of the argument, proponents of the CII Act believe the "primary purpose of the program" is to create "a reliable means through which [information] can be safely shared with and correctly analyzed by the government," according to Senator Bob Bennett (R-UT), one of the main sponsors of the CII Act ("Bennett FOIA Amendment Accepted," 2002). The act was intended to strengthen the nation's infrastructure and create a more confidential way to transfer information between the private sector and the government:

> Our nation is under constant attack…It's only a matter of time before those who wish this country ill will shift their focus away from attacking our computers in the federal arena and start attacking our private infrastructure. To prepare for and withstand these attacks, a strong private/public partnership is essential and information sharing is the key to its success ("Bennett FOIA Amendment Accepted," 2002).

The relationship between the public, the media, and policy-makers can be explained using agenda setting theory. A broad-scope view of the agenda-setting process includes three agendas: the media, public, and policy agendas:

> The media agenda is the set of topics addressed by media sources (e.g., newspapers, television, radio). The public agenda is the set of topics that members of the public believe is important. Finally, the policy agenda represents issues that decision-makers (e.g., legislators and those who influence the legislative process) believe are particularly salient (Miller, 2002).

The media affects the public, which then affects the decision-makers (legislators and those who influence the legislative process), and finally the decision-makers complete the circle by affecting the media. This paper is most concerned with decision-makers' effects on the media and the media's role in informing the public. In accordance with agenda setting theory, the media not only alerts the public to environmental problems but also affects the amount of attention the public gives to the problem:

> The media agenda influences the public agenda not by saying 'this issue is important' but by giving more space and time to that issue and by giving it more prominent space and time. That is, if headlines of newspapers and lead stories of television newscasts all highlight a study touting the role of cholesterol in increasing heart disease, this issue is likely to be seen as an important item on the public agenda (Miller, 2002).

Following is a list of recent environmental whistleblowing cases where the media had great influence on the public agenda.

Environmental Whistleblowing Cases

The media plays an integral part in informing the public to environmental issues: employees at the Tooele chemical weapons incinerator alerted the media to the fact that adjustments were made to the chemical incinerator's Health Risk Assessment in order to remove data that proved nerve gas was improperly disposed of off site, and that there was a leak of between 1000 and 2000 gallons of hazardous waste (Chemical Weapons Working Group, 2000).

The communication process between the agency/government and the public usually begins after the media publishes the whistleblower's information: for example, after six officials at the federal Bureau of Land Management (BLM) gave documents to the *Washington Post* proving that "several parcels of mineral-rich federal land had been counted as having little or no mineral value" (Grunwald & Elperin, 2002) during a federal trade with Utah, environmental groups such as the Western Land Exchange Project and the Southern Utah Wilderness Alliance got involved. Because the information became available to the public and the public expressed its concern, the trade was reevaluated. The BLM and the Interior Department had originally valued the state and federal land at $35 million each, but after the complaint, decided to reevaluate one 4,000-acre section that was originally deemed mineral-free (Grunwald & Elperin, 2002).

Also, in the aforementioned Tooele chemical incinerator case, the whistleblower disclosed that "political influence was applied by the Army" to cover-up dangerous practices and to avoid public review and comment, and that "data was manipulated to conceal the fact that agent was not staying in the Deactivation Furnace long enough to be destroyed" (Chemical Weapons Working Group, 2000). This led to environmental watch groups like the Chemical Weapons Working Group (CWWG) becoming involved; CWWG Attorney Mick Harrison accompanied whistleblower Gary Harris on a tour of the facility and said, "Gary Harris' revelations demonstrate that the Army knowingly violated the law, covered up known dangers and corruptly influenced state agencies to proceed recklessly with a technology they know does not work" (Chemical Weapons Working Group, 2000). A news conference was held to further notify the public of Harris' findings. CWWG continues to publish newsletters with information about the situation.

In another high profile case, whistleblower William Marcus, an EPA official, publicly expressed his belief that fluoride should not be added to public drinking water supplies, which the EPA was interested in doing. Marcus' action led to increased public awareness about the issue and more studies on the health and environmental effects of fluoride in drinking water. Marcus' lawyer called the case "the most significant case to date for an environmental whistleblower involving the EPA" (Herbert, 1992).

Decision-makers' restrictions on the amount of information the media receives or is legally allowed to report affects how much and what kind of information the public receives, which leads into the next section concerning the legal ramifications of information disclosure.

Disclosure and the Law

Before the CII Act, whistleblowers concerned about environmental injustices could disclose information to their federal or state governmental agencies or to the media and still enjoy some protection.

Federal employees could go directly to the agency for which they worked, or they could go to the U.S. Environmental Protection Agency (EPA), specifically to the Office of Inspector General (U.S. Environmental Protection Agency, 2004). Informants blowing the whistle at the federal level were protected under the Whistleblower Protection Act (WPA) and the Freedom of Information Act (FOIA) (Leahy, 2003). Whistleblowers at the state level disclosed information to the state auditor's offices and were protected under statutory shield laws and whistleblower protection acts (see, for example, Utah State Auditor's Office, n.d.), as were those who disclosed information to the media.

Although these protections are still in place, the CII Act overrides all of them; under the act, whistleblowers and other informants are asked to report directly to the Department of Homeland Security Special Counsel in order to guarantee anonymity and avoid possible legal consequences (Library of Congress, 2003). Once their information is submitted to the department, it becomes classified. Although informants can still report to their employers on a federal and state level, because the CII Act overrides the Whistleblower Protection Act (WPA), many hesitate to go anywhere except to the Department of Homeland Security (Leahy, 2003). Whereas the WPA counsel can help the whistleblower in cases of retaliation; the counsel can order the employer to restore the whistleblower's job, reimburse him/her for attorney fees, medical costs and other damages, and can also bring disciplinary action against the employer ("Confidentiality, Anonymity & Whistleblower Protection," 2004); it has less certain jurisdiction if the whistleblower's information concerns the nation's infrastructure (Leahy, 2003).

Consequences for disclosing to the media are even less certain; before the CII Act was implemented, in the nineteen states without shield laws, journalists who were subpoenaed for information pertaining to the whistleblower's identity and the nature of the disclosure must turn it over to officials or face consequences (RCFP, 2005). There are currently a number of journalists refusing to turn over confidential information and facing jail time and fines, some adding up to more than $75,000 (Penrod, 2004). Now, with the CII Act, journalists could face further repercussions for refusing to comply with authorities and for publishing information that pertains to the nation's infrastructure (Library of Congress, 2003).

Conclusion

This paper provided an overview of the Critical Infrastructure Information Act and its effect on the disclosure process. The paper used agenda setting theory to establish the decision-makers control, through the use of legal restrictions, over the content and amount of information the public receives through the media. The paper also highlighted several prevalent environmental whistleblowing cases in which the media was extremely influential in informing the public.

Sissela Bok (1982), a prominent ethics and decision-making researcher, pointed out that although some may abuse the act of whistleblowing by seeking revenge against the company, the prevention of all whistleblowing acts would be more harmful: "A society that fails to protect the right to speak out even on the part of those whose warnings turn out to be spurious obviously opens the door to political repression" (213).

Opponents of the CII Act have suggested a number of solutions, the most prevalent being to amend the act itself. Senator Patrick Leahy's bill, "Restore FOIA", is extremely important in the movement to amend the Homeland Security Act (Leahy, 2003). It would, if passed, dissolve the freedom of information exemptions. In Leahy's "Side-by-Side Analysis of the Leahy-Levin-Jeffords-Lierberman-Byrd Restoration of Freedom of Information Act of 2003" (2003), Restore FOIA proposes many alterations to the current act. One would be to change the term "information" in the CII Act to "records," which "refer to physical and well-defined communications" such as documents, reports, e-mails, etc. (Leahy, 2003). This would give the government the ability to manage the information more efficiently (as opposed to having to sort through and file verbal answers such as telephone calls and conversations (Leahy, 2003). Another change would include limiting the FOIA exemption to records directly pertinent to threats to critical infrastructure, which includes possible attacks or information about response and recovery efforts; restore FOIA also would "not preempt any state or local disclosure laws for information obtained outside the Department of Homeland Security" ("Side-by-Side Analysis," 2003).

The CII Act currently restricts state agencies in their use of the information in the same manner it restricts federal agencies (Library of Congress, 2003). Restore FOIA would not forbid the use of infrastructure information in civil court cases in order to protect the public (Leahy, 2003). The CII Act does not allow such information to be used in civil suits (Leahy, 2003). Restore FOIA would also do away with

criminal penalties for disclosure of information and would not override any whistleblower protections (Leahy, 2003).

Another solution to manage this rift between opponents and proponents of the CII Act is to increase the level of public involvement in the act. One way to do this, as mentioned above with agenda setting theory, is to increase the amount of media coverage of the act. Executive Director of OMB Watch Gary Bass praised the press in its role of covering the act, but also said he:

> would have liked to see more news stories earlier because it might have helped those working with members of Congress and their staffs to defeat the exemption. 'People didn't know enough soon enough about this issue…The press coverage focused on the larger bill creating the department. The exemption components were hardly ever mentioned, so the net result was that the public knew very little, Congress knew very little, and it became a peripheral issue (as cited in McMasters, 2003).

The media coverage the act did receive has already made a difference; after publicizing the criticism of the act, changes were made, including the acknowledgement that "certain unauthorized disclosures of CII would qualify as whistleblowing under the Whistleblower Protection Act (WPA) and be exempt from any penalties" (Moulton, 2004). The CII Act does allow federal employees to seek protection under the Whistleblower Protection Act "on the condition that such employee made 'any disclosure to the Special Counsel, or to the Inspector General of an agency'" ("Homeland Security Act of 2002," 2003). If the whistleblower made a disclosure to the media, however, she would not be protected.

This brings up a final suggestion. At the state level, shield laws need to be developed and/or strengthened to encourage people to blow the whistle to the media on environmental injustices at the local level. Should Leahy's bill pass, (which would mean the CII Act would not override statutory protections), state governments would be ready to protect both its whistleblowers as well as its media.

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The International Chamber of Commerce and Public Participation in Environmental Decision-Making

Leah Jaramillo
University of Utah

This paper addresses the role of the International Chamber of Commerce (ICC) in representing international business perspectives on a long-term approach to climate change via the UN's Framework Convention on Climate Change. Policy recommendations made by the ICC for increased economic development to address the challenges of global climate change are examined as is the juxtaposition between these recommendations and its actions aimed at combating climate change. The paper suggests that meaningful venues for public participation in environmental decision-making are required to maintain vigilant awareness of the influence exerted by global organizations such as the ICC.

Public participation venues are intended to create an open space where citizens of democratic nations participate in both the rhetorical act of speech and in political thought and dialogue. Increasingly, however, global institutional arrangements may render that space irrelevant. The transfer of power from local/national level to global level decision-making bodies limits the space for public participation, dialogue, and action. As the forces of economic globalization enhance international relationships, international and multilateral organizations become more important in the process of developing resolutions for environmental issues like climate change. Although issues like climate change necessitate global and multinational participation because they influence the entire globe and transcend political borders, current institutional structures severely limit democratic participation at this level.

Additionally, a variety of international nongovernmental organizations (INGOs) have access to United Nations (UN) summits and meetings, where they may be able to press their agendas without much public scrutiny. One such organization, the International Chamber of Commerce (ICC), represents the international business interest and is able to lobby for increased trade and investment, open markets for goods and services, and the free flow of capitol. The ICC recognizes that international policy resolutions on climate change will directly impact the international business arena, and so participates in the UN Framework Convention on Climate Change (UNFCCC) with its own ICC Task Force on Climate Change (TFCC).

This paper addresses the role of the ICCTFCC in representing international business perspectives on a long-term approach to climate change. Specifically, this case study analyzes the stance taken by the ICC's Task Force on Climate Change in its participation in the UNFCCC. Policy recommendations made by the TFCC for increased economic development to address the challenges of global climate change are examined. The paper also explores the juxtaposition between the ICC's promotion of an open international trade and investment system and free-market economy and its actions aimed at combating global climate change. The paper concludes with critical commentary and discussion of the questionable value of civic dialogue and suggests that meaningful venues for public participation in environmental decision making require conveners, facilitators, and participants to understand and maintain vigilant awareness of the influence exerted by global organizations such as the ICC.

Research Question 1: a) How does the public participate in a United Nations meeting and b) how effective is their participation in the final decision-making process?

Research Question 2: Do NGOs like the ICC influence global policy-making?

Research Question 3: a) Is global consensus the best way to achieve a solution to climate change, and b) is it the best strategy for public participation in this issue?

The UNFCCC

The United Nations Framework Convention on Climate Change (UNFCCC) was developed in 1992, and put into effect in 1994, to begin considering what could be done to reduce global warming. The document has been heralded as a crucial move for combating climate change at the international level. Currently, 189 countries are Parties to the UNFCCC. This international participation demonstrates that most countries around the world take the threat of climate change seriously and are willing to act in order to combat it. Accordingly, the UN defines the UNFCCC as "an overall framework for intergovernmental efforts to tackle the challenge posed by climate change" (UNFCCC, 2004a). Furthermore, the UNFCCC and its Parties recognize "that the climate system is a shared resource whose stability can be affected by industrial and other emissions of carbon dioxide and other heat-trapping gases" (UNFCCC, 2004a). For this reason, the ultimate objective of the UNFCCC is "to achieve, in accordance with the relevant provisions of the Convention, stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system" (UNFCCC, 1992). This objective recognizes that 1) different nations, industries, and NGOs have differing opinions as to what "dangerous" levels might be and 2) that there is currently no real degree of scientific certainty about what constitutes a "dangerous" level.

Due to this uncertainty, and the magnitude of involvement around the globe, the UNFCCC lays out a framework and process for agreeing to specific actions in the future. The UNFCCC states that "such a level [of greenhouse gas concentrations] should be achieved within a time-frame sufficient to allow ecosystems to adapt naturally to climate change, to ensure that food production is not threatened and to enable economic development to proceed in a sustainable manner" (UNFCCC, 1992). At its inception, the UNFCCC aimed to reduce emissions of greenhouse gases in industrialized countries to their 1990 levels by the year 2000. In this way, the UNFCCC lays out short-term goals and objectives rather than a long-term resolution to the issue in order to gain the most support from its Parties.

One of the most contentious aspects of an international approach to resolving climate change is the inherent unfairness claimed by less developed or developing countries (LDCs). The more developed or industrialized countries (MDCs) gained a significant portion of their wealth "in part by pumping into the atmosphere vast amounts of greenhouse gases long before the likely consequences were understood" (UNEP & UNFCCC, 2002, p.14). Energy-related emissions are the leading cause of climate change, and as a result, there is increasing pressure on all countries to curb the amounts of coal and oil they use. In some instances however, burning fossil fuels may be the most efficient way for LDCs to increase their economic development. Consequently, LDCs "now fear being told that they should curtail their own fledgling industrial activities" (UNEP & UNFCCC, 2002, p. 14).

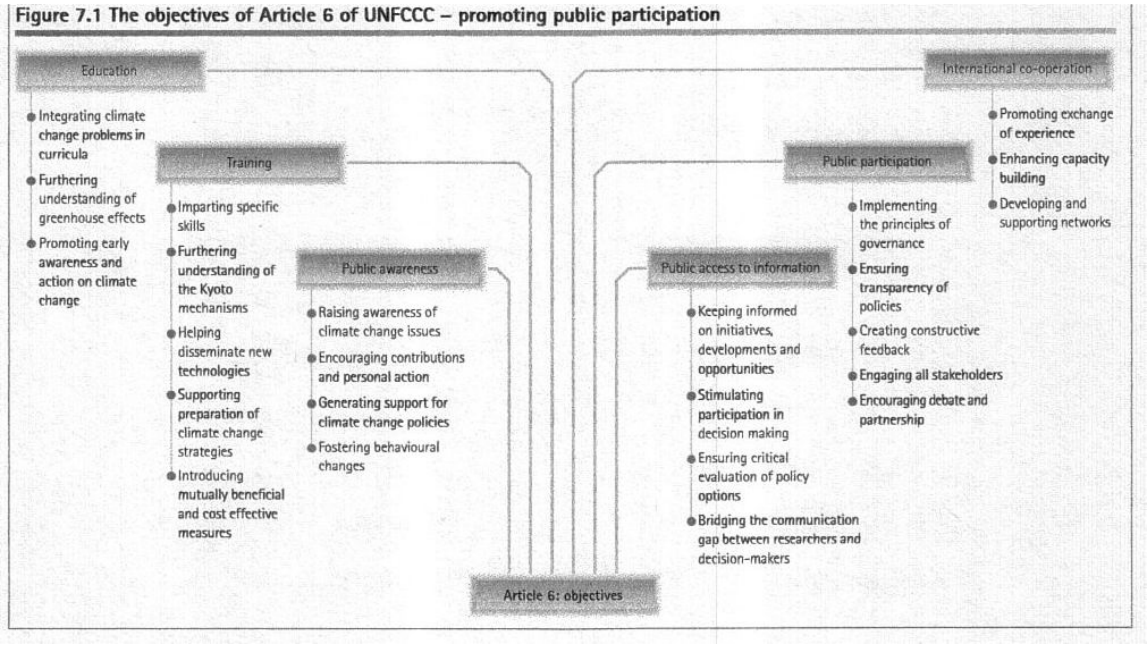
Conversely, some MDCs are hesitant to shoulder the full responsibility for dealing with climate change. Some of the sharpest cuts in emissions target MDCs. The United States, for instance, ratified the UNFCCC, but refused to sign the Kyoto Protocol because it lacked "globally uniform participation" (Schneider, 1998, p. 3). In 1997, the U.S. Senate passed a resolution "calling for the U.S. not to enter into any climate treaty that exempted developing countries from mandatory participation" (Schneider, 1998, p. 3) because the U.S. fossil fuel industry had asserted that the Kyoto Protocol would disadvantage U.S. products in the international market by raising the embedded energy costs for U.S. (and other MDC) products but not those produced in LDCs (Schneider, 1998). In effect, the U.S. did not sign the Kyoto protocol because it was (and remains) reluctant to shoulder what some would say is its fair share of the climate change burden. Although this is not the focus of this paper, it is important to mention the lack of U.S. support for the Kyoto Protocol here because it indicates the difficulties faced when international agreements are needed to resolve a global environmental issue like climate change. The task of "recognizing both the common and the differentiated responsibilities of both developed and developing countries"(UNFCCC, 2004d, p. 14) led to the creation of the UNFCCC, " a limited 'framework' text that would set the stage for a broad range of subsequent activities"(UNFCCC, 2004d, p. 14) to combat climate change.

