

Communication at the Intersection of Nature and Culture

Proceedings of the Ninth Biennial
Conference on Communication and the Environment



Selected Papers from the Conference held at
DePaul University, Chicago, IL, June 22-25, 2007

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DePaul University

Chris Green
DePaul University

Host: DePaul University, College of Communication

Communication at the Intersection of Nature and Culture

Proceedings of the Ninth Biennial
Conference on Communication and the Environment
DePaul University, Chicago, IL, June 22-25, 2007

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*Communication at the Intersection of Nature and Culture:
Proceedings of the Ninth Biennial
Conference on Communication and the Environment*

Barb Willard and Chris Green, editors

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Program
2007 Conference on Communication and the Environment
DePaul University, Chicago, Illinois
22—25 June, 2007

- An asterisk (*) by the paper indicates that the paper appears in the Conference Proceedings. If the paper appears in print elsewhere, a citation is provided.

Friday, June 22

6:00 – 7:00 p.m.

Keynote Lecture: “Communicating ‘Just’ Sustainability”

Dr. Julian Agyeman, Associate Professor of Environmental Policy and Planning, Tufts University

Courtelyou Commons –

Main Hall

Saturday, June 23

8:30 – 9:45 Session I

➤ **Twenty-five years after the Die is Cast: Mediating the *Locus* of the Irreparable**

- Stacey K. Sowards, University of Texas at El Paso
 - “The Perpetual Potential: An Alternative View on the Rhetoric of the Irreparable”
- Pete Bsumek, James Madison University
 - “Casting the Die in an *Inconvenient Truth*: Constitutive Rhetoric and Dimensions of Audience and Time in the *Locus of the Irreparable* “
- *Richard D. Besel, University of Illinois at Urbana-Champaign
 - “From Awareness to Action: The Rhetorical Limits of Visualizing the Irreparable Nature of Global Climate Change”
- *Renee Lertzman, Cardiff University, UK
 - “Love, Guilt and Reparation: Rethinking the Affective Dimensions of the Locus of the Irreparable”
- Respondent: J. Robert Cox, University of North Carolina at Chapel Hill

➤ **Producing, Marketing, Consuming & Becoming Meat: Discourse of Meat at the Intersections of Nature and Culture**

- Leah Sprain, University of Washington
 - “How Do You Cook a ROCKY(r) and a ROSIE(r) Chicken?: An Examination of the Branding of ‘Sustainably Farmed’ Meat”
- *Richard A. Rogers, Northern Arizona University
 - “Burgers, Breasts, and Hummers: Meat and Masculinity in Contemporary Television Advertisements”
- Julie Kalil Schutten, University of Utah
 - “Chewing on the *Grizzly Man*: Getting to the Meat of the Matter”
 - Paper published – citation: Schutten, J. (2008). Chewing on the *Grizzly Man*: Getting to the meat of the matter, *Environmental Communication: A Journal of Nature and Culture*, 2(2), pp. 193 – 211.
- Craig O. Rich, University of Utah
 - “Continuing a Queer Dialogue: Treadwell’s Logics of Desire in the *Grizzly Man*”

10:00 – 11:15 – Session II

➤ The Trinity of Voice: Environmental Melodrama and Environmental Conflict

- *Paige Schmidt, Texas A&M University
 - “Public Participation in Environmental Planning and Decision Making by Tribal Governments: A Case Study of the Citizen Potawatomi Nation”
- Eddie K. Lyons, Texas A&M University
 - “Evaluation of the Relationship Between Voice and Recruiting Strategies in the Texas Brigades Program and Opportunities for Public Participation”
- *Lavell Merritt, Texas A&M University
 - “Piping Plover and People in One Place: A Case Study Evaluating Public Involvement at Cape Hatteras National Seashore”
- Israel Parker, Texas A&M University
 - “Using Trinity of Voice as a Means of Delimiting and Defusing Environmental Conflict in a Changing World: The Leon River in Central Texas”
- *Laura Weber, Texas A&M University
 - “International Conservation Organizations vs. Indigenous & Traditional People: Conflict in Including Indigenous & Traditional Peoples in Conservation”