The UNFCCC calls for the development and shared use of environmentally friendly, low emission, and/or high-efficiency technologies to help reduce global levels of greenhouse gases. This information and

subsequent products would be developed and implemented in MDCs first, and later shared with LDCs to allow for "greener" economic development. This shared technology has been described as a way for LDCs to "leapfrog entirely the Victorian industrial revolution to a high tech, low carbon, and very efficient industrial future" (Schneider, 1998, p. 11). The UNFCCC calls for global assistance and interaction in combating climate change, while allowing economic development to continue as needed. In addition to this push for more environmentally sound technology, the UNFCCC emphasizes the need for increased sustainable development, learned adaptation to possible climate change effects, possible regulations, policies, and/or standards to reduce emissions, and public education, awareness, and participation in combating climate change internationally (UNFCCC, 2004d).

The UNFCCC includes two articles designed to encourage and increase public education, awareness, understanding, and participation in combating climate change. Article 4.1 states that all Parties shall "promote and cooperate in education, training and public awareness related to climate change and encourage the widest participation in this process, including that of non-governmental organizations" (UNFCCC, 2004d, p. 78). Article 6 of the Convention expands upon this by "calling on all Parties to promote and facilitate these activities at the national, regional, and sub-regional levels and, where appropriate, through relevant international bodies" (UNFCCC, 2004d, p. 78). The UNFCCC has identified six major objectives in order to promote public participation as defined by Article 6. They are education, training, public awareness, public access to information, public participation, and international co-operation. Figure 1 below illustrates these objectives and their components as defined by the UNFCCC (UNFCCC, 2004d, p.78).

Figure 1.



According to the UNFCCC, the five major public involvement achievements resulting from Article 6 are:

> *General awareness* – Both policy makers and the general public are now better informed about climate change, both the scientific issues and the actions that can be taken to mitigate it. *Cooperation with stakeholders* – Governments have been working with many stakeholders, including educators, environmental NGOs and business and industry groups. *Community awareness* – These and other groups have been working with communities to help them become more familiar with climatic issues – and the environmental, social and economic implications. *Public support* – Climate change now ranks higher on the list of public priorities. *Personal action* – Many more people have now been motivated

> to take personal action to reduce greenhouse gas emissions in the workplace and at home. (UNFCCC, 2004d, p.78-79)

The majority of these achievements are attributed to nongovernmental organizations and scientists, however governmental involvement in public education, awareness, and participation campaigns has increased since the signing of the Kyoto Protocol in 1997 (UNFCCC, 2004d).

Public Participation

Public participation is especially important when related to environmental conflicts because human activities directly influence the natural world. Attempts at developing methods to combat climate change illustrate the complex and interdependent nature of human interaction with the global environment. An issue of great magnitude like climate change must be dealt with at the global level. Most nations have agreed that something must be done to combat climate change and its effects. The United Nations has developed the United Nations Framework Convention on Climate Change as an international approach to resolving this issue. The question, in terms of public participation, is whether local level decision-makers are able to interact with global level decision-makers in this approach. Does an international UN sponsored approach to climate change take power from the local level? Or is it possible that the space for public participation, dialogue, and action still exists within the UNFCCC? Additionally, can meaningful public participation occur when working to resolve an issue like climate change?

For a global environmental issue, Sewell and O'Riordan argue that "[i]n its ultimate form then, participation is a consciousness raising process through which people begin to understand their political roles and the need for legitimate conciliation and contribution" (1976, p. 17). It appears that the UNFCCC sees participation in the same way. According to the UNFCCC, "climate change will affect everyone on the planet – so it is vital that everyone is aware of the risks of global warming and of the part they can play in averting its damaging effects" (UNFCCC, 2004d, p.78). Consequently, the UNFCCC identifies local and international NGO activities and programs are the most effective way to encourage public participation.

The UNFCCC identifies five constituencies at the local and national levels as channels for public participation. They are environmental NGOs (ENGOs), research-oriented independent NGOs (RINGOs), business and industry organizations (BINGOs), indigenous people's organizations (IPOs), and local governments (UNFCCC, 2004d, p. 82). These five constituencies make up the major lobbying groups that participate in UNFCCC events. NGO participation in formal UN deliberations began in 1946, when 41 NGOs including the ICC, were granted consultative status by the Economic and Social Council (ECOSOC). Today, 2,613 organizations have attained consultative status via ECOSOC (UN, 2005).

There are three categories of NGOs with UN consultative status: general, special, and roster status.

> (1) General consultative status is reserved for large international NGOs whose area of work covers most of the issues on the agenda of ECOSOC and its subsidiary bodies. These tend to be fairly large, established international NGOs with a broad geographical reach.
>
> (2) Special consultative status is granted to NGOs, which have a special competence in, and are concerned specifically with, only a few of the fields of activity covered by the ECOSOC. These NGOs tend to be smaller and more recently established.
>
> (3) Organizations that apply for consultative status but do not fit in any of the other categories are usually included in the Roster. These NGOs tend to have a rather narrow and/or technical focus. The roster lists NGOs that ECOSOC or the UN Secretary-General considers can make 'occasional and useful contributions to the work of the Council or its subsidiary bodies.' (UN, 2005)

NGOs with either type of consultative status, or who are on the roster can apply to the UN for accreditation in order to attend UN formal meetings, including the Conference of the Parties (COP) to the UNFCCC. However, accredited NGOs, with or without consultative status that have been invited to UNFCCC COP meetings, are only admitted as observers. They may participate in workshops when their participation is "decided by the chairs of the subsidiary bodies with the advice of the chair of the relevant workshop"

(UNFCCC, 2004b). Similarly, NGOs may submit position papers and/or information where submissions have been requested, "where appropriate and on the understanding that such submissions would not be issued as official documents, in order not to expand the volume of documentation, but would be made available on the secretariat web site" (UNFCCC, 2004b). In these ways, NGO participation in the COP meetings is limited. While it appears that the UNFCCC values the participation of NGOs in COP meetings and framework implementation, the only venue for public participation in this process is through the very limited interaction of "observer" NGOs.

The participation of approved and accredited NGOs in UNFCCC meetings may not encourage public participation in the way that it intends to. As Sewell and O'Riordan (1976) explain,

> [M]ost of the benefits spilling over from the recent upsurge of interest in participatory politics are accruing for those who already enjoy a certain degree of social and political privilege, the middle income, well educated, politically articulate people who have traditionally formed the core membership of pressure groups. Almost paradoxically it seems, the results in participatory innovations in environmental policymaking may not only fail to reduce political inequality, but may actually exacerbate the division between those who can exploit the political culture and those who cannot. (Sewell & O'Riordan, 1976, p. 19)

Although over 2,400 NGOs participated in the 2003 COP-9 meeting (UNFCCC, 2004d, p. 82), the level of their participation is not openly apparent. While some NGOs, like the ICC participate to a high degree in representing their agendas; others may not be given the same opportunity. The selective invitation for NGO participation has the potential to seriously limit public participation in the COP meetings.

The ICC

Founded in 1919 by private sector representatives from Belgium, Britain, France, Italy, and the US, the ICC's mission has consistently been to "serve world business by promoting trade and investment, open markets for goods and services, and the free flow of capital" (ICC, 2004b). Traditionally, the ICC has acted on behalf of business in making formal recommendations to governments and intergovernmental organizations. In 1946, the ICC was granted the highest consultative status to the UN, and has remained the major representative of international business interests to the UN and other multinational organizations (ICC, 2004b). The ICC develops business policy on a variety of topics including environmental issues and sustainable business practices.

The ICC's Task Force on Climate Change is a subset of the ICC Environment and Energy Commission (EEC), whose mandate is to " develop business positions on major environmental and energy issues, and maintain ICC as the primary representative of business in key intergovernmental negotiations" (EEC, 2004). The EEC's activities include leading the business delegation at the Conference of the Parties (COP) for the UNFCCC. This business delegation, the Business and Industry NGO (BINGO), is a constituency of organizations concerned with representing the interests of international business and industry and is designed to allow "vital experience, expertise, information and perspectives from civil society to be brought into the [UNFCCC] process to generate new insights and approaches" (UNFCCC, 2003, p. 3). The EEC also develops business policy for submission to the UN's Commission on Sustainable Development meetings, and develops and represents the international business interest at other UN meetings concerned with the environment and energy (EEC, 2004).

As a part of the Environment and Energy Commission, the ICC Task Force on Climate Change is charged with monitoring key issues and challenges surrounding the international negotiations on the UNFCCC (TFCC, 2004). The TFCC is comprised of interested representatives and ICC member companies from major business sectors (DPBP, 2004). The ICC describes the TFCC's role as "to ensure that the knowledge, experience, expertise and views of [ICC] members make a valuable contribution to the formation of policies to address the challenges posed by global climate change" (DPBP, 2004). According to the TFCC homepage,

> the ICC continues to play a vital, dual role during these ongoing negotiations by: assembling, coordinating and presenting the activities and messages of over one hundred active business and industry organizations concerned about the potential impacts and opportunities presented by the

> negotiations [and by] representing the policy positions of ICC member companies and associations. (TFCC, 2004)

The ICC is able to participate in the UNFCCC due in large part to its long-standing relationship with the UN, its high level consultative status, and widely recognized role as the world's business organization.

In November 2004, the ICC Department of Policy and Business Practice (DPBP) issued the *Business Perspectives on a Long-Term International Policy Approach to Address Global Climate Change* (DPBP, 2004). This document outlines the ICC position on business' role in dealing with this environmental issue as well as its recommendations for developing a workable international policy. The document reinforces the ICC's commitment of support for the UNFCCC and makes recommendations for increasing its efficacy. In order to represent the international business interest in and support of the UNFCCC, both the ICC and its Task Force on Climate Change frame their stance on this environmental issue as a challenge to find a balance between promoting neo-liberal economic models, maintaining economic growth, and the problem of climate change. The ICC sees that

> [t]he basic challenge is to meet the world's growing demand for energy that is essential to sustain economic growth and improve living standards, while also addressing long-term concerns about greenhouse gas emissions and the environment. ICC believes the development and global utilisation [sic] of both existing and new, cost-effective, efficient energy technologies with low greenhouse gas emissions in all sectors is the most effective way to improve access to energy, to promote energy efficiency and to reduce greenhouse gas emissions. (DPBP, 2004)

In this way, the ICC and its TFCC support a neo-liberal economic agenda as the means for resolving climate change issues. In fact, as is represented above, the TFCC supports the development of new more efficient, technologically advanced, and cost-effective industrial products as a solution for climate change. "The pressing needs of energy for development and enabling frameworks to deploy new and existing efficient, innovative technologies should be taken on board in seeking ways to move ahead" (DPBP, 2004). Accordingly, the ICC supports increasing economic and industrial development, the increase of open trade and international investment, and the free flow of capital as the means to reducing greenhouse gas emissions and thus as a major component in resolving climate change issues.

Although the ICC and TFCC support the UNFCCC, the organization recognizes that there are serious obstacles facing the development of a global movement to combat climate change. Despite its participation in the UNFCCC, the ICC's critique of the development of an international policy to combat climate change closely parallels critiques of the UNFCCC from its Parties and outside observers as well. For instance, the ICC recognizes that

> [t]oday, there are fundamental differences among countries and regions on the most effective ways to address climate change, in particular whether it should be addressed under the UNFCCC, the Kyoto Protocol, both or through some other mechanism. These differences illustrate the difficulty in finding a generally accepted framework for international co-operation. (DPBP, 2004)

Additionally, the ICC sees that

> [t]hese fundamental differences in approach call into question whether an international framework based on a progression of binding, differentiated, absolute emission reduction targets can effectively marshal a sustained global response to concerns about climate change. Furthermore, these differences create serious obstacles to designing and implementing an effective, long-term international framework to address climate change. (DPBP, 2004)

The ICC's commentary above is representative of the business and industry interest group and other UNFCCC Parties that support economic development, national interests, and other political agendas. Due to its support of neo-liberal economic policies and the increasing development of international business, it is perhaps unsurprising that the ICC believes

> [t]he current [UNFCCC/Kyoto Protocol] approach has the potential to impose high costs on business and society, exacerbate tensions in international trade, and to damage economic prospects, competitiveness and investment, particularly in countries with the most stringent commitments and measures, while doing little to address increasing global greenhouse gas emissions. (DPBP, 2004)

In response to these critiques of the current UNFCCC/Kyoto Protocol approach to international climate change policy, the ICC and TFCC make several recommendations. The ICC states, "all Parties to the UNFCCC should participate in a common endeavour [sic] to assess and improve climate policy under the international framework of the UNFCCC" (DPBP, 2004) and suggests

> that a longer-term international climate policy framework under the UNFCCC must be developed: one that reflects a full international consensus to address these risks effectively, and that encourages investments in, and access to, energy and advanced technology that is needed to promote economic growth and development. (DPBP, 2004)

Although the ICC's promotion of a long-term policy framework for combating climate change parallels the belief of other NGOs, the motivation for promoting this long-term approach remains true to the ICC's pro-globalization, neo-liberal mission. As the following statement illustrates, the ICC sees a long-term policy to counteract climate change as a way to continue serving the international business interest by highlighting investment in major technologies and creating a new path for business development.

> To date, climate change policy discussions have focused on implementing near-term greenhouse gas emissions limits, in particular those defined in the Kyoto Protocol. They have not focused on the implications for long-term innovation and investment, especially in major technologies and infrastructures for energy supply and use. It is essential to discuss these longer-term challenges so that the public and policymakers will better understand the full implications of these agreements and their implementation. This is especially true regarding implications for research, innovation and investment decisions that must be made now, in particular for equipment and infrastructure with long lifetimes. Such discussion will help policymakers reach a full international consensus on an effective, long-term, global approach to address the concerns about the risks of climate change. (DPBP, 2004)

It is apparent that the International Chamber of Commerce and its Task Force on Climate Change are fulfilling the ICC's mission to "serve world business by promoting trade and investment, open markets for goods and services, and the free flow of capital" (ICC, 2004b) even in relation to an environmental issue like climate change. The ICC statement above illustrates the ICC's traditional view of public participation by promoting it as a method to help the public understand and accept policy agreements. As Peterson and Franks illustrate, this more traditional approach helps to "explain agency policy in a way that will encourage greater public acceptance" but may "yield a public participation process that fails to realize significant dialogic potential" (2005, p. 28).

Discussion

Public participation has been recognized as an effective method for managing environmental conflict. In relation to climate change, it is important to utilize and implement the knowledge of interested stakeholders, as well as technical experts in the development of a global environmental solution. Although policy for resolving climate change must be developed by global level decision-makers, the implementation of such a policy affects local level decision-makers and stakeholders around the globe. As coordination of the UNFCCC illustrates, the development of a global policy to reduce climate change requires public participation at the global level. Interested stakeholders from varied NGOs including representatives of business and industry like the ICC and environmental groups like the Climate Action Network take part in UN meetings and workshops similar to those used in local level environmental policy decision-making. The difference is that only those NGOs that are accredited by the UN may participate.

Several questions remain, including how ICC participation in UNFCCC Conferences of the Parties affects public participation. Due to the UNFCCC structure for NGO participation at COP meetings, it appears that public participation is facilitated through NGO participation. Public participation in the ICC comes from its member companies. Interested member companies select a representative who participates in the ICCTFCC. ICC participation in the UNFCCC, even as the head representative for BINGOs, is maintained at 'observer' status. When requested, the ICCTFCC has submitted its business perspectives on resolving climate change to interested Parties and UNFCCC workshops. Although it is clear that NGOs participating in the UNFCCC, like the ICC, are involved in global policy-making as observers and

sometimes consultants, it is unclear how weighty their perspectives on climate change are in the UNFCCC decision-making process (research question 2).

It is also clear that all public participation in UNFCCC COPs is marshalled through designated NGOs. In order for the local level public to participate at the global level, they must align themselves with an NGO that has been accredited by the UN. There are over 2,000 NGOs that have been accredited to attend UN meetings, and close to 700 accredited for UNFCCC COP attendance (UN, 2005). According to the UN, NGOs provide

> a variety of services and humanitarian functions, bring citizens' concerns to Governments, monitor policy and programme implementation, and encourage participation of civil society stakeholders at the community level. They provide analysis and expertise, serve as early warning mechanisms and help monitor and implement international agreements. (UN, 2004c)

In this way, NGOs' associations with the UN function as a means for the public to participate at the global level (research question 1a).

As occurs in public participation activities at the local level, some stakeholders in UNFCCC COP meetings have more influence on the final decision and/or policy. The structure of the UNFCCC COP meetings illustrate that nation states have more influence on climate change policy implementation than do NGOs. The US' refusal to ratify the Kyoto Protocol demonstrates that despite assorted meetings, a stakeholder can choose not to implement an environmental policy of this magnitude if it so chooses. The impacts of an international approach to climate change, especially for developed countries like the US, can reduce the efficacy of public participation processes at the global level. The major impediment to US implementation of any climate change policy is its effects on economic development and industry. In this way, the ICC's neoliberal economic agenda is clearly influential.

Although the ICC supports the UNFCCC, it calls for a more long-term policy that accounts for economic development and international consensus that views technological development as a major solution to climate change. Overall, the UNFCCC and its parties recognize that economic development presents a major barrier to reducing greenhouse gases in developed and developing countries, and supports an international agreement promoting technological improvements as one way to do so. In fact, both the UNFCCC and the ICC call for international consensus throughout their documents (research question 3a).