➤ Media Framing of Environmental Issues: Hurricanes, Ecoterrorism and Woody Harrelson

- *Dylan Wolfe, Clemson University
 - “Sound Bytes and Celebrity Expertise in Contemporary Environmental Activism”
- *Jody M. Minion, Texas A&M University
 - “Win, Lose or Draw: Media Framing of Conservation Easements”
- *Gina Eosco, Cornell University
 - “The Whirling Media Coverage of Seasonal Hurricane Forecasts: A Closer Look at Media Framing of Scientific Uncertainty and Preparedness”
- Travis Wagner, University of Southern Maine
 - “Reframing Ecotage as Ecoterrorism: News and the Discourse of Fear”
 - Paper published – citation: Wagner, T. (2008). Reframing Ecotage as Ecoterrorism: News and the Discourse of Fear, *Environmental Communication: A Journal of Nature and Culture*, 2(1), pp. 25 – 39.
- *Ellen Moore, University of Illinois at Urbana Champaign
 - “The Impact of Religion, Media, and Science on the Perception of Environmental Issues in the U.S.”

11:30 – 12:45 – Session III

➤ **Communicating the Environmental Crisis of Nature and Culture**

- Phaedra C. Pezzullo, Indiana University
 - “Everyday Life and Death in a Nuclear World”
- Jonathan M. Gray, Southern Illinois University
 - “Sidestepping (with) Global Warming in Alaska: Communicating Crisis Between Tourism and Professional Censorship”
- *Steve Schwarze, University of Montana
 - “Crisis Redux: September 11 and the Asbestos Hazard”
- Jennifer Peeples, Utah State University
 - “Can You See What I See?: Assessing the Effectiveness of Toxic Images”
- Respondent: J. Robert Cox, University of North Carolina at Chapel Hill

➤ **Strategies for Constructing the Environment through Public Participation**

- Richard Buttny, Syracuse University
 - “Wal-Mart’s Presentation to the Community on the Draft Environmental Impact Statement: Discourses of Expertise and Reassurance”
- *Ann D. Jabro, Robert Morris University
 - “Opening and Shutting the Door: Technology Amplifies the Public’s Voice Surrounding a Superfund Site’s Final Days of Production”
- Gregg Walker, Oregon State University
 - “Enacting Civil Space: Integrating Participatory Communication and Collaborative Governance in the Environmental Policy and Sustainable Development Arenas”
- *Caitlin Wills-Toker, Gainesville College and Jennifer Duffield Hamilton, Center for Health and Environmental Studies
 - “Carrying Forward the Voice of the Public: The CDC’s Public Involvement Effort on Community Control Measures for Pandemic Influenza”

6:00 – 7:00 p.m. *The “Composters” Performance - Alison Aurelia Fisher & Janet Donoghue – Southern Illinois University

Sunday, June 24

8:30 – 9:45 – Session IV

➤ **Rural Life Between Nature & Culture**

- Jeff Motter, Indiana University, Bloomington
 - “Articulating rural modernization: Sustainability, modernity, and the country life movement”
- Emily Plec, Western Oregon University
 - “Rural perspectives on rivers and watersheds: Environmental rhetoric (and resistance) in the backwoods”
- *Jean P. Retzinger, University of California, Berkeley
 - “A sociable movement: Nature and culture, city and country, producers and consumers together at farmers’ markets”
- Cindy M. Spurlock, University of North Carolina at Chapel Hill
 - “Performing and sustaining (agri)culture and place: The cultivation of environmental subjectivity on the Piedmont Farm Tour”

➤ **The Nature/Culture Dualism: Communication Strategies at the Intersections of Nature and Culture**

- Stacey K. Sowards, University of Texas at El Paso
 - “Identification through orangutans: Destabilizing the nature/culture dualism”
 - Paper published – citation: Sowards, S. (2006). Identification through orangutans: Destabilizing the nature/culture dualism, *Ethics & the Environment*, 11(2) 45-61.
- *Carrie Packwood Freeman, University of Oregon
 - “Putting the Human Animal at Ease with Itself: Deconstructing the False Human/Animal Dichotomy”
- Tema Milstein, University of Washington
 - “When ‘There are no words’ and when whales ‘Kind of Speak for Themselves’: An ethnographic exploration of communication as a mediating force in Canada and U.S. whale watch tourism”
 - Paper published – citation: Milstein, T. (2008)., When Whales “Speak for Themselves”: Communication as a Mediating force in Wildlife Tourism, *Environmental Communication: A Journal of Nature and Culture*, 2(2), pp. 173 – 192.
- *Leigh A. Bernacchi, University of Utah
 - “Natural manipulation: Orogenesis and erosion in digital landscape and ‘Redemption of Physical Reality’”
- Respondent: Connie Bullis, University of Utah

10:00 – 11:15 – Session V

- **Narratives, Rhetorical Genres and Environmental Conflict: Responses to Schwarze's "Environmental Melodrama"**
- **Entire panel published – citation:** Kinsella, William J.; Bsumek, Peter K.; Walker, Gregg B.; Check, Terence; Peterson, Tarla Rai; and Schwarze, Steve (2008). Narratives, Rhetorical Genres, and Environmental Conflict: Responses to Schwarze's 'Environmental Melodrama', *Environmental Communication: A Journal of Nature and Culture*, 2(1), 78 - 109.

To link to this article: DOI: 10.1080/17524030801980242

URL: <http://dx.doi.org/10.1080/17524030801980242>

- Pete Bsumek, James Madison University
 - “Kairos: Time to get down to it (should have been done long ago)”
 - Terence Check, St. Johns University
 - “Environmental devils”
 - William J. Kinsella, North Carolina State University
 - “Identity, community, and risk: Some constitutive consequences of environmental melodrama”
 - Tarla Rai Peterson, Texas A&M University
 - “Global warming: Ultimate melodrama”
 - Gregg B. Walker, Oregon State University
 - “Civic investment and civic voice: Environmental melodrama in citizens’ discourse at collaborative learning forums”
 - Respondent: Steve Schwarze, University of Montana
-
- **Spoiled and Spoiling Spaces: Communicative Strategies in response to Perceived and Real Environmental Crisis**
 - Terri Martin, University of Utah
 - “Muting the voice of the local in the age of the global: How communication practices compromised public participation in India’s Allain Duhangan Environmental Impact Assessment”
 - Paper published – citation: Martin, T. (2007). Muting the voice of the local in the age of the global: How communication practices compromised public participation in India’s Allain Duhangan Environmental Impact Assessment, *Environmental Communication: A Journal of Nature and Culture*, 1(2), pp. 171 – 193.
 - *Ann D. Jabro, Robert Morris University
 - “Signs, symbols, and communication: Reaching mutuality at a chemical manufacturing site”
 - *Joshua Ewalt and James Cantrill, Northern Michigan University
 - “Victims ‘in’ and protectors ‘of’ Appalachia: A frame analysis of *Mixing Mountains*: ‘We Went to the Mountaintop, but it Wasn’t There’”
 - *Erida Ferreira Araujo Silva, Antonio Aparecido Mozeto, Universidade Federal de Sao Carlos, Sao Paulo—Brazil & Joachim Carolsfeld, World Fisheries Trust
 - “Establishing dialogic spaces between local and scientific knowledge: Evaluating metal contamination in the Sao Francisco River, Brazil”