While consensus may seem like an appropriate goal for the UNFCCC, it is possible that consensus may not yield a successful resolution to climate change. It is clear that global participation is necessary in order to combat this environmental issue, however with over 189 Parties and thousands of observing NGOs, consensus on the UNFCCC does not appear likely. In fact, international consensus may simply serve to reify existing power structures. Peterson et al argue that many times consensus building processes "necessarily occur within existing political structures, where some groups have more power than others…[and] have the advantage in shaping group consensus so as to favour continuation of existing hierarchical relationships" (2005, p. 764). Similarly, Peterson and Franks argue, "over reliance on consensus processes jeopardizes both democracy in general, and conservation specifically, by legitimising existing hegemonic configurations of power and precluding resistance against dominant elites" (2005, p. 39). In this way, the ICC's pressure for international consensus can be seen as maintaining the existing power structure that supports neoliberal economic policies at the global level. Similarly, although not clearly substantiated, the UN's policy for NGO participation in the UNFCCC can be seen as inhibiting changes in this power structure (research question 3b). Although NGOs are allowed to participate, the extent of their power to influence policy decisions does not appear strong (research question 2). In these ways then, striving for consensus on an issue like climate change may simply reinforce existing national positions on the issue, rather than change perspectives or create a sustainable resolution (research question 3a). This case study thus illustrates that current institutional arrangements support the expansion of free markets and neoliberal economies, which can be highly detrimental to the natural environment.

Since the influence of NGOs in this global environmental decision-making process is less than transparent, NGOs would benefit from implementing more opportunities for public participation at the local level. In order to effectively combat climate change, a greater amount of public participation will need to occur at the global level as well as the local. The UN remains the best mechanism for effectively developing and implementing policy to resolve climate change at the global level. Although the UN system for public participation is less than perfect, it appears to be the most logical way to incorporate the global public's divergent viewpoints and agendas. Civic dialogue and action are important in the

implementation of any environmental policy. An issue with the magnitude of climate change requires that members of developed countries remain especially vigilant in their actions to ensure that impacts to our globe are reduced. Meaningful venues for public participation are intended to allow for all interested stakeholders to participate. As has been discussed, this is not currently the situation in the UNFCCC.

Environmental decision-making requires conveners, facilitators, and participants to understand and maintain vigilant awareness of influence exerted by global organizations such as the UN and ICC. As the case study above has illustrated, NGO influence on global-level decision and policy-making bodies, like the UN, is highly opaque. As in all environmental conflicts there are many stakeholders with different agendas and perspectives involved in developing policy to combat climate change. Although nations have the most influence both in developing international policy and in developing and implementing "greener" national policies, it is important that individual citizens around the world recognize their role in resolving this environmental conflict. Creating spaces for public inquiry, dialogue, and action is the best way to increase this recognition. Public participation in climate change policy/decision-making must occur on both the global and local level in order to reduce human impact on our environment and prevent detrimental results to human life.

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From Spaces of Sacred Solace to Dwellings of the Devil: Wilderness and Religion, a Tenuous Relationship

Samuel Snyder
University of Florida

In The Culture of Extinction, deep ecologist Frederic Bender argues the culture of extinction began in the human separation from the "old ways" of hunter gatherers, and subsequent disconnect from the natural world. In part, this move, he maintains, accompanied the painting of wilderness as untamed, dangerous, and in need of control. Bender's point finds exemplifying in the casting of Adam and Eve out of the Garden of Eden. Paradoxically, however, it was in the wilderness deserts where early Christian mystics sought solace, inspiration, and divine enlightenment. Today wilderness embodies this perilously religious position as both site for control and source of inspiration. In order to understand the human relationship to wilderness one must take the variable of religion seriously. According to Lynn White Jr., Max Oelschlaeger, and J. Baird Callicott religion, while accused of being a cause of environmental problems, also offers insights into remedying the ailing human-nature relationship. Drawing on tools of religious studies, environmental ethics, and philosophy this paper will explore the payoff for considering the role of religion in the human relationship to nature by way of the great wilderness debate. What task, if any, does religion and religious studies perform in re-conceiving a "wilderness ethic," as this conference sets out to explore?

According to the call for papers, this conference seeks to explore new understandings of "wilderness" in a way which positions wilderness not merely along utilitarian value criteria, but so that the existence and success of wilderness occupies a "ground that makes possible our existence." Whether intended, or not, those final words: "ground that makes possible our existence" recall the definitional criteria of religion set forth by theologian Paul Tillich. In various points of his theological writings, Tillich defines religion as the "ground of being" or "the state of man [sic] grasped by an ultimate concern" (Tillich 1987, 201). Similarly, scholar of religious studies David Chidester defines religion as the means by which humans orient themselves to the world with concern for an ultimate (Chidester 1987). Drawing on these two definitions, then, could we safely say that this conference is seeking to explore new understandings of wilderness along the lines of religion?

Now wait, I know what you are thinking! Wilderness and religion? Religion and the environment? Didn't Lynn White tell us in 1967 that religion is the reason we are sitting in this quagmire of environmental degradation? Religions, specifically the Abrahamic traditions of Judaism and Christianity, are the reasons we are gathered here debating the concept of wilderness and the preservation of lands categorized by such an ambiguous term. Yes, this is true to a degree. However, in that very same essay where White blasts religion out of the Garden of Eden, he turns to advocate its use in nature's protection. "Since the roots of our trouble are so largely religious," he writes "the remedy must also essentially be religious, whether we call it that or not" (White 1967, 1207).[i] This too is what we on this panel propose to do, explore the tools of religion, "whether we call it that or not" (as White states), as a means to rethink the preservation of wilderness – "whether we call it that or not" (to carry Whites point a step further).

Originally, I planned on writing a paper tracing the ways in which religion, specifically Abrahamic traditions, have created and shaped human understandings of what we now call wilderness. However, such a paper contains no originality and might actually bore you to sleep as we near the end of the conference. With scholars spanning from Roderick Nash's *Wilderness and the American Mind* to Max Oelschlager's *The Idea of Wilderness*, Catherine Albanese (1990), Donald Worster (1994), and many others tracing the lineage of wilderness through its Abrahamic roots and beyond, such an argument is nothing new.

We all know the drill: Earth- and goddess- based religions were superceded by patriarchal sky-worshiping religions to the degree that the new sky-god cast a couple named Adam and Eve out of a luxurious manicured garden into the big bad wilderness were evil lurks and Satan tempts thus beginning a long and troubled relationship between humans and nature (Bender, 2003; Callicott, 1998; Glacken, 1967; Nash, 2001; Oelschlaeger, 1991; Worster, 194). However, religion, on the other hand, has not been completely antithetical to nature or wilderness preservation. Religious faithful throughout the history of the West - from the Gnostics to John Muir - have turned to the arborous protection or sandy solitude of spaces deemed wilderness for religious reflection and encounters with the divine, both transcendent and/or earth-bound. These latter moments of religious encounter in nature, thanks to Muir and others, eventually led to the move from wilderness as a descriptive term to the designation of actual natural spaces as wilderness; from condemnation to preservation of wilderness(Albanese, 1990; Bender, 2003; Callicott, 1998; Glacken, 1967; Nash, 2001; Oelschlaeger, 1991; Worster, 194). From here, as we are all familiar, ensues "the great new wilderness debate" (Callicott and Nelson, 1998).

So that story has been told many a time and you all probably don't want to hear it again. However, the play of religion and wilderness relationship becomes a bit more interesting when we take a few steps further back. From distant enough vantage points the realization becomes clear that no two more complicated terms could perhaps be placed into conversation with each other than religion and wilderness. For many, these terms have nothing to do with each other. How many times did I hear from non-scholars, or scholars unfamiliar with either religion or the great wilderness debate: "Religion and wilderness, what do they have to do with each other?"

Well, everything! No matter how you slice it, religion cannot be separated from wilderness; and wilderness cannot be separated from religion. Further, the great wilderness debate is in fact a religious debate, especially if we are seeking to understand wilderness as the ground which makes our existence possible.

But yet, what is religion? Or what is wilderness? They are both quite problematic to define, but yet we all feel as though "we know them when we see them." As Roderick Nash says concerning wilderness, "Wilderness, in short, is so heavily freighted with meaning of a personal, symbolic, and changing kind as to resist easy definition" (Nash 2001, xiii). The very same can be said of religion. Depending on perspective, or disposition, both religion and wilderness can be said to be either complete cultural constructions or very real and tangible realities.

According to William Cronon and others, wilderness is a complete cultural construction. Drawing on the work of Raymond Williams, Cronon writes, as the Eden story points out "ideas of nature never exist outside a cultural context. . . nature [wilderness too] is a self-conscious cultural construction" (Cronon 1995, 39). However, make such an argument to an activist sitting in a tree "defending wilderness" and he or she might very well drive a tree spike into your head asking if the pain too is a culturally constructed reality.

The same goes for religion. Scholars of religion have been debating its definition and reality since the conception of the discipline of religious studies. Scholars such as Jonathon Z. Smith deny the absolute realities and parameters of religion as set forth by pivotal thinkers such as Mircea Eliade. "Religion," he argues in *Critical Terms for Religious Studies*, "is not a native term; it is a term created by scholars for their intellectual purposes and therefore is theirs to define. It is a second order, generic concept that plays the same role in establishing a disciplinary horizon that a concept such as "language" plays in linguistics or "culture" plays in anthropology" (Smith 1998, 282). However, again, tell the faithful that their tradition, or religion in general, is a culturally constructed reality and you might be forced to go swimming in the baptismal font.

Despite their problematic definitional histories and seemingly arbitrary realities, culturally constructed or not, both religion and wilderness occupy quite tangible spaces of human terrain. And regardless of what they point to, their construction is of great importance to me and the remainder of this paper, for their "constructions" travel similar paths in the colonial history of the West.

Wilderness, as we know, arose in use as a term to designate that which was beyond civilization. In the early American mindset, driven by Puritan thought, wilderness existed as the "hostile territory of the devil" to be tamed by civilization and civilized by religious infusion, particularly Christianity (Albanese, 1990; Nash, 2001; Oelschlaeger, 1991; Worster, 1994).

Therefore, if wilderness in its early history existed as the antithesis of civilization, religion in its early history exemplified the existence of civilization. All that was not civilized lacked not only religion and/or

God, but humanity or human-ness. That or those without religion demanded civilization, just as wilderness demanded human taming in the early Christian mind.

According to David Chidester in *Savage Systems*: *Colonialism and Comparative Religion in Southern Africa***,** the defining process of religion took place on frontier zones of conflict of the colonial enterprise. "Whether practiced on the colonized periphery or at the colonizing center," both the concept and the study of religion were "entangled in the power relations of frontier conflict, military conquest and resistance, and imperial expansion" (Chidester 1999, xiii). In other words, the colonial enterprise defined religion along Christian parameters. Those without Christianity were deemed to have no religion, deemed uncivilized, and therefore sub- or non-human paving the way for control and manipulation by colonial leaders and Christian missionaries.

Sounds vaguely familiar to wilderness, no? Definitions of wilderness, specifically in the American mind, arose out of a very similar colonial context to that of South Africa as examined by Chidester. In addition, those North American, non-European, humans faced the same colonizing forces as the South Africans. Only upon accepting Christianity, were the "native" populations deemed to be human; and only upon Christian civilization was nature removed from the evils of wilderness.

However, in time both categories changed. Once the frontiers of South Africa saw closure and containment scholars, theologians, and travelers granted South Africans to have religions apart from Christian definitions of religion. Similarly, once the colonial enterprise controlled and contained a bit of wilderness was the possibility granted that it too might offer values as a religious sanctuary, or be a legitimate space for divine encounter. Only then, thanks to Muir, was wilderness discussed as having value worth preserving, just as South African indigenous traditions were seen to have value in and of themselves worth respecting and preserving.

Today neither religion nor wilderness receives definition along such colonial, Christian parameters. Both are assumed to have tangible realities, and, so it seems, humans turn to both for moments of grounding and world orientation. Both religion and wilderness provide canopies through which one's existence might possibly find grounding. Further, it is wilderness, as discussed in this conference which is the religious ground we might be seeking through environmental ethics and preservation practices.

Where I have played with a few of the relationships of religion and wilderness as terms, "if we want to call them that," the remainder of the panel will present specific examples of religious traditions, or religion broadly speaking (if we want to call them that), interacting with culture, politics, and nature in struggles over wilderness definition and nature preservation further exemplifying again how inseparable the two contested terms are from each other.

Notes

[i] Other scholars such as Baird Callicott (1994) and Max Oelschlaeger (1994) have made similar claims about the need to turn to religion as a primary tool for coping with the environmental crisis.

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Reevaluating Lynn White: Celtic Christianity and the Cause of Wilderness

Joseph Witt
University of Florida

In 1968, historian Lynn White, Jr. published his famous thesis, arguing that the basic tenets of Christianity promoted what he called "our ecologic crisis." White's work inspired many scholar to examine Christian traditions in search of elements which might promote a system of Christian environmental ethics. The modern movement of Celtic Christianity, while originating before White's publication, represents one example of an attempt to construct an environmentally-friendly, or "green," Christianity. This paper examines the modern Celtic Christian emphasis upon wilderness in order to help understand religious reactions to the Lynn White thesis.

Historian Lynn White, Jr. generated a significant stir among scholars of Christianity when, in 1967, he published an article entitled "The Historical Roots of Our Ecologic Crisis" in the journal *Science*. In this article, White related the development of Western science and technology and the destruction of natural environments to particularly Christian concepts. This now famous "Lynn White thesis" caused decades of scholarly debate and inspired some Christian groups to reevaluate their tradition in search of an environmentally friendly past. The modern Celtic Christianity movement, begun long before the work of White but not realizing widespread popularity until slightly after, exemplifies one attempt to find and environmentally friendly Christian past in the Celtic regions of Ireland and the United Kingdom. Because of their special relationships with wilderness, argue many modern followers of Celtic Christianity, the early Celtic Christians created a peaceful blend of Christian tradition with other animistic pagan traditions. This paper examines the claims of several modern Celtic Christian groups in an attempt to analyze the place of wilderness within Celtic Christian spirituality.

Lynn White begins his article with an analysis of the development of science and technology in Europe. Originally, argues White, science and technology involved separate spheres; science was to the elite as technology was to the laborer. However, the eventual combination of the philosophy of science with the action of technology helped to exacerbate ecological destruction (White 1967, 32). These developments in science and technology depended upon the relationships of medieval persons towards their surroundings, or as White says, "what people do about their ecology depends on what they think about themselves in relation to things around them. Human ecology is deeply conditioned by beliefs about our nature and destiny–that is, by religion" (1967, 33). In the medieval European context this means Christianity. Three aspects of Christianity led to destructive attitudes towards nature, namely, a sense of linear rather than cyclical time, anthropocentrism and a sharp human-nature dichotomy (White 1967, 34). While acknowledging potentially helpful features within the Eastern Christian tradition and from the life of Saint Francis of Assisi, White concludes that "no new set of basic values has been accepted in our society to displace those of Christianity. Hence we shall continue to have a worsening ecologic crisis until we reject the Christian axiom that nature has no reason for existence save to serve man" (1967, 36). Rather than fully condemning Christianity, White calls for an eradication of the extremely anthropocentric worldview derived from certain Christian interpretations. Though no efforts have as yet been successful, argues White, there remains some hope for the development of an ecologically friendly Christianity. By embracing a certain conception of wilderness modern Celtic Christians seek to do just that.

According to the modern followers of Celtic Christianity, their tradition emerged when Saint Patrick first peacefully brought the Gospel to Ireland. However, this paper does not seek to evaluate the historical claims of this movement or the development of Christianity within the modern United Kingdom and

Ireland. Instead, this paper focuses on the claims of the modern Celtic Christian movement which dates only to the mid-nineteenth century.[i]

Modern Celtic Christianity draws adherents from several diverse Christian traditions–from orthodox Catholics and Protestants who simply enjoy the lessons of saint's lives and church history to persons whose spirituality more closely resembles neo-paganism or Wicca than Christianity.[ii] Basically, however, Celtic Christians make some similar claims. First, adherents argue that pagan Celtic traditions contained certain environmentally friendly and peaceful features. These included a closely-knit communal social structure and reverence for and connection to natural places which some now interpret as panentheism, or observing the power of a transcendent deity within the matter of the world. When the first Christian missionaries entered Celtic lands near the end of the Roman occupation of Britain, continue many Celtic Christians, they encountered a peaceful and artistic people with pre-existing affinities for sacramentalism (viewing the natural world as a sign of God's grace) and trinitarianism (Celtic religion, by most scholarly accounts, favored triads and triune deities).[iii] This Celtic Christian tradition, derived from a peaceful blend of Celtic paganism and early Christian teachings, continued through the centuries to the modern day in Celtic lands despite oppression from Rome and England. Importantly, Celtic Christianity developed in lands never conquered by the Romans or the Saxons (only later to move to Wales). The Church in Celtic lands developed slightly beyond the dominating hand of Rome and remained free of invasion long enough to solidify its role in Celtic culture. In other words, Celtic Christianity developed as a religion of the fringes–the religion of the people at the edge of the Earth and in the wild lands.

Thomas Cahill's *How the Irish Saved Civilization* (1995) considers the conversion of Ireland and the benefits of life on the Celtic fringes. Cahill accepts, for the most part, this historical perspective discussed above, saying of pagan syncretism, "unlike the continental church fathers, the Irish never troubled themselves overmuch about eradicating pagan influences, which they tended to wink at and enjoy" (1995, 148-149). Regarding the peaceful nature of the conversion, Cahill adds that "Ireland is unique in religious history for being the only land into which Christianity was introduced without bloodshed" (1995, 151). Cahill continues, adding that the new Irish Christians, who to some degree developed from the old religious elite, the druids, took special liking for the written word (1995, 172). The Irish monks acquired texts from around Christendom, translating, copying and adding their own artistic Celtic embellishments on works such as the Book of Kells, Book of Durrow and Lindisfarne Gospels. When Rome finally fell in the fifth century, culminating in the sack by Alaric and the Visigoths, the humble Irish monks, translating and copying on the fringes of the world, became the sole remainder of the Christian literary tradition in Europe. For the next two centuries, students came from across largely illiterate Europe to study at the great Irish monastic centers such as Saint Patrick's Armagh and Saint Brigid's Kildare. The copying of manuscripts continued in places such as Skellig Michael, a small community perched on a large stone eight miles beyond the southwest Irish coast in the Atlantic ocean, and Iona, a tiny island west of Mull in the Scottish Hebrides. Irish monks supplied the literature as Christianity re-established itself around Europe. From the end of the sixth century and into the seventh, Irish monks such as Columcille and Columbanus ventured into Europe, as far east as Kiev, founding monasteries and helping reinstate Christianity in former Roman lands and thus, to use Cahill's terms, saved Christian civilization (1995, 183-196).