11:30 – 12:45 – Session VI

- **Step It Up 2007: A National Research Project on Climate Change**
- **Panel published – citation:** Endres, D.; Sprain, L.; Peterson, T. (2008). The Imperative of Praxis-based Environmental Communication Research: Suggestions from the Step It Up 2007 National Research Project, *Environmental Communication: A Journal of Nature and Culture*, 2(2), pp. 237 - 245.
 - o Daniel Endres – University of Utah
 - o William J. Kinsella - North Carolina State University
 - o Damon Hall – Texas A&M University
 - o Deborah Callister – University of Utah
 - o Leah Sprain – University of Washington
 - o Todd Norton – Washington State University
 - o Travis Paveglio – Washington State University
 - o Traceylee Clarke – California State University, Sacramento
 - o Trudy Milburn – California State University, Channel Islands
 - o Michael Vickery – Alma College
 - o Nils Peterson – Michigan State University

Monday, June 25

8:30 – 9:45 Session VII

- **Ways of Living, Ways of Speaking: International Case Studies in Environmental Communication**
 - o *Tema Oliveira Milstein, University of Washington
 - “From pointing and naming to speaking for whales: A study of communicative acts as they inform human-nature relations”
 - o *Kerry Grimm, Oregon State University
 - “The other power: Ecotourism discourse and its ability to shape the western imagination”
 - o Laura Perkins, Southern Illinois University Edwardsville
 - “Environmental communication in community: The Findhorn Foundation experience”
 - o Andrew Pleasant, Rutgers University; Patrick Kwelepata -Director, Mayibuye KlipRiver Wetland Rehabilitation Project Soweto, South Africa
 - “Finding connections: Report on a preliminary investigation of community capacity for environmental protection in Soweto, South Africa”

➤ **Communicating about Climate Change: Risk, Conflict, and Perception**

- *Alexandra Lazaro, Rosa Cabecinhas, & Anabela Carvalho, Instituto de Ciencias Sociais, Universidade do Minho
 - “Perceptions of climate change risks and mitigation behaviors: Understanding inconsistencies between representations and action”
- Chris Russill, University of Minnesota—Twin Cities
 - “Tipping point forewarnings of climate change: Some implications of an emerging trend”
 - Paper published – citation: Russill, C. (2008). Tipping point forewarnings of climate change: Some implications of an emerging trend, *Environmental Communication: A Journal of Nature and Culture*, 2(2), pp. 133 - 153.
- *Andrea Feldpausch, Texas A&M University
 - “The global climate change issue: An issue of legitimacy in the media”

10:00 – 11:15 – Session VIII

➤ **The Embodiment of Risk: Case Studies in Environmental Communication & Material Rhetoric**

- Kelly E. Happe, Northern Illinois University
 - “Body’s burden: Bio-monitoring and the new epistemology of risk”
- *Maggie VanNorman, University of Minnesota
 - “Constructing the innocent body: An analysis of the appeals in the body burden in newborns report”
- *Marilyn Bordwell DeLaure, University of San Francisco
 - “Vulnerable bodies, burdens of proof: The anti-nuclear activism of Mothers for Peace”

➤ **Environmental Politics & Policy: Entering the Fray**

- Tracy Marafiote, SUNY – Fredonia, NY
 - “The American Dream: Consumerism, tourism, & wilderness”
 - Paper published – citation: Marafiote, T. (2008). The American Dream: Consumerism, tourism, & wilderness, *Environmental Communication: A Journal of Nature and Culture*, 2(2), pp. 154 - 172.
- Joshua J. Frye, Purdue University
 - “Frame dispute between USDA and U.S. organic agriculture movement organizations (1990 – 2002)”
- *David Tschida, St. Cloud State University
 - “The Green Party in presidential election 2008: A preliminary case study of the rhetorical situation at the start of a campaign season”
- *Danielle Endres, University of Utah
 - “Public participation through public science: Scientific argument in the Yucca Mountain Controversy”

11:30 – 12:45 – Session IX

➤ **Public Participation and Decision Making: Rituals, Conflict, and Interpretations of Environmental Issues**

- Katherine McComas, Cornell University
 - “Beyond political efficacy: The rituals of environmental public meetings”
- *Travis Paveglio, Washington State University; Todd Norton, Washington State University
 - “Stakeholder dynamics at the intersection of property and fire: Conflict, cohesion, and communicative practices”
- *Cristi Choat Horton, Texas A&M University
 - “An interpretive analysis of core values of agriculturalists of the Yellowstone River”
- *Petra Bengtsson, Swedish University of Agricultural Sciences
 - “Communicating biodiversity in Swedish management organizations