It is important to remember that many assertions and interpretations made by Cahill and other supporters of Celtic Christianity remain hotly contested by several Celtic studies scholars and Church historians. Donald Meek (2000), for example, argues that modern Celtic Christian interpretations such as Cahill's misrepresent the ideas of early Christians in Celtic lands. These people, Meek argues, did not consider themselves Celtic but Christian only. They remained doctrinally true to the theology of the time and lived within great material and cultural trade networks. In other words, they were not as isolated and unique as Cahill and others would have us believe. Meek says of popular writers on Celtic Christianity, though not necessarily of Cahill, "they are part of a phoney war, sustained by misconceptions and vast generalisations which arise beyond language-based Celtic scholarship and often lack roots in proper, internal knowledge of Celtic cultures" (2000, 238). Meek notes that many persons develop sympathies for Celtic Christianity through what he calls "postmodern primitivism," valorizing the lives of those perceived as distant from the destructive forces of society. The Celts only existed on the fringes, he explains, when viewed from outside Celtic lands (Meek 2000, 80-82). Despite these problems, Cahill's interpretation of history generally finds more acceptance among devotees of Celtic Christianity and deserves study as religious belief rather than as pure history.

Like Cahill, Thomas O'Loughlin (2000) considers the theological ramifications of Christian life at the wild lands on the edges of the world. Examining the lives of Saints Patrick and Columba, and in direct

contradiction to the claims of Donald Meek, O'Loughlin finds a distinct awareness of existence at the fringes of Christendom. He reads in the Life of Columba a need for Adomnán, Columba's hagiographer, to prove the importance of his teacher to the larger body of Christians on the Continent. Adomnán is aware of his existence on the edges of the Christian world but still recognizes an important connection with Christians in other lands (O'Loughlin 2000, 50). O'Loughlin similarly finds awareness in Saint Patrick's Life, written by Muirchú, of an existence on the rim of the world. Interpreting Jesus' words in Matthew 10:23[iv] to mean that his return will come only after the Gospel reaches the ends of the world, Patrick felt he could help bring the Second Coming by at least bringing the Word of God to the world's northwestern extremity. O'Loughlin says, "Patrick saw himself as finishing the job of proclamation, fulfilling his urgent task, and so then there would be no reason for the world to continue: the 'mystery hidden for ages' (Ephesians 3:9; Colossians 1:26) was now plain to all" (2000, 57). According to the Lives of Columba and Patrick, then, while still feeling connections with the body of the Church, early Christians in Celtic lands also viewed themselves as living on the fringes in a wild corner of the world in need of the Word of God.

Using historical and theological work such as that of Cahill and O'Loughlin, modern Celtic Christian adherents conclude that Celtic Christianity, by its very nature, has a special wilderness identity not shared by more mainstream Roman Catholicism. Ian Bradley (1993) summarizes this identity as follows: "Celtic Christianity is a faith hammered out at the margins. The Celts lived on the margins of Britain, on the margins of Europe and on the margins of Christendom. They lived close to nature, close to the elements, close to God and close to homelessness, poverty and starvation. . ." (quoted in Meek 2000, 80). Because of this perceived connection to wild land and older eco-friendly pagan traditions, many modern explorers of Celtic Christian spirituality feel called to environmental and social activism. For example, the Iona Community, founded in 1938 by the Reverend George MacLeod on the ruins of Columba's earlier abbey, lists as its concerns,

> Justice, peace and the integrity of creation (opposing nuclear weapons, campaigning against the arms trade and for ecological justice); Political and cultural action to combat racism; Action for economic justice, locally, nationally and globally; Issues in human sexuality; discovering new and relevant approaches to worship; Work with young people; The deepening of ecumenical dialogue and communion; Inter_religious relations (Iona Community 2003).

The Iona Community has also expressed support for the upcoming Make Poverty History rally in Edinburgh on July 2, 2005. Clearly, for the members of this community, the inspiration of the Celtic Church leads to direct action in care of Creation. Similarly, Dara Molloy, a self-proclaimed Celtic priest who lives on Inis Mór in Ireland's Aran Islands, heads a community devoted to sustainable living and organic farming (Molloy 2004). Despite claims by skeptics of selfish individualism among New Age Celtic Christians, the Iona Community and Molloy's An Charraig community exemplify cases of environmental preservation and action for social justice based upon Celtic Christian inspiration.[v]

The work of Alastair McIntosh provides one final example of Christian ecological and social activism with Celtic Christian influences. A Quaker and native of Leurbost in the Hebridean Isle of Lewis, McIntosh remains heavily involved in various projects around the United Kingdom. For the last three decades he has participated in organizations such as the GalGael Trust, a community empowerment organization in Glasgow; the Isle of Eigg Trust, a local initiative to return the Isle of Eigg to communal ownership; and activities such as the blocking of the Mount Roineabhal superquarry on the Isle of Harris and the Faslane Peace Camp, a group which protests Britain's nuclear weapons held at the Faslane Naval Base in Scotland.[vi] Drawing greatly from liberation theology, McIntosh provides far more subtle and complex theological arguments for the necessity of activism in his work than do many popular writers on Celtic Christianity. Importantly, though, as a native of a Celtic land, McIntosh expresses sympathy for Celtic Christianity. He charts a middle ground between the criticisms of Meek (2000) and the complete acceptance of Newell (1999) and Joyce (1998), warning of the problems of romanticism, misrepresentation and spiritual individualism while at the same time valuing the call among Celtic Christians to protect the earth and develop community ties. He says, "the issue, I think, is not *whether* Celtic spirituality ever existed, but the fact that a living spirituality connecting soil, soul and society manifestly can and does exist. This is *community* in that word's most holistic sense" (McIntosh 2002, 19). For McIntosh, stories of enchanted places such as holy wells and faerie mounds, taken sometimes as literal truth among neo-pagan groups and Celtic Christians with more New Age tendencies, help inspire imagination and creativity. Stories associated with specific events and places, such as those surrounding holy wells and faerie mounds,

tie people to Celtic and Christian history and promote care for those places. The Well of the Holy Women on the Isle of Eigg, for example, accredited to Saint Brigid, inspires in many a greater feeling of connection and need for protection than would an otherwise anonymous pool of water.[vii]

For many drawn to Celtic Christianity, associations with wilderness and life on the fringes of civilization help define a uniquely ecologically friendly Christian tradition. Celtic Christians claim that, by its proximity to wilderness, the emerging Celtic Church, drawing from the emerging Christian tradition as well as the wisdom of ancients, developed an especially reverential perspective of nature and the wild. The wilderness was not something dominated by humans but the abode of spirits and a sign of the grace of God. Significantly, this wilderness contained humans as well. Modern Celtic Christians, either centuries from their Celtic roots or without any Celtic roots at all, include the Celts and the older inhabitants of what is now the United Kingdom and the Republic of Ireland as part of the Celtic wild. This prompts some such as Meek (2000) to charge modern Celtic Christianity with exploitative primitivism much like that of the American settlers in their relationships with American Indians. While this may in part be true, it is more the concern of this paper to describe the Celtic Christian perception of wilderness than to criticize it.

In conclusion, modern Celtic Christians understand their tradition as deriving from an interaction between civilized Christianity and wild Celtic paganism. Because these influences existed in a harmonious balance within the Celtic Christian tradition, they argue, it developed with a reverence for nature not seen in other Christian traditions. Lynn White (2003 [1967]) argued that "since the roots of our [ecological] trouble are so largely religious, the remedy must also be essentially religious, whether we call it that or not" (36). By understanding themselves as part of an ancient, environmentally friendly tradition, modern Celtic Christians act to find this religious remedy sought by White.

Notes

[i]For good histories of the Celtic Christian movement see Meek (2000), McNeill (1974) Trevarthen (2005) and Bowman (2005). For source material see Carmichael (1992 [1899]) and Davies and O'Loughlin (1999).

[ii]For more information on modern popular Celtic Christianity see Bradley (1993), Newell (1999) and de Waal (1997).

[iii]For introductions to Celtic religion see Mac Cana (1983), Low (1996) and Hutton(1993).

[iv]"But when they persecute you in this city, flee ye into another: for verily I say unto you, Ye shall not have gone over the cities of Israel, till the Son of man be come" KJV.

[v]See also www.christian-ecology.org.uk and www.aislingmagazine.com for further examples of Christian environmental and social activism based in the United Kingdom and Ireland as well as www.plowsharesactions.org and www.tridentplowshares.org for more information on Christian peace and nuclear disarmament activism.

[vi]See McIntosh (2002) and www.alastairmcintosh.com.

[vii]See McIntosh (2005).

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Grand Staircase-Escalante National Monument and a "Peculiar People"

Gayle Spiers Lasater
University of Florida

The 1996 Clinton designation of Grand Staircase – Escalante National Monument in Southern Utah under the Antiquities Act launched a wilderness debate over the federal withdrawal of state lands from the public domain for the purpose of preservation. For many Utahans, 75 percent of whom are Mormon, this designation was the final straw in a long legacy of federal encroachments. In naming the Bureau of Land Management rather than the National Parks Service traditionally charged with managing monuments, Clinton set in motion the contradictions between the Act's wilderness preservation and the BLM's multiple-use resource extraction and development philosophies. The designation provides an opportunity to consider Cronon's critique of wilderness as a dualistic construct between nature and culture. These tensions are keenly felt and debated among the Mormons, who hold doctrinal principles of environmental stewardship based on an anthropocentric theology, and yet as an American subculture, are quintessentially capitalists. In the Utah landscape at Grand Staircase – Escalante National Monument these tensions are in full panorama.

Introduction

In 1996 President Clinton designated for posterity nearly 1.7 million acres of the Colorado Plateau by naming the Grand Staircase – Escalante wilderness a national monument under the Antiquities Act of 1906. With much of Utah's state territory federally owned, this event for many Utahans – mostly Mormon – was the final straw in a long legacy of federal encroachment. The designation of Grand Staircase – Escalante National Monument (GSENM) provides an instructive case study in the wilderness issues at play in the American West.

This paper will consider the stakes in the GSENM, and, in particular, the intersection of environmentalism, politics, and religion in Utah, where 75% of the inhabitants are Mormon. Following the introduction, I'll revisit the settlement of Utah by this "Peculiar People" and the LDS doctrines that inform their environmental politics, diverging into two main political currents: pro-wilderness environmentalists vs. pro-capitalist anti-environmentalists. The next section considers the land-use issues as a result of the establishment of the Monument, and the designation of the Bureau of Land Management as the Monument's management, which set in motion the contradictions between the BLM's multiple-use philosophy and the preservationist goals of the Act and National Parks Service.

In conclusion, Cronon's argument against the dualistic construct of wilderness designations is contemplated with regard to the GSENM. Contrary to Cronon, the argument herein is that in the absence of federal protection, GSENM and the Colorado Plateau at large are subject to capitalist extractions of mining, oil and minerals, water, and grazing exploitation, and therefore require preservation. The Clinton administration, concerned with potential despoliation and Republican efforts to prevent the national Monument designation, slipped the withdrawal right under Utah's officials' noses, including that of then Governor, Mike Leavitt, who now serves in the Bush administration. Although the regional stakeholders could not come to resolution, after which Clinton acted, this designation highlights a contradiction in our federal democracy whereby the executive branch can impose national interests over those of individual states. While some Utah politicians considered GSENM a federal "land grab," other Utahans are supportive of wilderness conservation.

The Mormon Settlement of Utah and Divergent Environmental Views

Joseph Smith, Jr., officially founded the Church of Jesus Christ of Latter-day Saints (known hereafter as Mormons, Saints, or LDS) in 1830, ushering in the seventh and final dispensation. Gathering followers, Smith and the nascent Mormons considered themselves the restored One True Christianity in these latter days. As the New Israel, the history of the Chosen or "Peculiar People"[i] recapitulated that of the ancient Israelites, including polygamy, exile, and a covenant right to a promised land. Displaced repeatedly by persecutions, Brigham Young assumed the leadership following Smith's murder, and like the New Moses, led the Saints to settle western Native American lands in the Salt Lake Basin of the Utah Territory in 1847. The federal government had been complicit in the disruption of Mormon communities attempting to discourage their polygamist practices, which the Mormons considered a right of religious freedom. But polygamy would finally come to full confrontation in the battle over Utah statehood, where Brigham Young and numerous Mormons were federally incarcerated for plural marriages. The Mormon Prophet overturned the practice by revelation in 1890, Utah statehood was granted in 1896, and most Mormons settled into monogamy in the new state of Utah. The Saints established a quasi-theocracy where there was little or no distinction between the sacred and the secular given the enormity of their communal task: surviving in the arid and hostile West, finding some accommodation with the federal government over what the Mormons consider a long history of federal encroachment into religious freedom and states' rights, and creating God's kingdom in New Zion for his Chosen People.

Based on LDS theology, man, as created in God's own image, is God's highest creation and steward over all the Earth, which was created for divine purposes as realized through his human stewards. This anthropocentric theology is consistent with other Christianities; "man-as-finisher" and "man-as-modifier" of God's creation are persistent Mormon themes. But the Saints were repeatedly counseled by Brigham Young and the Elders to practice good husbandry and stewardship as evidenced in the prolific writings of the pioneers. In the arid Salt Lake Basin, there were three immediate environmental concerns: aridity, the cold climate, and vegetation. Aridity was thought to be readily manageable through irrigation techniques and intensive farming, but only God could temper the climate, which the Saints were convinced he had done, reinforcing their chosenness. But within the first two decades of settlement, vegetation was being altered due to overgrazing. Orson Hyde wrote in 1865,

> I find the longer we live in these valleys that the range is becoming more and more destitute of grass; the grass is not only eaten up by the great amount of stock that feed upon it, that tramp it out by the very roots; and where grass once grew luxuriantly, there is no nothing but the desert weed, and hardly spear of grass is to be seen … There is no nothing but the desert weed, the sage, the rabbit-bush, and such like plants, that make very poor feed for stock (Jackson, 1975, p. 38).

Continued grazing would become one of the thorny issues in the designation of the GSENM over a century later. Notwithstanding the noted ecological damage, agriculture provided the necessary sustenance, facilitating Mormon industry which gave rise to an enclave of capitalist growth and accumulation. Although the Mormons abandoned the religious practices of polygamy and communal property, the tithe requirement brought under Young's control sufficient assets to foster the necessary industrial, commercial, agricultural, and domestic consumables enterprises such as mining, milling, smelting, grain and crop production and storage, livestock, textiles, building, and furniture production. As an intensive religious subculture of modernization in the New Western History of America, for the Saints, their progress and success are testament to the fulfillment of God's will and doctrines.

The major doctrines that inform LDS environmental politics include the belief that rejects the orthodox *ex nihilo* creation tenant. Rather than God creating the Earth out of nothing, Mormons believe that all the creation was pre-mortally spiritually endowed and existed prior to Earthly embodiment with man as the highest creation. Second, the Trinity is rejected for a literal anthropomorphic God whose "flesh-and-bones" exalted body is glorified through eternal procreation of spirit children. Humans are the very spirit children of God the Father and the Heavenly Mother awaiting embodiment. Because God provides in every way, it is the privilege of Mormons to bring spirit children to Earth through procreation. Finally, through the saving atonement of Jesus Christ and his return, all of God's Peculiar People and creation will be redeemed, and the Earth will be restored to the paradise of God's original intent. Together these doctrines lead to divergent thinking about creation: for some, man is the steward and made in the literal image of God where Earth was created for human utility and eternal progress. For many Mormons, God's

Plan of Salvation includes modernity facilitated by capitalism. For other Mormons, that all of creation is spiritually endowed leads to a reverence for nature and an environmental ethic of preservation.

Like various Christianities, Mormon theology is subject to differing interpretations and results in a variety of environmental responses. Hunter and Toney (2005) of the University of Colorado researched Mormons and the environment, and conclude that

> Mormon respondents as compared with the U. S. population generally did, indeed, express *more* concern for maintenance of environmental quality particularly in the face of economic growth, and *more* faith in the ability of individual's to make a difference in environmental quality" (Hunter & Toney, 2005, p. 12).

The researchers further conclude that although the study Mormons expressed much concern, they "were less likely to have actually undertaken actions on behalf of these environmental attitudes" … (ibid). This ambivalence could be attributed to the ambiguities in doctrine that on one hand valorize economic progress and prosperity utilizing the Earth's resources and restoring the planet as Paradise. On the other hand, the Church teaches the Earth is a spiritually endowed place that should be reverently cared for. For Mormons who may be moved by the teaching of the Earth's spiritual endowment, there is a growing environmental movement led by Mormon wilderness advocates and scholars, such as BYU's Richard Jackson, George Handley and Thomas Alexander, Terry Tempest Williams of the University of Utah, and Patricia Nelson Limerick of the University of Colorado, to mine LDS teachings for an environmental ethic. However, for these and other environmentally conscious Mormons, the official Church commitment of "Policies of Inaction" toward the environment[ii] is a position in acute contradiction to the teachings of Joseph Smith, Brigham Young and their successor prophets. According to Jackson (1975), had the settlers followed their leaders' environmental directives, they "would have been the first conservationists in North America" (p. 38). As it is today however, Southern Utah has pockets of anti-environmental activism, which, especially on Pioneer Day in commemoration of the Mormon settlement of Utah, has turned ugly. For UF environmental scholar and native non-Mormon Utahan Richard Foltz (2002), the overwhelmingly conservative political agenda of Utah's Mormon politicians and electorate trumps whatever liberal environmental leanings a progressive interpretation of Mormon doctrine might yield.