➤ **Green Commerce: Negotiating Capitalism and Environmentalism in the U.S.**

- *Rich Grogan, Michigan State University
 - “Advertising in *Time Magazine* during oil price spikes: An analysis of print ads in 1979-1980 and 2004-2005”
- Lisa Slawter, University of Georgia
 - “’TreeHugger TV’: Re-Visualizing environmental activism in the post-network era”
 - Paper published – citation: Slawter, L. (2008). ’TreeHugger TV’: Re-Visualizing environmental activism in the post-network era, *Environmental Communication: A Journal of Nature and Culture*, 2(2), pp. 212 - 228.
- *Christopher N. Gamble, The Pennsylvania State University
 - “Ambivalent naturism: Prejudice and the treatment of nature inside and outside the mall”
- *Rebecca Gill, University of Utah
 - “Bridging ecocentrism and anthropocentrism discursively and materially: Ecopreneurship as (gendered) sustainable development”
- Brendan Kendall, University of Utah
 - “Personae and natural capitalism: Negotiating politics and constituencies in a rhetoric of sustainability”
 - Paper published – citation: Kendall, B. (2008). Personae and natural capitalism: Negotiating politics and constituencies in a rhetoric of sustainability, *Environmental Communication: A Journal of Nature and Culture*, 2(1), pp. 59 - 77.

**Communication at the Intersection
of Nature and Culture: Proceedings of the Ninth Biennial
Conference on Communication and the Environment**

Barb Willard, editor

Preface

...all wildness is fluid. Frozen, it dies. (Eisenberg, 1998, p. 100)

Set on the shores of Lake Michigan in Chicago lays Montrose Point, an 11-acre stretch of land with wind-swept dunes, a stand of cottonwood, a honeysuckle hedgerow and native grasslands. This lakeshore spot provides a haven for endangered wildlife, a resting stop for migratory birds, a naturalist's paradise, and recreational area for local residents seeking a respite from the manufactured landscape of the Chicago region. When you stand on its highest point and look out over the lake, you can find little, if any, evidence that you are in one of the most densely populated cities in the country. What is most interesting, however, about Montrose Point is not its stark contrast to the high-rise buildings that surround it, but rather, its completely artificial creation. Montrose Point, considered to be a natural area, would not exist without the imprint of human culture. This land, it can be argued, embodies the very nexus of nature and culture.

Montrose Point was actually Lake Michigan before landfill was used to build the solid ground of its foundation. When the developers of Chicago created the lakefront, they took landfill from a variety of sources – debris from harbor and subway development, structural ruins of the fire of 1871, sand – and used it to create the shore line that thousands of visitors and residents currently enjoy. Once established, Montrose Point was used as a radar station during WWII and a Nike missile base during the Cold War but was reclaimed by the Chicago Park District in the early 1970s and largely left unattended. Over time, the land began to take on natural vegetation, creating the dunes and tree stands that are there today. Restoration ecologists and ornithologists have since banded together to enhance the conditions for the growth of natural vegetation and now it is a bird

sanctuary with avian and human visitors from all over the world. Left on its own, this cultural landscape blended natural features, making it a product of both nature and culture.

The Chicago region contains a number of similar sites that are the product of the courtship between human culture and non-human nature, where wildness expresses its fluidity even in the most urban places. It is largely for this reason that Chicago was chosen as the host of the 2007 Conference on Communication and the Environment (COCE) which took as its theme the mediated relationship between human culture and the natural environment. Raymond Williams argues that ultimately the idea of nature is inextricably linked to the idea of culture because it is human society that creates the conceptual foundation of nature. He states:

...we continually come across propositions of the form “Nature is. . .”, or “Nature shows” – what? Red in tooth and claw; a ruthlessly competitive struggle for existence; an extraordinary interlocking system of mutual advantage; a paradigm of interdependence and cooperation. (1980, p. 70)

Ultimately, for Williams, nature is a concept that’s meaning is altered in various contexts. That cultural meaning then influences the way in which humans interact with nonhuman life forms and consequently, cultural concepts of nature result in a material impact on nature. Too often, in the past, nature has been conceptualized as untouched by human presence, as separate from culture. The majority of these essays take issue with that idea, operating from the position that the natural world is always impacted by human culture, binding the two together in both a conceptual and physical marriage. It is the purpose of these proceedings to invite readers and scholars into a conversation about communication’s role in shaping ideas about the environment and its theoretical and material implications.

The Conference on Communication and the Environment (COCE) is a biennial conference that has been convening since 1991 when James Cantrill of Northern Michigan University and

Christine Oravec of University of Utah organized a conference with approximately fifty academics in Alta, Utah to discuss the discourse of environmental advocacy. The original purpose of COCE was to bring together scholars from a variety of backgrounds and disciplines to “define the province of environmental advocacy, share views of how humans communicate about an environment at risk, and chart directions for future research” (Cantrill, 2008,¶ 1).

Together, these essays address a number of pressing questions that arise when we examine what discourse brings to bear on our conceptualization and interaction with the environment. Wes Jackson makes a plea for humanity to become “native to this place” in his book of the same name. He states, “. . .we will be *required* to become native to our little *places* if we are to become native to this *place*, this continent” (1994, p. 2). What he means by this is that we need to know our place, both locally and then, by extension, globally, so that we can be responsible environmental citizens of our biotic communities. In a sense, he asks that humans learn how to recognize the confluence of nature and culture and live ethically within that realm. These essays shed light on how we can blend nature and culture in harmonious (or destructive) ways, creating the possibility for us to become native to our place, whether that place is in the wilds of Montana, the waters of the Atlantic Ocean, or the “natural areas” of dense, urban regions. Environmental communication has much to offer about how we configure the relationship between nature and culture and how that configuration can either alienate humans from their position in the natural world or, alternatively, provide the ideational grounds for being “native to this place” we call nature/culture.

References

- Cantrill, J. (1996). *A brief history of the Conference on Communication and the Environment*. Retrieved April 7, 2008, from the Environmental Communication Network Web site: <http://www.esf.edu/ecn/cocehist.htm>
- Eisenberg, E. (1998). *The ecology of Eden*. New York: Vintage Books.
- Jackson, W. (1994). *Becoming native to this place*. Washington, D.C.: Counterpoint.
- Williams, R. (1980). *Problems in materialism and culture*. London: Verso.

Acknowledgments

The 2007 COCE summer conference and the publication of these proceedings would not have been possible had it not been for the dedicated work of a number of people. We would like to thank Joe Christman of DePaul University's Conference Services for his tremendous help in securing conference space, dorm rooms, and arranging for meals. We would also like to thank the staff of the College of Communication for their help in organizing the conference. Joy Dinero was a tireless assistant in conference organizing and proceedings completion. Her ability to multitask, problem-solve, and perform tedious chores all while maintaining a cheerful demeanor made running the conference and completing the proceedings not only a relatively easy charge, but a pleasant one. I also wish to thank the number of scholars who agreed to review papers for the conference and the proceedings, including: Jim Hasenauer, Joshua Frye, Todd Norton, Steve Schwarze, David Tschida, Katherine McComas, Tracy Marafiotte, William Kinsella, Tarla Rai Peterson, and Jonathan Gray. Finally, for agreeing to post the conference proceedings, we would like to thank Mark Meisner and his home institution, SUNY-ESF, for allowing us space on the Environmental Communication Network (ECN) website, <http://www.esf.edu/ecn/>.