The Antiquities Act and the BLM at GSENM

The Antiquities Act, employed to designate the GSENM, provides broad executive power to set aside land from the public domain, limited to the minimal amount of acreage necessary, for the purposes of historic, geological, or scientific preservation without any notice to States or Congress (Heideman, 2002, p. 37-68). Anticipating the Utahan rancor, as an appeasement, Clinton designated the Bureau of Land Management as the management agency rather than the National Parks Service, setting in motion an additional problem for the conflicts of interests in the Monument. While the Antiquities Act is for preservation, the BLM's objectives favor multiple-use resource development including extraction, such as mining, hunting, and grazing, over preservation. In contrast, the National Parks Service, which has traditionally managed national monuments, has advocated preservation and would have been consistent with the goals of the Antiquities Act. By naming the BLM rather than the NPS, Clinton threw Utahan's a bone, but further complicated matters in his designation speech that deemed mining as incompatible with preserving the Monument, leaving the Monument otherwise "open for multiple uses including hunting, fishing, hiking, camping, and grazing" (ibid, p. 45). By 1999 the Proposed Management Plan and Final Environmental Impact Statement was released after three years of consultation with the State of Utah and seven Native American tribes, and having considered public comments (Kelly, n.d.). Notwithstanding, the designation has been the subject of numerous appeals, the most contentious over mining, oil and gas leases, livestock grazing, and water to Washington County via the Lake Powell Pipeline.

While many Utahans have protested the federal "land grab" and the subsequent harm done southern Utah economies, there is empirical evidence that the designation has, in many ways, been an economic benefit to the area. In a letter to Secretary of the Interior Gale Norton, dated March 15, 2005, the signatories from ten wilderness advocacy groups cited these benefits as opposition to the recent appellate brief filed by the State of Utah challenging the creation of the Monument[iii]. Wages in Garfield County have gone up a net 13 percent and in Kane County, average earnings increased by 18 percent. While both counties have experienced decreases in unemployment, Kane County's rate went down from 8.7 to 3.5

percent. Real estate values in adjacent communities have risen since the designation. In the town of Escalante the median home value increased from $69,432 in 1990 to more than $100,000 in 2001. In Kanab, the mean home value rose by 23 percent from 1990 to 2000. The letter also cites the value of the wilderness in terms of economic ecotourism (as the third most visited site in the National Landscape Conservation System with 689,980 visitors in 2003), and as an important national heritage rich in ancient cultural, archaeological, and geological endowments.

Arguing that locked within the geological formations of the Monument are significant coal reserves, mining interests and Utah politicians have fought for continued extractions. According to research conducted at Colorado College (http://www.coloradocollege.edu), estimates place energy and mineral resources at $223 to $331 billion, involving 89 valid oil and gas leases, and two companies holding numerous coal mining leases, along with dozens of claims on other minerals. Although Clinton honored "valid and existing rights" the BLM has implemented a more thoroughgoing environmental impact process. As a result, many leaseholders have sold the BLM their claims. According to Roberts at the University of Utah, the Southern Utah Wilderness Alliance insists that mining has proven not to be a sound economic investment due to the remote and rugged locations increasing costs of production, which would account for very little mining in the past 100 years. "The same wilderness designation that might negatively impact mining in Utah can positively impact tourism" (n.d., p. 11). Roberts cites the Economic Report to the Governor 2002 indicating that in 2001, tourism in Utah reached $4 billion and provided 126,000 jobs. In contrast, mining in 2000 amounted to 0.7 percent of all non-agricultural employment, or about 8000 jobs (ibid).

Livestock accompanied the pioneers from the Mississippi River Valley and grazing has been a practice by Mormons and non-Mormons in the West since settlement. Within twenty years livestock had caused soil erosion and permanently altered the vegetation – degradation that has continued. According to researchers at CC (Centrella, 2002), citing the Sierra Club's report on an EPA study, "extensive field observation in the 1980s suggest riparian areas throughout much of the West were in the worst condition in history" (p. 3). This damage is considerable recognizing that only 3.5 percent of all domestic beef is raised on public land and accounts for only .06 percent of all western jobs (ibid, p. 2). Adding to the environmental opposition is the fact that taxpayers heavily subsidize public ranching. As with the mineral leases, some ranchers are selling grazing permits to conservationists, which are then retired by the BLM. But other ranchers insist that under the law public rangeland must be kept open to grazing. The BLM is in the unenviable position of assessing each lease for sustained yield principles.

The contentious issue of water is best demonstrated by the need of Washington County to pipe water from Lake Powell via a pipeline that traverses the Monument (Heideman, 2002) and a competing position that calls for draining Lake Powell (Winters, 2004). While the movement for eliminating the lake is growing, in the meantime, the BLM will not grant a pipeline permit until the applicant is in compliance with the National Environmental Policy Act. The NEPA requires an examination of all possible conflicts between the proposed project and the federal, regional, state and local land use plans. Aside from the extraordinarily difficult task of assessing all competing claims and statutes, the most difficult land-use issues are the disturbances of surface areas and the eyesores of an open pipeline across the Monument.

With all the contending parties and contradictory statutes, Heideman (2002) proposes possible solutions that include maintaining the status quo where the BLM attempts to blend preservationist and multiple-use philosophies, which will likely continue to perpetuate the conflicts of interests; alter the BLM management of the Monument to a preservation principle; presidential alteration of the Monument; or congressional alteration of the Monument (eight bills were pending in 2002). Other congressional bills attempt to alter, or undermine, the Antiquities Act. According to Heideman, the simplest solution is to have the BLM implement the Federal Land Management Policy Act of 1976 Section 704 that "permits the BLM to manage land that has been dedicated to a particular purpose according to the law that governs that portion of land" – in this case the Antiquities Act (ibid, p. 67-68). This would resolve the contradictions of land-use in favor of preservation and finally be in compliance with all federal statutes. While this resolution would please wilderness advocates in Utah and elsewhere, it would likely ignite a maelstrom of legislation aimed at reforming, or undermining, the environmental and preservation authority of the federal government.

Conclusion

William Cronon's (1995) "The Trouble with Wilderness; or Getting Back to the Wrong Nature" critiques the dualistic constructs of nature and culture and emphasizes the "central paradox":

> wilderness embodies a dualist vision in which the human is entirely outside the natural. If we allow ourselves to believe that nature, to be true, must also be wild, then our very presence in nature represents its fall. The place where we are is the place where nature is not. If this is so – if by definition wilderness leaves no place for human beings, save perhaps as contemplative sojourners enjoying their leisurely reverie in God's natural cathedral – then also by definition it can offer no solution to the environmental and other problems that confront us (Cronon, 1995, p. 80-81).

And yet, Cronon's ambivalence is palpable as he writes,

> In reminding us of the world we did not make, wilderness can teach profound feelings of humility and respect as we confront our fellow beings and the earth itself. Feelings like these argue for the importance of self-awareness and self-criticism as we exercise our own ability to transform the world around us, helping us set responsible limits to human mastery – which without such limits too easily become human hubris (Cronon, 1995p. 87).

It was undoubtedly the "setting of limits against human mastery" that motivated President Clinton's designation of GSENM, and is, in my view, the best argument for wilderness preservation, within certain contexts. This is not to say, as Guha (1989) has made clear, that First World wilderness preservation strategies are necessarily applicable in every context around the globe. But in the case of GSENM, if there are no limits and capitalist culture is permitted to subsume all of nature, the Colorado Plateau would predictably be ruined through extractive practices. But as Cronon points out, a "humanist environmentalism" acknowledges that non-use is not an option" and "strives to protect nature but also other, equally important values: responsible (wise?) use, social justice, democracy, fairness, tolerance, community, generosity (forgiveness of the other), love, humane living, beauty, good humor, joy" (1999, http://www.lib.duke.edu/forest/Events/lecture 1999.html). Terry Tempest Williams articulates corresponding values: "The open space of democracy provides justice for all living things—plants, animals, rocks, and rivers, as well as human beings" (2004, p. 51). In the case of GSENM, the designation did not seek to preserve the Monument against all human activities and perhaps in Clinton's mind, the attempt was made at justly balancing preservation (the Antiquities Act) with selective reasonable or responsible utility (BLM multiple use goals). And as could be expected, in any socio-cultural process, tensions and contradictions are inherent. While there is a growing wilderness movement in Southern Utah and advocates around the US, it has a formidable adversary in the overwhelming conservative capitalist economic agenda of Utah's politicians and electorate. Although Williams and other bioregionalists advocate local democracy best facilitated through regional planning inclusive of all stakeholders, Clinton, with the designation of Grand Staircase – Escalante National Monument, imposed federal limits that the local region apparently would not.

The political division over GSENM is felt keenly among the Mormons, Utah's majority population who are descendents of colonists and settlers, and environmentalists. Although the Mormons hold doctrinal principles of environmental stewardship based on an anthropocentric theology, as an American subculture, they are also quintessentially capitalist. In Mormon parlance, this seems a peculiar contradiction. In the Utah landscape at Grand Staircase – Escalante National Monument these tensions are in full panorama.

Notes

[i] For a further explanation of why the Mormons consider themselves God's "Peculiar People" McConkie (1966) writes, "In every age the Lord's people are classified by the world as a *peculiar people*, a designation which the saints accept and in which they rejoice. … They are peculiar, distinctive, unusual, not like any other people, because they have overcome the world. Their doctrines, practices, and whole way of life runs counter to the common course of mankind" (p. 565).

[ii] A 1991 study of US Christian denominations' positions on the environment accounted for five positions: 1.) Programs underway; 2.) Beginning a response; 3.) At the brink; 4.) No action; and 5.) Policies of inaction – denominations formally committed to inaction. See Williams, T. T, Smart, W. B. & Smith, G. M. (1998, p, ix).

[iii] See letter at http://www.discovernlcs.org/Resources/Factsheets/upload/GSENM_Letter_Norton3-15-05.pdf

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Invoking the Wild: Radical Environmentalism's Use of Animal Totems in Wilderness Protection

Gavin Van Horn
University of Florida

This paper explores the relationships between wild animal symbols and the politics/ideology of the radical environmental movement. In various media formats, wild animals are frequently glorified among radical environmentalists as incarnations of freedom, autonomy, authenticity, and restorative hope (in contrast to domesticated human and nonhuman animals). While positing that human beings should reconnect to their "animal selves," activists deploy these animal symbols to empower them in their efforts to defend and restore wilderness, using them as sacred icons of untamable wildness and to invoke empathy for nonhuman animals (and the ecosystems which they inhabit) that suffer (and resist) the impacts of human hubris.

In a scene from Edward Abbey's (1990) final novel *Hayduke Lives!*, George Washington Hayduke, the primal protagonist of two of Abbey's books, is being pursued by the Machine once again. A hulking Caterpillar dirt scooper bears down upon Hayduke, nipping at his heels as he flees along a canyon rim. Seemingly cornered, Hayduke spins and fires his pistol at the metal beast, successfully wounding the machine and gazing with satisfaction as it shudders, spurting its engine coolant on the ground, unable to advance any further. Having stopped the industrial intruder, Hayduke is then revealed in his animal incarnation: "We heard him singing. Singing, that is, as a wolf sings, a proud prolonged profound Promethean howl of triumph and of joy, a hymn that dwindled after a time to the faintest vulpine vibration on the air but never died, never died completely" (pp. 70-71).

Similar to the fictional Hayduke, radical environmentalists can be distinguished from mainstream environmentalists by their willingness to defend – through civil disobedience and/or ecotage – the natural world from those who seek to desecrate it.[1] This willingness to go beyond strictly legal channels is often justified or encouraged in radical environmental media production by appealing to the "animal self." These appeals frequently rely on *both* ecological science and particular forms of religious perception in which nonhuman animals are valorized as sources of knowledge and inspiration.

Structural anthropologist Claude Lévi-Strauss (1963) once commented that animals are "good to think with" (p. 62). That is, nonhuman animals provide humans with an array of social templates with which to compare ourselves. Nonhuman animals thus often act as an "other," the not-us, that nonetheless shares enough likenesses with humans so that comparisons can be made and metaphors can become more powerful, for good or ill.

In various forms of radical environmental media production, wild animals embody a visible language, incarnating the abstract notion of wilderness by endowing it with a nonhuman face, a nonhuman voice, and a nonhuman body that suffers and resists the modern onslaught of industrial encroachment. Through artwork, ritual, song, poetry, "evangelistic" speeches, journals, slogans, books, and other media formats, the affinities activists feel and share with wild nonhuman animals, the countercultural claims that activists advance, and the rationale that supports these claims are strategically buttressed. By examining specific examples of what animals represent and evoke for radical environmentalists, it is possible to apprehend some of the ways in which politics, science, and spirituality intersect in radical environmental circles to aid in the defense and restoration of wilderness. While there are many facets of animal symbolism that could be examined, there are at least three topics that are consistently given animal incarnation in radical environmental publications that will be the focus of this paper: authenticity, interspecies solidarity, and political resistance.

Animal Authenticity: The Wild and the Tame

In North America, wild animals have been deterritorialized, persecuted, and killed in considerable numbers since European contact. As cities, suburbs, and roads divided ecosystems into tinier slivers of livable habitat in the twentieth century, some people became alarmed at the visible loss of wild lands and wild creatures. The radical environmental movement, which coalesced into a visible entity in 1980 with the founding of Earth First!, has gathered its sense of mission and anger, in part, from the perception that the natural world and all things "wild" were in peril of disappearing forever. The "real" environment, in this view, was quickly being supplanted by an artificial, culturally-constructed one.

One of the most basic forms of radical environmental media has been literature. Many writers have inspired radical environmentalists, but Edward Abbey has remained one of the more influential (and perhaps the most controversial) literary lights.[ii] Abbey's writings continue to resonate with those who consider wild places and wild creatures to be representative of the "real," the basic ground of being that transcends the short-term designs and projects of humans. Abbey often expressed such feelings, as in the following passage from *The Monkeywrench Gang* (1975), in which Abbey's jack-Mormon river runner Seldom Seen Smith contemplates existence: "The river, the canyon, the desert world was always changing, from moment to moment, from miracle to miracle, within the firm reality of mother earth. River, rock, sun, blood, hunger, wings, joy – this is the real, Smith would have said, if he'd wanted to. If he felt like it. … Ask the hawk. Ask the hungry lion lunging at the starving doe. They know" (p. 58).

Like many radical environmentalists who would later attempt to reconnect with the "wild" within and without, Abbey believed that one need look no further than the earth to know heaven. Yet it was not a paradise without thorny edges. "Now when I write of paradise I mean Paradise, not the banal Heaven of the saints," Abbey wrote. "When I write 'paradise' I mean not only apple trees and golden women but also scorpions and tarantulas and flies, rattlesnakes and Gila monsters, sandstorms, volcanos and earthquakes, bacteria and bear, cactus, yucca, bladderweed, ocotillo and mesquite, flash floods and quicksand, and yes – disease and death and rotting flesh" (1968, p. 190).

This passage is indicative of the biocentric views of radical environmentalists (before the term came into popular usage), in which the natural world is not held to be perfect because of an absence of natural suffering but instead is considered more whole *because* of the evolutionary struggle of life. To sanitize such a world for human convenience was the ultimate desecration, in Abbey's view. According to Abbey, in order to escape the "synthetic prison" of industrialization that severs humans "from their origins" and keeps them in "exile from the earth" (1968, p. 192), one must embrace and respect in equal measure the hard edges of the wild – a natural, non-artificial heritage that was, in his view, quickly being subsumed, tamed, and domesticated.

Wild animals, in this perspective, represent living beings that unlike many "domesticated" human and nonhuman animals remain firmly embedded within the evolutionary flow of the natural world.[iii] They stand as examples of the relationships in which humans once participated, and perhaps, in which humans could participate once again. Thus, for radical environmentalists, wild animals often serve to reveal what the "authentic" portions of human existence are, and also act as models for resisting those "unnatural" aspects of human culture that have obscured human animality, ferality, and wildness. Wild animals, in this sense, represent that which cannot and will not be tamed.

In light of such a view, it is not surprising that radical environmentalist publications often point to the historical process of domestication as being a primary source of social malfeasance.[iv] Against the quelling of human-animal instinct, John Zerzan (1994), an influential anarcho-primitivist writer and activist, advocates for "ferality," a state which he sees as freely occurring in wild plants and animals (p. 144). Zerzan's book *Future Primitive* offers a host of reasons why civilization is ineluctably corrupt, the product of social forms of domination that led to the entrenchment of powerful and immiserating hierarchies. Zerzan counsels that humans should, like their pre-agricultural forbearers, seek authentic, unmediated experiences apart from technological fixes, which would lead humans in the direction of "joyful upheaval, passionate and feral embrace of wildness and life that aims at dancing on the ruins of clocks, computers and that failure of imagination and will called work" (p. 146).

Moreover, Zerzan assumes a rigid distinction between culture and nature, asserting that the "natural" condition of humans was "spontaneity, enchantment, and discovery" for two-and-a-half million years prior to the advent of symbolic culture. This "Eden" existence was one in which human senses were heightened and animal-consciousness was commonplace (pp. 33-34). In line with his anarcho-primitivist hopes for a humanity devoid of hierarchical apparatuses, Zerzan lauds such "primitive" lifeways in which animals were

considered equals, a condition that ended abruptly, by his account, with the domination entailed with domestication (p. 35).

Under the influence of radical environmentalism, "ferality" has become a popular term in anarchistic subcultures to describe resistance to domesticating cultural influences.[v] Graham St. John (2005) states that "going feral" by deeply identifying with a threatened natural world has become a "kind of eco-radical conversion" or rite of passage (p. 651). Ferality, in this sense, represents a rupture from a domesticated condition and a "transgression of the Nature/Culture boundary" (p. 650). By going feral, green anarchists seek to rediscover a sense of purpose and place, or as St. John calls it, a "passport to chthonic citizenship" on the planet (Ibid.) – in other words, a homecoming.

Surveying the past, radical environmentalists frequently find that modern humans, having lost touch with primal nature and economies based on reciprocity with other animals, are rapidly in decline – and taking the rest of the world with them. In contrast, wild animals "fit" within the ecological community. Likewise, humans who wish to "fit" within the constraints of the land, radical environmentalists posit, need to remember their authentically "wild" biological heritage and reinvigorate their relationships with other creatures and the earth. In short, humans should embrace an interspecies identity, a wild solidarity with other creatures.