From Awareness to Action: The Rhetorical Limits of Visualizing the Irreparable Nature of Global Climate Change

Richard D. Besel
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Abstract

In this paper I examine a recent artistic attempt to publicly visualize a future at risk, Alexis Rockman's mural painting Manifest Destiny. By turning to J. Robert Cox's work on the "Locus of the Irreparable," I contend that Manifest Destiny compels viewers to see the irreparable nature of global climate change in terms of the unique, precarious, and timely. Arguing that Rockman's creation is a visual example of the rhetoric of the irreparable, I put Cox's work into conversation with recent efforts to understand the nature of visual rhetoric. However, despite the attention-grabbing nature of Rockman's work, the production of specific social judgments related to the reduction of greenhouse gas emissions are left wanting. The implications for public understanding of global climate change issues and future research directions for scholarship using Cox's articulation of rhetoric of the irreparable are discussed.

Twenty-five years ago, the *Quarterly Journal of Speech* published J. Robert Cox's article, "The Die is Cast: Topical and Ontological Dimensions of the Locus of the Irreparable" (Cox, 1982). Since then, argumentation and rhetorical scholars concerned with environmental issues have recognized the importance of Cox's work, referencing the article on a variety of topics ranging from theoretical considerations of environmental metaphors (Muir, 1994, p. 3) and apocalyptic rhetoric (O'Leary, 1997, p. 299) to analyses of environmental controversies related to Deer Creek Crossing (Bannon, 2006, p. 31-33) and the protection of orangutans by nongovernmental organizations (Sowards, 2006). Perhaps the most impressive testament to the importance of Cox's effort is its inclusion in *Landmark Essays on Rhetoric and the Environment* (Waddell, 1998). Indeed, Cox's article stands out as an influential work of environmental communication scholarship. However, more can be done to understand the range and limits of the rhetoric of the irreparable.

To engage and expand on Cox's notions about the locus of the irreparable, I turn to Alexis Rockman's 2004 work, *Manifest Destiny*. Set 3,000 years in the future, this eight-foot high and twenty-foot long oil and acrylic painting depicts Brooklyn long after the effects of global climate change have taken their toll: the ice caps have melted, sea levels have risen, and only ruins

remain of the coastal cities. By analyzing Rockman's *Manifest Destiny*, I accomplish two important tasks in this paper. Arguing that Rockman's creation is a visual example of the rhetoric of the irreparable, I put Cox's work into conversation with recent efforts to understand the nature of visual rhetoric. I agree with John W. Delicath and Kevin M. DeLuca when they claim, "We need to find a way of theorizing how images give meaning to social problems and the role they play in contemporary public argument" (2004, p. 320). Examining Rockman and Cox's works answers Delicath and DeLuca's call for additional scholarship. In addition, by turning to a case study involving the environmental problem of global climate change, I illustrate the limited potential of the rhetoric of the irreparable for social action.

The remainder of this paper is divided into three sections. First, I briefly summarize Cox's articulation of the locus of the irreparable. Second, I analyze Rockman's *Manifest Destiny* as a visual example of rhetoric of the irreparable. Finally, I discuss how my analysis reveals the limits of the rhetoric of the irreparable for global climate change solutions.

Cox's Dimensions of the *Locus* of the Irreparable

Building on the works of Chaim Perelman, Lucie Olbrechts-Tyteca, and Martin Heidegger, Cox's 1982 article explores the nature of the *locus* of the irreparable. According to Perelman and Olbrechts-Tyteca, "Whether the result of it be good or evil, the irreparable event is a source of terror for man; to be irreparable, an action must be one that cannot be repeated: it acquires a value by the very fact of being considered under this aspect" (1969, p. 92). It is the significance of an event that cannot be repeated or erased that gives communicators their rhetorical traction to rearrange our societal values and hierarchies; in other words, an irreparable event can function as one of many *loci communes*, or discursive commonplaces.