Wild Solidarity: Interspecies Identities

Given the extensive influence of ecological science and its stress on interconnectivity, it may be unsurprising that earth-revering religious production is an important facet of radical environmental subcultures. In the religious milieu of these subcultures, animistic, pantheistic, and pagan perceptions are appealed to with regularity.[vi] These earth-based spiritualities often provide additional means for activists to access the emotive, "wild" connections that are felt to exist between nonhuman and human animals. Mystical and ritual experiences of interspecies connection are one method of attaining this wildness, and Gary Snyder, Peggy Sue McRae, David Abram, Dolores LaChapple, John Seed, and Arne Naess are just a handful of authors who have written for radical environmental publications whose work continues to inspire such spiritual perceptions.

Deep ecology, a term coined by Norwegian philosopher Arne Naess in 1972, has found fertile ground among radical environmentalists. Arguably the most important tenets of deep ecology are *ecocentric identification* and *biocentrism*, the concept that a person's "ecological self" is discovered and nurtured by identification with other forms of life (see Bender, 2004). According to David Abram (2005), deep ecology has drawn a number of activists "who were not afraid to acknowledge their own existence as earthly animals" and who were willing to be humble in "the delicious and sometimes terrifying awareness of being human in a much more-than-human world" (p. 470). Writing for the *Earth First! Journal* in 1988, Abram promoted attentiveness to interspecies communication, noting that the planetary crisis is partially attributable to humans closing themselves to animal language. He asked bluntly, "How can we ever become fully human when we have forgotten how to be genuine animals?" (p. 25). Furthermore, Abram asserted that it is this kind of "species-amnesia" that keeps humans from hearing the nonhuman world that is struggling to make contact with them. Abram has revisited this theme in many publications, as in this passage from an article in 2005:

> By acknowledging that we are a part of something so much vaster and more inscrutable than ourselves – by affirming that our own life is entirely continuous with the life of the rivers and the forests, that our intelligence is entangled with the wild intelligence of wolfs and of wetlands, that our breathing bodies are simply our part of the exuberant flesh of the earth – deep ecology opens a new (and perhaps very old) sense of the sacred. It brings the sacred down to earth … a profoundly immanent experience of the Holy precisely as the many-voiced land that carnally enfolds us – a mystery at once palpable, sensuous, and greatly in need of our attentive participation. (p. 471)

The effort to bring the sacred down to earth is also evident in the writings of Gary Snyder, a self-described "buddhist-animist" (in Taylor, 1995, p. 114), who has strongly influenced green social thought and spirituality. Snyder has written extensively on bioregional "reinhabitation" as a way of once again becoming attuned to the sacramental character of one's habitat.[vii] Snyder revealed a perception that is echoed by many radical environmentalists when he stated, "I was born a natural animist. It wasn't a moral

or intellectual thing, from early childhood, I felt the presence [of] other beings, and I enjoyed being out in the woods … I think most kids are natural animists" (in Taylor, 2005b, p. 1562).

In his Pulitzer-prize winning book of poems and prose, *Turtle Island*, Snyder (1974) sometimes contrasted the world of animals to the artificiality of human enterprise.[viii] The following excerpt from "Mother Earth: Her Whales," captures such themes, calling on the other animal "peoples" to unite against the arrogance of industrial humans.

> Ah China, where are the tigers, the wild boars,
>
> the monkeys,
> like the snows of yesteryear
> Gone in a mist, a flash, and the dry hard ground
> Is parking space for fifty thousand trucks.
> IS man most precious of all things?
> -- then let us love him, and his brothers, all those
> Fading living beings –
>
> North America, Turtle Island, taken by invaders
> who wage war around the world.
> May ants, may abalone, otters, wolves and elk
> Rise! and pull away their giving
> from the robot nations.
>
> *Solidarity*. The People.
> Standing Tree People!
> Flying Bird People!
> Swimming Sea People!
> four-legged, two-legged, people! (p. 42)

This plea for "wild solidarity" is a staple of radical environmental publications, in part because, from its inception, radical environmentalism has drawn considerably from ecological science. Indeed, much of the urgency expressed by radical environmental activists is derived from grave concerns related to species extinction and ecological fragmentation. Because large predator animals are ecological indicators of healthy ecosystems and often most at risk as a result of ecosystem degradation, charismatic species like wolves and bears are especially powerful referents for "wildness" and wilderness.

Take the wolf, for instance. Aldo Leopold, a figurehead in the environmental pantheon of prophets, has had a lasting influence on radical environmental discourse, and his memorable "conversion" experience has reached mythic status in radical environmental subcultures (Taylor, 2002, p. 40). Leopold, an employee of the U.S. Forest Service in the early twentieth century, recalled in his posthumously published *A Sand County Almanac* (1949) that when he was young and "full of trigger itch" (p. 130) he once shot a mother wolf during a forest survey assignment in the Southwest. He arrived in time to see the "green fire" dying in the wolf's eyes, a moment that etched itself upon his memory and altered his view of the human place in the biotic community. In order to "think like a mountain," Leopold later argued, one had to consider the wolf's integral place in the larger ecosystem. In the absence of natural predators, deer would denude the mountain, encouraging erosion and degrading the entire ecosystem. Humans, Leopold concluded, have a great responsibility – not to be superior but merely a "plain member and citizen" of the natural world (p. 204).

Earth First! has been one group that has taken this story as a ritual mantra, according to Bron Taylor:

> This story has evolved into a mythic moral fable in which the wolf communicates with human beings, stressing inter-species kinship … The wolf's 'green fire' has become a symbol of life in the wild, incorporated into the ritual of the tradition … Thus primal spirituality is combined with the idea that an authentic human life is lived wildly and spontaneously in defence of Mother Earth. (1991, p. 260)

The importance of this totem predator is captured in an illustration from an *Earth First! Journal* issue, which depicts a speared wolf, centered between a mountain landscape on the one side and billowing

smokestacks on the other. The fearful transition to a mechanized, lifeless society, devoid of wild places and creatures is expressed in the picture's caption, which reads: "As wolves die, so does freedom. Hear the warning…"

Dave Foreman, one of the co-founders of Earth First! who later helped establish such wilderness advocacy groups as The Wildlands Project and The Rewilding Institute, was deeply influenced by Leopold and his biocentric views. When he was still active in Earth First!, Foreman used to give stump speeches that included retelling the narrative of Leopold's "green fire" experience.[ix] Like a wilderness revival preacher, Foreman would end his speech with an altar call of sorts, exhorting the faithful and the recently converted to howl in testimony to their own animality.[x] For Foreman, this howl meant something specific:

> The wolf's howl is the cry of defiant contempt. But it's also something more. It's the cry of joy, of pleasure in being alive. No matter how bad it gets, it's wonderful to be alive on earth … No matter how depressed we get, how angry, we still have to be full of joy, happiness. That's what keeps us going. So, yeah, howl with contempt for adversity. Howl with defiance. But howl with joy, too … Robots don't howl. But animals do. Free, wild animals with green fire." (in Zakin, 1993, p. 198)

Part of this howling defiance and interspecies identity has taken concrete shape among radical environmentalists via various forms of political resistance. And, once again, it is wild animals that are often chosen to represent the struggle against the industrial machine. Even the term used among radical environmentalists for extralegal action, which in the past has included tree spiking, road blockades, dismantling bulldozers and construction equipment, pulling up survey stakes, theatrical stunts, and the like, has an animal moniker: monkeywrenching.

Political Resistance

On 18 October 1998, in Vail, Colorado, five buildings and four ski lifts were incinerated causing 26 million dollars in damage. Soon after, the Earth Liberation Front released the following communiqué: "On behalf of the lynx, five buildings and four ski lifts at Vail were reduced to ashes … The 12 miles of roads and the 885 acres of clearcuts will ruin the last, best lynx habitat in the state. Putting profits before Colorado's wildlife will not be tolerated. This action is just a warning…"(*Earth First!*, 1 November 2000, p. 47). On the inside cover of the November 2004 issue of the *Earth First! Journal*, a color illustration of a lynx with the caption "five years later … what are you doing tonight?" underscores that this event and its totem animal continue to be used as inspiration for future actions.

Thus far, it has been shown that non-domesticated animals can be symbols of authenticity and that radical environmental forms of media often encourage solidarity with wild species. But it should also be emphasized that such solidarity does not leave one sitting immobile in the lotus position. Ecological understandings and spiritual perceptions are unified by a sense of urgency among many radical environmentalists, compelling them to direct action, sometimes at great personal cost.

For example, Rodney Coronado, a controversial animal activist who is of Pascua Yaqui Indian ancestry, has moved between different radical groups, including the maritime Sea Shepherd Conservation Society, the Animal Liberation Front, Earth First!, and various anarchist groups. Combining the sometimes fractious strands of biocentric and animal-rights oriented radical environmental thought into his own "natural rights" activism, Coronado has grounded his environmental actions in "an animistic episteme" (Taylor, 2005a, p. 1331). Fighting for the Earth, according to Coronado is a "sacred and honorable duty" and his power "comes from the very things I fight for" (Ibid.).

Coronado, writing for the *Earth First! Journal* in 2000, described his relocation in the early 1990s to the Siskiyou Mountains in the following way:

> Living with the source of my power, the animal people and the wild Earth, I began to renew a vital connection. Alongside the survivors and refugees of humans' war on nature, I saw that all living beings in Creation were nations unto themselves, struggling to raise their families and stay alive in a relentless war that wiped out entire races." (p. 88)[xi]

Coronado's wilderness epiphany highlights a feeling often expressed in radical environmental publications: there is a "higher law" to which humans are beholden, a deeper solidarity which will inevitably place them at odds with any culture that treats nature as a resource fit only for human use and abuse.

Prior to his arrest in 1994 for firebombing a Michigan State University animal research facility, Coronado fled to the prairie wilderness and there found another source of renewal, which he details in this remarkable passage:

> On a long walk on the prairie I prayed and told Creator that even if death lay ahead, I stood with all Creation. On the side of the bobcat and the lynx, the coyote and the mink. It was them I fought for, and I wasn't ready to turn my back now … That's when She spoke. I cannot describe it as anything other than love. A flow of energy that reduced me to tears as I awakened to the Spirit around me. 'We are here. We have always been here. We will always be here, but there is nothing we can do for you until you believe in us more than you believe in them.' Suddenly the whole world was alive, and every being in it consciously aware of its connection to all others. A coyote stared. In its gaze I heard, 'Now you are a hunted one. Now you are one of us. (2000, p. 88)

Coronado concludes, "One day our animal relations will no longer run from us as if we were enemies. They will know us as friends. Until then, we must continue to demonstrate to them, ourselves and the whole world that we are willing to risk our freedom for them and their wilderness homes" (p. 89). Coronado's experience reveals the deep connection that many activists feel to other animals, a connection which leads them to fight on their behalf. In Coronado's case, his identification also was derived from being "a hunted one," an animal like all others who suffer from the exploitation of the earth. His mystical experience of interconnection affirmed his resolve against nature's despoilers, on the side of the animals.

In a very literal sense, for radical environmentalists, animals of various kinds can be "political animals." For instance, Dave Foreman (1982) once quipped that, in contrast to humans who chose to consistently adhere to nonviolence, "unfortunately, I am still an animal … I cannot turn the other cheek" (p. 4). Howie Wolke (1983), another of the Earth First! co-founders once expressed a similar logic: "The most basic human animal instinct is to fight back when under attack or when members of your tribe are under attack" (p. 12). Thus, not suppressing one's animal instincts may lead one to oppose those social and legal structures that threaten nonhuman animals directly or indirectly. After being sentenced in 1986 to six months in jail for removing survey stakes, Wolke used his jail time to write *Wilderness on the Rocks* (1991), dedicating his book to his "totem" animal, the grizzly, with the hopes that his writing would make clear "why increasing numbers of individuals such as myself are driven to break the law in defense of wild country" (p. i).

In radical environmental literature and art, wild animals themselves are even hailed as quintessential monkeywrenchers. T.O. Hellenbach (2002), for example, writes in *Eco-Defense* about wolves "resisting" the destruction of their homelands by being livestock "renegades" (p. 14). Such an analysis reinforces the feeling that radical environmentalists and nonhuman animals are in solidarity with one another, fighting further incursions on an Earth that is held to be sacred ground.

For radical environmentalists, in a primordial sense, the wilderness – and the wild animals that freely inhabit it – stand as a benchmark to show where and how far human beings have deviated from their relationship to Earth. Thus, the wildness that creatures such as wolves and grizzly bears embody remains a keystone for radical environmentalists who wish to see anthropogenic destruction thwarted. As the handful of examples given in this paper indicate, many radical environmentalists believe that attentiveness to the needs of these animals can encourage deeper environmental and metaphysical interconnection that leads to direct social and political resistance. Much is at stake, for as Foreman (1991) once put it in his book *Confessions of an Eco-Warrior*, there are moral implications for those who identify with the wild: "It is through becoming part of the wild that we find courage far greater than ourselves, a union that gives us boldness to stand against hostile humanism, against the machine, against the dollar, against jail, against extinction for what is sacred and right: the Great Dance of Life" (p. 9).

Conclusion

In their staunch refusal to make humans the measure of other creatures, radical environmentalists provide an alternative lens through which to look at the human place within the natural world. Through various forms of media production, radical environmentalists affirm these messages through wild animal symbols, calling the faithful to defend a threatened and sacred earth. One might say that at the intersection of ecological science and spiritual perception, wild animals provide activists with a tangible representation of *what is at stake* in the planetary environmental crisis and *how to resist* the forces that contribute to this

crisis. Charismatic megafauna – big cats, wolves, bears, and a host of other animals – in the terminology of conservation biology, are indicator species, living barometers of a healthy planet. In more affective terminology, they are symbols of the wild – all that is good, authentic, and free; all that humans could be, radical environmentalists might say, if only they could awaken from their slumber of domestication and embrace the planet's, and their own, wildness.

Notes

[i] Ecotage is a conjoining of the words ecological and sabotage, a shorthand way of denoting extralegal actions that involve attempts to protect wild places and creatures. Sabotage, literally a wooden shoe thrown into the gears of the machine, is etymologically derived from the French word *sabot*. M*onkeywrenching* has become a common synonym that carries much the same meaning. Though there has always been considerable debate among radical environmentalists about the efficacy of illegal direct action tactics, radical environmentalists maintain that ecotage – in contrast to terrorism or ecoterrorism – is directed against inanimate objects or property and therefore may be considered nonviolent. For more on this subject, see Foreman and Haywood (2002, pp. 1-16) and Foreman (1991, pp. 119-143).

[ii] Abbey's *The Monkeywrench Gang* had a direct influence on EF! (and no doubt many an aspiring eco-saboteur), providing a heroic, semi-fictional narrative of extralegal resistance to industrial encroachment. Abbey himself spoke at several early Earth First! events and wrote occasional articles for publication in the *Earth First! Journal*, forming a friendship with co-founder Dave Foreman that would leave a lasting impression on the burgeoning radical environmental movement of the 1980s. Abbey rarely pulled rhetorical punches, and particularly in the latter part of the 1980s, he and a handful of early Earth First!ers were increasingly accused of sexism and racism, which likely exacerbated growing tensions in the movement and contributed to the schism of Earth First! in 1990 (see Bari, 1994; Zakin, 1993).

[iii] Because domestication is disdained among radical environmentalists, domesticated animals are frequently viewed as "unnatural" ecological aberrations. Just as wild animals can represent all that humans ought to reclaim as part of their biological heritage, domesticated animals oftentimes symbolize the ways humans have altered their environments for the worse. For example, irresponsible cattle ranching in the western United States has resulted in far-reaching ecological consequences, and since public lands continue to be grazed by federally subsidized ranchers, perhaps no other animals have been targeted (sometimes literally) as often as a desecrating agent than cattle (see Taylor, 2002, p. 58). The process of cattle introduction itself has garnered radical environmental hostility, for these Euro-Asian domesticated ungulates displaced native wild species such as elk, antelope, and bison, and particularly in the early twentieth century, native predator species, including wolves, coyotes, and mountain lions, which were systematically exterminated to insure the economic feasibility of cattle ranching.

[iv] Though there has always been an anarchistic (libertarian in tenor) undercurrent in the radical environmental movement, in 1989, an anarchistic presence became much more noticeable among radical environmentalists, dramatically highlighted when Mike Jakubal burned an American flag at an Earth First! rendezvous. Up to that point, the predominant view in Earth First! publications was that the movement was "patriotic" in the same way as, for instance, the Boston Tea Party was a patriotic resistance to unjust rule. Different forms of anarchistic sentiment have proliferated in the radical environmental movement over the last two decades, only some of which will be addressed in this article. Anarcho-primitivists generally feel that the present government (or any bureaucracy) is unredeemable and that humans must relearn how to live, inasmuch as is possible, without mediators (technological, religious, governmental, legal, or otherwise).

[v] The magazine *Green Anarchy* often carries articles and advice on feral living, including practical tips on how to embrace a lifestyle more in line with foraging peoples. This process is often referred to as "rewilding." In a *Green Anarchy* (Spring 2005) insert on getting "back to the basics," for example, the authors summarize some of the more common themes involved in rewilding: "Rewilding involves prioritizing direct experience and passion over mediation and alienation, re-thinking every dynamic and aspect of our reality, connecting with our feral fury to defend our lives and to fight for a liberated existence, developing more trust in our intuition and being more connected to our instincts, and

regaining the balance that has been virtually destroyed after thousands of years of patriarchal control and domestication. Rewilding is the process of becoming uncivilized" (n.p.).

[vi] Religious studies scholar Bron Taylor, who has spent considerable time in the field studying radical environmental groups, refers to the varied religious "bricolage" that circulates in radical environmental subcultures as "primal spirituality" (2002, p. 30), a helpful term, in my opinion, in that it evokes the "wild," tribal feel that is characteristic of radical environmentalism. Taylor has published several articles that address the various religious rituals and views among radical environmentalists (Taylor, 2002, 2001a, 2001b, 1995, 1991).

[vii] Snyder (1987) has taken up such themes in radical environmental publications like the *Earth First! Journal*: "The biological-ecological sciences have been laying out (implicitly) a spiritual dimension. We must find our way to seeing the mineral cycles, the water cycles, air cycles, nutrient cycles, as sacramental – and we must incorporate that insight into our own personal spiritual quest and integrate it with all the wisdom teachings we have received from the nearer past" (p. 28).

[viii] Snyder has not been the only poet to inspire radical environmental thought. Poems regularly appear in radical environmental publications expressing many of the themes identified in this paper. For a sampling of poetry and music from the radical environmental movement, see Scarce, 1990, pp. 243-254.

[ix] For more on the use of "green fire" as an important motivational and ritual tool, see Taylor, 2002, 39-40. Foreman dissociated himself from EF! in 1990 after a series of personal and ideological disputes that are not the subject of this analysis.

[x] Foreman (1991) summarizes the this-worldly character of animality in his book *Confessions of an Eco-Warrior*: "Human beings are primates, mammals, vertebrates. EF!ers recognize their animalness; we reject the New Age eco-la-la that says we must transcend our base animal nature and take charge of our evolution in order to become higher, moral beings. We believe we must return to being animal, to glorying in our sweat, hormones, tears, and blood. We struggle against the modern compulsion to become dull, passionless androids. We do not live sanitary, logical lives; we smell, taste, see, hear, and feel Earth; we live with gusto. We *are* animal" (p. 34).

[xi] The connections drawn between ecocide and genocide are not uncommon among radical environmentalists, since social domination is believed to go hand-in-hand with domination/domestication of the natural world.

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Whose Security?: The Abuse of National Security Rhetoric in Resource Management

Lucas F. Johnston
University of Florida

The National Energy Policy Act (2001) involves some of the most heated rhetorical battles between corporate interests, environmental advocates, and governmental regulators, and thus provides ethically rich territory for exploring the interface between these various stakeholders and their divergent concepts of wilderness. In this public dialogue, both corporate and government rhetoric, and environmental resistance, ultimately rested on sets of values that are incompatible. The value preferences implicit in environmental policy have a direct effect on both the legal designation of wilderness areas, and on the public concept of what the wild is worth.

A receipt for pizza, and some illegible scribbling: that's what the Office of the Vice President of the United States handed over to the General Accounting Office following its solicitation of information concerning the cost, to the taxpayer, of the creation of the National Energy Policy Act (USGAO 2003: 22). This Energy Policy Act, partially, but not fully implemented, involves some of the most heated rhetorical battles between corporate interests, environmental advocates, and governmental regulators, and thus provides ethically rich territory for exploring the interface between these various stakeholders and their divergent concepts of wilderness. First I will take a brief look at the process and product of the National Energy Policy Development Group (NEPD Group), and the values and priorities implicit in the recommended policies. Second, I hope to explore some of the responses to the National Energy Policy Act, including direct action campaigns launched by environmentalists to combat its execution. Lastly, I hope to review the sense of "values" offered by both sides in the debate. These values derive from contrary worldviews that conceive of humans in significantly different ways; that is, both corporate and government rhetoric, and environmental resistance, ultimately rest on sets of values that are incompatible. The value preferences implicit in environmental policy have a direct effect on both the legal designation of wilderness areas, and on the public concept of what the wild is worth.

I. The Energy Plan

On January 29, 2001, the President charged the National Energy Policy Development Group (NEPD Group) with the task of sorting through all relevant information, and drawing up an energy policy to keep the United States on the fore in matters of energy production, technology, and security. The length of the actual report, over 30,000 pages, prevents easy summarization, and my treatment here aims only to highlight the guiding principles and priorities of the political leaders who drafted the proposal.

A. The Facts

The proposal contained thirteen points, including energy efficiency, renewable energy, oil and gas production, coal production, Indian energy, nuclear energy, and energy tax incentives. The authors called for utilizing more of the untapped natural resources that lie on protected federal lands. This means increasing drilling operations in Alaska, particularly in the Arctic National Wildlife Refuge (ANWR), and easing building restrictions on energy transport corridors. In addition, current restrictions on resource extraction on leased federal land have been removed. Over two billion dollars is also earmarked for clean

coal technology. Nuclear energy also plays a major role in the proposed energy solutions, with Bush recommending over twenty new nuclear facilities, the first such generators built since the late 1970s (NEPD Group 2001).

Proponents claim that the plan, favoring traditional energy sources such as coal, oil and gas, will increase national security by increasing the amount of available fuels, and by decreasing dependence on foreign oil. The administration has defined the need for energy production as "a crisis" due to a "fundamental imbalance between supply and demand. This imbalance," said the Department of Energy, "if allowed to continue, will inevitably undermine our economy, our standard of living, and our national security" (NEPD Group 2001: 7).

B. The Process

One especially contentious piece of the National Energy Policy Act involved the process that gave rise to the Act. Formed in January 2001, the NEPD Group submitted its recommendations to President Bush within a few months. In April 2001, a number of Congressional Representatives requested that the United States General Accounting Office (GAO) review the process involved with their stated objectives to "1) describe the process used by NEPDG to develop the *National Energy Policy* report, including whom the group met with and the topics discussed at these meetings, and 2) determine the costs associated with that process" (USGAO 2003: 1).

The findings of the GAO were simple: the National Energy Policy was "the product of a centralized, top-down, short-term, and labor-intensive process" (USGAO 2003: 2). The task force solicited information from many outside entities, including, according to the GAO report, "petroleum, coal, nuclear, natural gas, and electricity industry representatives and lobbyists," and a cross-section of chemical manufacturers (USGAO 2003: 5). There is clear evidence that some of the fourteen primary members of the NEPD Group met with other industry leaders like Chevron, the National Mining Association, the National Petrochemical and Refiners Association, and the Alliance of Automobile Manufacturers. The Vice President himself met with the Chairman and CEO of Enron and the Coal-Based Generation Stakeholders (USGAO 2003: 19). However, over thirty percent of material submitted by the Office of the Vice President to the GAO was censored, and the Vice President continues to maintain that the GAO lacks the statutory authority to request such documentation (USGAO 2003: 4). Thus, the first charge of the Congressional Requesters, to discern the process involved in the creation of the Energy Policy and the constituencies consulted, remains incomplete. The second task, to assess the cost to the taxpayers, met a similar fate at the hands of the Vice President's support staff, who forwarded the aforementioned receipts for pizza and other incidentals.

C. The Payoff, or the Sellout?

In his state of the Union address on 2 February 2005, George W. Bush suggested that our three greatest obligations are: 1) to provide wise and responsible social reform, 2) to pass along the values that sustain a free society, and 3) to provide an America that is safe from danger. All of these are, according to Bush, obligations to future generations, and each carries with it a particular interpretation of the "values" inherent in these priorities. Bush finished his speech, and discussion of his third priority, invoking Biblical themes: "The road of Providence is uneven and unpredictable—yet we know where it leads: it leads to freedom" (Bush 2005). In the text of this speech, Bush's national security rhetoric is tied up with his social and economic agendas, including energy production, and all three are tethered to a set of values that are even occasionally explicitly religious.

In very marked contrast, we see direct-action oriented opponents of Bush's administration generally, and his energy policy more specifically, drawing on eco-spiritual themes almost across the board. Deep Ecology's spiritual premises and its de facto political philosophy of bioregionalism continue to play a prominent role in both mainstream and radical environmental philosophical stances (Taylor 2000). Bron Taylor describes the perceptual matrix that drives direct action resistance as a generic paganism that tends toward animism (Taylor 2002). The central political beliefs that accompany this pantheist or animist worldview include:

> "a common perception of their predicament (environmental deterioration is threatening many species as well as human survival [security]), a common understanding of the causes (…a cabal of elite corporate figures dominate nation-states and social life, pushing global capitalism into every corner of the planet, to the detriment of ordinary people and the environment), and a common prescription (the land and political power must be taken from the abusers and managed according to traditional wisdom…while

vigilance is maintained against those who would again usurp the common for private gain)" (Taylor 2002: 49-50).

II. Comparative Values

I will suggest here that each of these positions is driven, at bottom, by differences in spiritually-grounded values and ideologies, the Bush/Cheney administration mustering support through strategic and limited release of information to the general public; the resistance through what DeLuca and Delicath call "image events," essentially acts of protest theater designed for media dissemination, which essentially aim at broadening the range of opinions that help define and resolve social problems (Delicath and DeLuca 2003: 329).

Opponents have argued that the sort of security provided by the present Energy Policy Act (Lovins and Lovins 2002)[i] may be a result of nothing more than a "wicked trap," a political situation in which resource crises rigidify and entrench the status quo (Pritchard and Samuelson 2002: 153). In a different but parallel shortcoming, the bureaucracy-free communitarianism of bioregionalists has been critiqued for assuming that decentralized government can provide the leverage needed to protect against resource exploitation. So neither political extreme, top-down energy policies nor fully communitarian bioregionalism, seem to provide ample protection of wilderness.[ii]

There is some common ground between these seemingly distant camps, including their concern for future generations, and their insistence on security—their disagreement rests on the more fundamental question of what it means to have security. In essence, each of these is a fundamentally different worldview, one that conceives of the human relationship with nonhuman nature in crucially different ways. Implementation of the National Energy Policy Act may compromise the legally defined definition of wilderness identified in the National Wilderness Act by suggesting that national security, freedom, and the preservation of family values depends upon the ability to generate more domestic oil. Proponents of direct action, in contrast, view these policy priorities as desecrating the sacrality of the land, particularly in stretches of big wilderness where the human footprint is relatively small. By acknowledging the incompatibility of these two worldviews, it may be possible to hash out some common policy ground between them.

Notes

[i] Even some of the leaders of the eco-efficiency charge (who, incidentally, are cited by the NEPD Group), Amory and Hunter Lovins, have suggested that the subsidies that guide the current energy proposal are misplaced: "The House version of Vice President Cheney's national energy policy…*suppresses energy efficiency by distorting price signals, thus damaging national competitiveness and security*."

[ii] See the *Earth First! Journals* from the early 1990s to present. Clashes continue over many major timber sales, and have been the focus of both scholarly and media attention. See for example Taylor and Geffen (2003), Ketchum (2004), Dark (1997), and Bari (1994).

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The Ice Cream Game: A Systems Thinking Approach to Environmental Conflict Resolution

Jessica L. Durfee
University of Utah

Environmental problems and issues are becoming more and more complex; making understanding such issues more perplexing for the average community member. Systems thinking and systems dynamics have helped scientists cope with the complexity and uncertainty of environmental issues for the past century. More recently, mediated modeling processes and community-based workshops have integrated systems thinking with local problem solving initiatives. In order to help community stakeholders understand systems dynamics, a group of researchers designed an interactive game to illustrate principles of systems thinking. The Ice Cream Game was created for an NSF-sponsored workshop in the Salt Lake Valley of Utah. This essay overviews systems thinking and mediated modeling processes and then introduces the Ice Cream Game, as it was used in the Salt Lake Valley case study.

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Introduction

Environmental problems and issues are becoming more and more complex; making understanding such issues more perplexing for the average community member. This complexity can not be ignored or simplified. For many years ecologists, biologists and other physical scientists have used a systems perspective to explain how the environment works. System dynamics is a way of thinking that captures how the environment functions in a holistic approach. Scientists have used a systems approach to predict how current behaviors and events will reverberate and oscillate over the long term in the environment. Just as environmental scientists must deal with complexity, members of the public can not avoid the challenge of dealing with increasingly complex environmental issues. Often these issues impact the water they drink, the air they breathe, and the lifestyle they wish to live.

A tool for dealing with complexity has been growing over the past few decades: systems thinking. Systems thinking can offer insights and approaches for tackling complex environmental problems (Kay, 2003). A growing body of research has addressed how a systems thinking approach can be used to understand complex environmental problems. Likewise there has been a substantial increase in the number of public participation workshops designed to teach community stakeholders the principles of systems dynamics within a conflict resolution context. These workshops have been part of the "mediated modeling" movement in environmental conflict resolution practices.

The primary goal of this essay is to illustrate an interactive technique developed to teach systems thinking concepts in public, participatory workshop settings. This activity is called "The Ice Cream Game" and it was specifically designed for a group of community members interested in understanding local air quality issues in Salt Lake City, Utah. Before introducing the game, I'll provide a brief overview of systems thinking and mediated modeling practices; then I'll fully detail the history of the game's development and share some of the workshop participants' responses to playing the game.

Systems Thinking

Systems thinking originated from the fields of Process Thinking, Tektology, and General Systems Theory developed at the beginning of the 20th Century (Capra, 1996). From systems thinking, other analytical constructs were articulated, such as systems dynamics and dynamic modeling tools. In the 1950s, an electrical engineer, Jay Forrester, drew upon the principles of control theory and decision theory to better understand the unpredictability of human systems (Radzicki, 1997; Vorgstad, 1994). Forrester continued his research at MIT, and is now considered the "father of systems dynamics." His approach has been applied to industrial systems, urban systems, organizational and educational systems. Peter Senge, also a scholar at MIT, has written many books related to systems thinking, one of which is The Fifth Discipline: The Art and Practice of the Learning Organization. Senge (1990) applied the principles of systems thinking to understanding individual and organizational behavior. Yet another application of systems thinking has been articulated by conflict resolution scholars, Steven Daniels and Gregg Walker (2002). Daniels and Walker integrated the concepts of systems thinking with adult learning theories in order to provide a framework for collaborative problem solving. Daniels and Walker's framework has been successfully applied to many environmental conflict situations, and dovetails with another innovative stakeholder process called "Mediated Modeling" recently articulated by Marjen van den Belt (2004).

All of these constructs were born out of a systems thinking paradigm. Systems thinking teaches analytical skills that emphasize "looking at the big picture" as well as understanding the smaller, individual components of the system. As a colleague of mine eloquently put it: "Systems dynamic modelers must look at the forests and the trees – be both generalists and detail oriented. Looking at the whole forest is a way of identifying if you're on the correct path; however, looking at individual trees that you pass is critical for determining how to move on that path" (Langsdale, 2004).

We should be careful not to conflate systems dynamics and systems thinking. Barry Richmond, yet another MIT scholar, defined systems thinking as "the art and science of making reliable inferences about behavior by developing an increasingly deep understanding of underlying structure" (1994, p. 6). Richmond articulated the difference between systems thinking and systems dynamics much differently from his predecessor Jay Forrester. Richmond viewed systems thinking as the foundation for systems dynamics, while Forrester was more interested in building formal computer models. In any case, understanding systems allows one to take a new perspective on old problems, allows for analyzing assumptions and proposing new solutions.

James Kay (2003) explains: "Systems thinking is about patterns of relationships and how these translate into emergent behaviors… Systems thinking provides us with a window on the world which informs our understanding of nature and our relationship with it" (p. 1). While implementing a systems thinking paradigm may seem like a simple initiative (i.e. teach community members or students to look at the big picture!), it is an approach that is counter-intuitive to what formal education has taught young people. Students are trained from an early age to break problems apart and isolate variables; likewise, the scientific method encourages deductive reasoning and reductionist thinking via the methodology and structure (Senge, 1990). Forrester initiated bringing systems dynamics to elementary education. He argued that many curriculums emphasize the memorization of facts, whereas systems dynamics teaches analytical skills, which are critical for decision making. And for Forrester, better decisions lead to a more sustainable society (Forrester, 1987).

In regard to the state of education, Rosenthal (2003) argued, "Students' understanding of environmental problems – their causes and solutions – is often limited and inaccurate" (p. 157). Rosenthal's work focuses on teaching systems thinking concepts through environmental art exercises. Specifically, students spent a semester doing an eco-art project, working in small groups, the goal was to link local environmental issues with larger, more complex social problems. The students spent 16 weeks learning systems thinking concepts; however, in community conflict resolution workshops, there is hardly this amount of time to learn about the nuances of system dynamics and systems thinking.

Kay's work focuses on various exercises in "framing" the situation in order to better engage in systems thinking approaches to environmental problems. While Kay provides an interesting framework to understand systems dynamics, he fails to provide a discussion on how to teach these systems concepts. In either case, Rosenthal's eco-art or Kay's framing approach, they fail to evaluate their strategies as potential tools to teach systems concepts.

As previously mentioned, other research has addressed the application of systems thinking exercises to complex environmental issues and problem-solving endeavors, but little research has actually investigated

how systems thinking can best be taught. More importantly, how can teaching systems thinking concepts be integrated into stakeholder workshops, specifically the mediated modeling process?

Mediated Modeling

Mediated modeling, which is based on dynamic systems thinking (Walters, 1986; Walters & Holling, 1990), has grown out of an increasing awareness that humans are a part of the ecosystem, and are capable of irreversibly damaging it (Costanza & Jorgenson, 2002; van den Belt, 2004). Humans have encroached on the natural environment to the extent that it is now impossible to find pristine systems in order to take baseline measurements. An ironic consequence of the human ability to control nature is the loss of ecosystem services essential to human health, due to human activities that depend on these very services (Costanza et al., 1997; Daily, 1997). Mediated modeling provides a structured process based on dynamic systems thinking to include the most important aspects of a problem in a coherent, simple but elegant simulation model.

Van den Belt (2004) described mediated modeling as a tool for overcoming problems inherent in linear thinking and compartmentalized, non-participatory decision making. It provides a structured process for including the most important aspects of a problem in a computer generated simulation model. This structure enhances management of complex environmental conflicts by integrating culture, ecology, economics, politics, and any other relevant dimensions. It enables participants to envision the system as multidimensional, dynamic, and interactive. Rather than experts dispensing "answers" or a discussion about the perceptions of a group of stakeholders, mediated modeling aims for a collaborative team learning experience to raise the shared level of understanding in a group as well as fostering a broad and deep consensus. Dynamic systems thinking and supporting software is used to construct computer-based simulation models at a scoping level. The model construction process is used to structure the discussion and the thinking of stakeholder groups and fosters team learning.

Van den Belt (Van den Belt, Deutch, and Jansson, 1998; Van den Belt, 2004) has conducted extensive mediated modeling activities, and has found that it enhances public involvement in controversial and complex environmental policy issues. Van den Belt et al (1998) analyzed a mediated modeling process in Patagonia, and Van den Belt (2004) analyzed similar processes in five case studies: coastal zone management in the Ria Formosa (Portugal), futures planning in Banff National Park (Canada), decision support for watershed management in Wisconsin, watershed restoration for a TMDL process in Texas, and managing sage grouse populations in Idaho. In all cases, building and manipulating simulation models enabled stakeholders to (1) perceive interconnections across sectors, (2) connect their own past, present and future actions, and (3) respond systemically to the intrinsic complexity of environmental management. In all of these projects, mediated modeling helped stakeholder groups use systems thinking to reframe their understanding of controversies, and suggested multiple options for achieving a new course that promised benefits to all stakeholders.

Case Study: The Salt Lake Valley Airshed Project

In July 2004, a group of researchers began a series of public outreach workshops based on van den Belt's mediated modeling process. The workshops were specifically designed to solicit local stakeholder input in order to collaboratively build a model of air quality in the Salt Lake Valley of Utah. The workshops, sponsored by a grant from the National Science Foundation (NSF) spanned a nine-month time frame and involved nearly 40 participants from over 15 different community and government agencies. The goal was focused on introducing systems thinking concepts to local policy and decision makers as well as collaboratively generating a computer simulation model of the airshed to be used by local government agencies, non-profit, private business and industry decision-makers, as well as concerned citizens.

As previously mentioned, systems thinking requires a broad understanding of system dynamics; specifically an understanding of interconnections and interactions among components, people, and processes (Senge, 1990). Thus, it was necessary to introduce the diverse group of workshop participants to the concepts of systems thinking. While a PowerPoint presentation and lecture from a trained systems modeler would have been sufficient in transferring information, it would not have fully exposed the participants to the concepts and complexity imbedded in understanding systems. Thus, the facilitation team invented an interactive activity – the Ice Cream Game.

Games or group activities can facilitate experiential knowledge building, sharing and learning in diverse stakeholder groups (Oblinger, 2004). Initially, the plan was to create an activity that would serve as an example of the airshed system, and interrupt the game-play with discussion questions (i.e., what is the system? Why do systems help us see the bigger picture? Why does modeling systems enhance our understanding); however, starting with a game that is directly related to the content of the workshops, in this case, local air quality, may have been risky because it could immediately polarize the group. Using a non-controversial example, in this case ice cream, we hoped to facilitate team-building, as well as systems learning. Again, the goal of the activity was to introduce workshop participants to interconnections, delays, and feedbacks imbedded in human-ecological systems, while "breaking the ice" for many of the workshop participants who did not know each other already.

The Ice Cream Game

The ice cream activity is a radical variation of MIT's "Beer Game"; radical because the participants actually play the roles of a system instead of merely observing the dynamics of the system. Likewise the Beer Game often is used to illustrate the internal dynamics of a business or manufacturing system, whereas we wanted to create a game to introduce generic systems principles while forcing the workshop participants to interact and become interdependent upon each other. Table 1 lists the main purposes of the Ice Cream Game and why it was used at the Salt Lake Valley Airshed Project.

Table 1. The Purpose of "The Ice Cream Game"

1. To introduce participants to the key principle: "system structures and behaviors are interrelated."
2. To experience the pressures of playing a role in a complex system.
3. To break the ice while creating an "equal playing ground." Each workshop participant comes to the table without any expertise on the ice cream business – political, social and expert positions related to the environmental science of the conflict are neutralized for nearly an hour, while the participants get to know each other and learn about system dynamics.

The game was designed for ten players per system map (game board) and was led by one system guide at each table. Within 30 minutes the players experience a 15-day microcosm of ice cream production, delivery, sales, and consumption. The game emphasized order delays and weather fluctuations that impacted the amount of ice cream bought and sold. This game introduces key systems thinking and modeling concepts that are valuable throughout environmental conflict workshops and mediated-modeling processes. Table 2 is a list of concepts that are explicitly played out in the game and discussed in the debriefing conversations.

Table 2. Key Concepts of "The Ice Cream Game"

- Reference Behavior: the history of the system; how it has behaved in the past.
- Equilibrium: a system in balance; supply adequately meets the demand.
- Delays or Lags: the gap in time between actions; as the structures communicate with each other the response time may be delayed.
- Feedback Loops: mutually-informing actions; the output of a system re-enters as input.
- Constraints: certain forces influence the system's structures and/or actions; they act as "rules".
- Connections: the parts of a system are interrelated by various connections or elements of complexity that isn't initially obvious.
- Perturbations: an external force that changes the system's functioning; i.e., "throwing a wrench into it."

Setting Up "The Ice Cream Game"

Before engaging in game-play, there was a brief presentation and script designed to introduce the game to the participants. Prior to the workshop a handout (see Appendix A) was created to provide an introduction to systems thinking. The handout was included in the folder given to the workshop

participants as they registered for the meeting. It was assumed that the handout would be merely a reference sheet for the participants, therefore a brief choreography of Powerpoint presentations preceded the ice cream game. First, one of the system modelers presented a five-minute Powerpoint presentation on "What is systems thinking." This presentation was a fast-paced overview of the main concepts including "the iterative journey of perspective, boundaries, models, and emergence" (see Appendix B). Second, another member of the modeling team presented a formal introduction to the game. The premise of the second Powerpoint was to quickly overview "How to Play the Game" (see Appendix C). This presentation was guided by the script presented in Table 3.

Table 3. Script for Introducing the Ice Cream Game

A recent study found that Utah is the nation's leader in ice cream consumption. Granted, July in Utah can be very hot! As interested investors we'd like to get a better look at the big picture of ice cream sales in Utah. Our financial advisor suggests that we gather data and build a model of the local ice cream business. The first step in building our model is to determine what the reference behavior(s) of this system is (are), meaning we need to understand how the system has operated in the past, in order to predict the future. Once we understand the reference behavior, then we can better make a decision about investing. Instead of building a model on the computer we are going to break into groups of 10 and attempt to play out the roles of this surprisingly complex system. We're going to only look at a small segment of the ice cream system – 5-15 days in one store, supplied by one producer. At the end of this period, you'll know whether this is a worthwhile investment or not!

There are 10 (ten) roles for the game. Find a seat at the gameboard and there you will find the "Description of your Role" and a list of "Your Daily Tasks." Take a moment to carefully read your role's rules. Each team will have a system-guide to assist and monitor the functioning of your ice cream system. But beware! The system-guide may introduce "perturbations" at any point in time. "Perturbations" is a fancy way of saying "surprises!" or random elements. Perturbation cards will have specific directions for the receiver – they are not allowed to show their card to anyone else.

Debriefing "The Ice Cream Game"

After approximately 30 minutes of playing the game – enough time for the participants to overcome the initial frustrations and become competent in their roles – we ended the game and began a facilitated debriefing discussion. This conversation begins while the participants are still in small groups of ten. First, have the Ice Cream Store Manager, Factory Sales Person, and Customer count their money. Who has the most? Second, how much ice cream does each participant have – the customer's total, the remaining gallons in the store, the stock in the production plant, likewise, was any left on a delivery truck? Players will realize that they had good local information, but limited global understanding.

Then the small group facilitator probes the participants for their feelings about the game, i.e. "How did you feel during the game?" "What frustrated you?" "What did you learn about the system?" Third, we ask who would invest in the ice cream business, why or why not? How would they "draw" or "describe" the system?

After a 10-minute in-group debrief, all the groups reconvened with the larger group and the facilitators invited reflections on what was learned. The facilitators then tied those "learnings" to the systems thinking and systems dynamics terminology introduced in the handout and earlier presentation.

Participants Responses to "The Ice Cream Game"

It is beneficial to share some of the participants' (pseudonyms are used for confidentiality) responses to this systems thinking activity. After playing the game, we asked what the participants enjoyed, learned or found interesting about the activity. Betty quickly responded, "Normally, when I hear the word game I leave, quickly. I'm glad I stayed… Never thought I really understood what was meant by system, [the] Ice Cream game helped me understand."

Other participants expressed similar reactions, commenting that the game not only introduced them to the nuances of being part of a system, but understanding that even "simple systems" are inherently complex. Paul explained, "the interaction of individual functions in a interdependent system can be complex! And not easily predictable." Even participants who are familiar with systems thinking and modeling found the activity useful, Brett wrote, "People's frustrations mirrored those that we have to deal with when dealing with complex systems such as air quality."

The game was also an exercise that encouraged participation in the system while simultaneously being cognizant of the meta-system. During play, a participant asked, "Wait! Can't we go around the table and find out who everyone is and what their role is?" and the response was, "No! because in real life we don't usually have that opportunity or time, we need to play the game as if the only business we know is our own." With this said, the goal was that the participant would understand that the game serves as a metaphor for the larger, more complex process of modeling the urban air shed.

Finally, the activity simulated a real system by requiring that participants act quickly and make decisions that were based on incomplete information of the entire system. A stakeholder astutely articulated this in his ice cream game experience: "Most decisions are made with incomplete information. Decision makers see only a small piece of the total picture."

While initially games and group activities seem trivial, or merely function as ice breakers, the experience in the Salt Lake Valley Airshed Project was that this game functioned as an interactive learning experience to convey complex and abstract information about systems thinking.

Conclusion

In conclusion, the principles of systems thinking and systems dynamics are integral to understanding complex environmental problems, however we are not taught to think systemically. Therefore tools that teach not only the concepts of systems thinking, but provide an experience related to being part of a system can be extremely helpful in designing public participation workshops devoted to addressing local environmental issues. In this case, we designed The Ice Cream Game, which successfully introduced participants to systems principles as well as each other.

Naturally, as any singular case study, this report is limited. However, since the game was first played in Salt Lake City last summer, we have been invited to British Columbia to share it with a group of community stakeholders at a watershed workshop. The game has also been used in multiple undergraduate classrooms covering such curricula as small group processes, decision-making, and conflict resolution. In the future, more applications of the game in other workshop contexts would help to improve the game and its application to mediated modeling processes.

Ultimately, the game is a unique teaching tool, which has helped stakeholders step outside of embedded conflicts and engage in a learning process. After playing the game participants better understand systems thinking concepts and how their actions impact the local airshed system.

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Appendix A: Introduction to Systems Thinking Handout for Workshop Participants

Salt Lake Valley Urban Trace Gas Emissions Study
Workshop Reference Book

SYSTEMS THINKING

What is a System?

A system is an entity that maintains its existence through the mutual interaction of its parts. A system exists and operates in time and space. The key part of this definition is "interaction." A system is much more than a "heap" or a "lump" of parts; the interactions–not the parts—are responsible for the characteristics of the system.

This definition of system implies something beyond cause and effect. Rather than simply "A" affects "B"; "B" also affects "A". Examples of systems include: particle, atom, molecule, cell, organ, person, community, nation, world, solar system, galaxy, and universe -- in increasing levels of complexity. Some argue that there is only one system -- the "Universe" -- and all other systems are sub-systems of this larger system. The relevant question is where one chooses to draw the system boundaries.

What is "Systems Thinking"?

Systems-thinking is seeing beyond what initially appears to be a set of isolated and independent incidents to identify the system of interactions. This type of thinking encourages us to recognize connections between events to better understand and influence them.

Systems Thinking as a Mindset...

Systems thinking is a mindset to understand how things work. It is a perspective to go beyond events and look for patterns of behavior, seeking the underlying systemic relationships responsible for resulting events. Systems thinking requires adopting a "world-view" which examines the interrelationships among multiple elements.

Why Not Use the Traditional Scientific Method?

Decartes and Bacon provided us with a precise recipe for understanding the world -- the scientific method. Later Newton, with the discovery of the laws of motion and gravity, provided us with a clockwork paradigm for understanding the universe. These paradigms are not wrong, but incomplete. The Newtonian paradigm is based on linear cause and effect relationships. The difficulty with linear cause and effect understandings is that they only provide a short-term perspective for understanding how things really work.

When we go beyond the linear cause and effect paradigm to study patterns of behavior and the systemic interrelationships among the parts of the system we develop a deeper understanding of the nature of the way things operate in time and space.

This understanding allows to work with the system instead of against it, trying to manipulate it as in traditional scientific approaches to problem solving. A systems thinking perspective allows for the development of interventions to create lasting change within the system.

When Should we use a Systems Thinking Approach?

Examples where systems thinking has proven its value include:

- Complex problems involving multiple actors see the "big picture" and not just their individual part.
- Recurring problems, which are often made worse through past attempts to fix them.
- Issues where an action affects (and is affected by) the environment surrounding the issue. These can include both the natural environment or the competing social and economic environments.
- Problems whose solutions are not obvious.

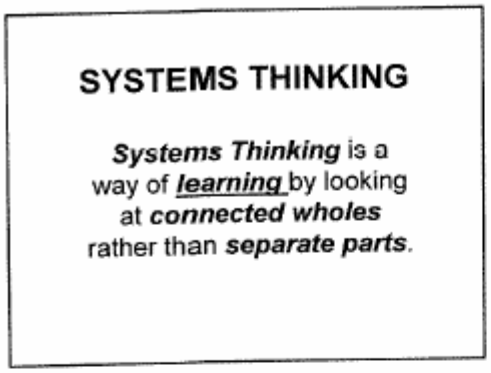
Many of the important problems plaguing us today are scientifically complex and involve multiple stakeholders. Dealing with such problems is notoriously difficult; sometimes a solution is reached, but only after extensive compromising.

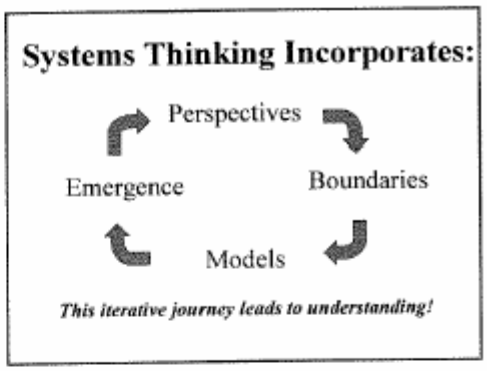
Such solutions may discourage the prospects of effectively addressing the problem. The benefit of systems thinking lies in its ability to effectively deal with these types of problems and raise our thinking to a level that develops collaborative, creative options for complex problems.

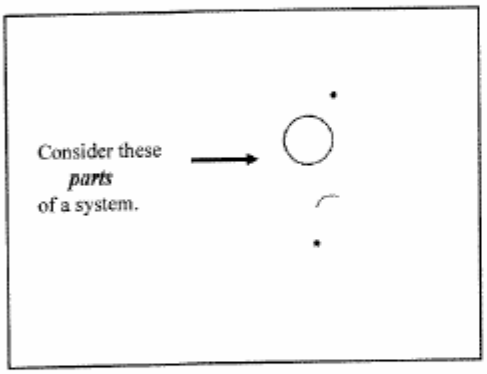
Where Did These Ideas Come From?

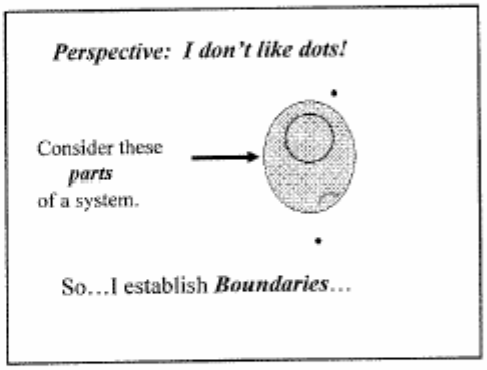
Systems thinking, as a formal method, has its foundation in the field of system dynamics, founded in 1956 by MIT professor Jay Forrester. Professor Forrester recognized the need for a better way of testing new ideas about social systems, in the same way we can test ideas in engineering. Typically engineers build models to test new ideas; the same can be done in the world of systems thinking.

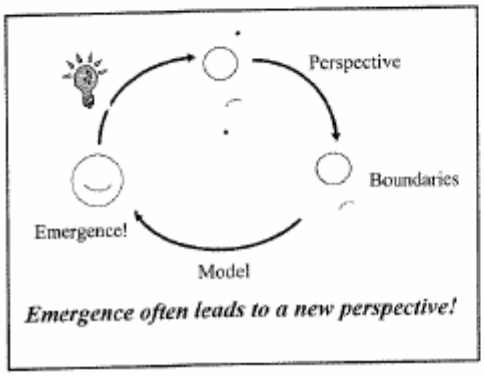
Appendix B: Introduction to Systems Thinking Powerpoint Slides

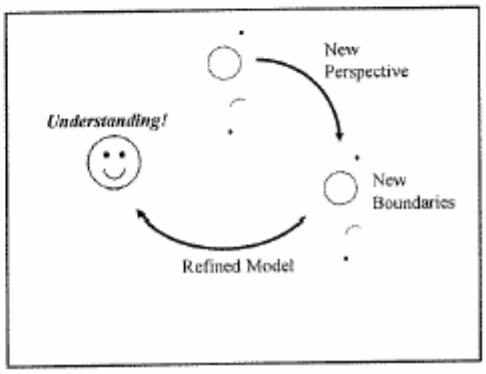












Systems are...

- Comprised of many elements, operating according to a wide range of incentives, goals, and decision making rules
- Characterized by the self-organization of their own structures
- Defined by feedback loops and signals so they can not be usefully reduced to more simple components
- Having outcomes that are ***emergent***
- Exhibiting unimagined sensitivity to change

Examples of Systems...

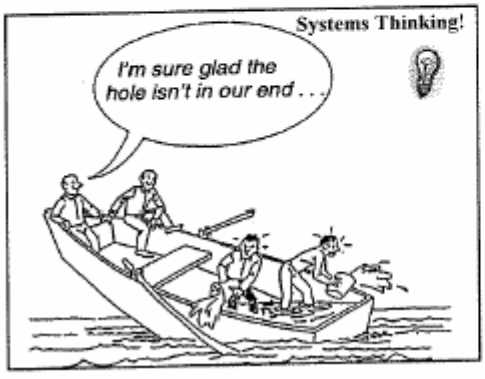
- **Solar System**
- **Ecosystems**
- **Urban Systems**
- **Business Systems**
- A Watershed!

Systems Thinking as a Tool for Problem Solving

- Multiple perspectives
- Multiple boundaries -- physical, political, and social
- Modeling will help integrate perspectives
- Shared modeling efforts bring shared understandings of the larger picture.
- Better policy & action ideas emerge

Systems Thinking when addressing issues of complex environmental science…

- Encourages perspective sharing
- Encourages perspective-taking
- Facilitates modeling efforts
- Improves our understanding of the complex, scientific and political properties of the situation.



Appendix C: Introduction to The Ice Cream Game Powerpoint Slides