For Cox, the *locus* of the irreparable involves three dimensions: "The *locus* of the irreparable is a way of organizing our perceptions of a situation involving decision or action; its use calls attention to the *unique* and *precarious* nature of some object or state of affairs, and stresses the *timeliness* of our relationship to it" (1982, p. 229). According to Cox, the "object or act which qualifies as irreparable is necessarily unique" (182, p. 229). He continues, "Much of the potency of arguments regarding the irreparable derives from the value of what is unique or singular, and from contrast between that and some fungible alternative" (Cox, 1982, p. 230). In addition to being unique, an irreparable object or act also has a precarious nature. However, the precarious nature of the irreparable is not reduced to simplistic fatalism, for the irreparable "need not be lost if one acts" (1982, p. 230). Precariousness may refer to that which is fleeting, fragile, or established and stable, but threatened. Finally, although Perelman and Olbrechts-Tyteca do not explicitly mention timeliness as a quality of the irreparable, Cox extends their work to include it. For Cox, "our experience with precarious reality places value upon the timeliness of choice or action" (1982, p. 231). In other words, the *locus* of the irreparable asks us to act *now*, before it is too late.

In addition to engaging the temporality of the present (we must act now), Cox also reminds us of Heidegger's contributions to our understanding of time. The irreparable is not just concerned with the present; it is also concerned

with the past and the future. How long have we had the unique, fragile, threatened object or act? What will the world look like in the future if we do not act to save it? Thus, Cox paraphrases Heidegger's general interpretation of human existence, or *Eksistenz*: "The meaning of our experience is rooted, not in a succession of particular Nows, but in a field or temporal spread of Future-Present-Past" (1982, p. 232). It is this ontological location in a temporal field that perpetually leads us to be "thrown-ahead-of-ourselves-toward-the-future" (Barrett, quoted in Cox, 1982, p. 233). The ultimate source of terror that Perelman and Olbrechts-Tyteca see in the irreparable is, thus, a human being thrown so far into the future that he or she no longer exists. In other words, you confront your own finitude and mortality; you are dead.

With this understanding of the *locus* of the irreparable in mind, Cox suggests there are ways actors confronted by this line of argumentation can adjust their actions and decision-making processes. One possibility is that they lengthen the amount of time to consider action. Another possibility is that they seek additional information. A third possibility is that they adopt a minimal condition rule. Finally, actors can engage in extraordinary measures.

Now that I have summarized Cox's dimensions of the *locus* of the irreparable, I wish to explore this understanding in light of the recent "visual turn" in rhetorical studies (e.g., DeLuca, 1999; DeLuca & Demo, 2000; Erickson, 2000; Finnegan, 2001, 2004; Foss, 1994). If asked whether or not I believe it is possible to have a visual rhetoric of the irreparable, I would simply answer "yes." However, following Finnegan's (2001) lead with "visual argument," I am not so much interested in *what* a rhetoric is as much as I am interested in *how it functions*. Thus, the next section of this paper will address how Rockman's rhetoric functions as a rhetoric of the irreparable.

***Manifest Destiny* and Visual Rhetoric of the Irreparable**

Alexis Rockman is not your typical painter. Educated at New York's School of Visual Arts and inspired by painters like Thomas Cole, Frederic Church, and Albert Bierstadt, Rockman considers himself to be a "pop artist using natural history as my iconography" (Potter, 2006, p. 715). Perhaps best known for his 2000

piece, *The Farm*, which depicts a square cow and other bioengineered animals, Rockman has long focused on the relationship between humans, technology, and nature.



Figure 1. Alexis Rockman's 2000 painting *The Farm*.

Not only are his paintings impressive in terms of size and color, but they are also imaginative. In fact, Stephen Jay Gould once said, "[Rockman] tweaks my cerebrum" (Potter, 2006, p. 716). One commentator summarized his work in the following way:

A combination of natural science and fantasy, his work explores the predatory relationship between nature and culture. Inspired equally by scientific curiosity and artistic compulsion, his startling images are at once literal, naturalistic, and entirely imaginary. Challenging the way we see and categorize the world, he questions human-animal-nature interaction by creating "in your face" scenarios based on vital popular culture dilemmas, among them genetic engineering and global warming (Potter, 2006, p. 716).

His recent painting, *Manifest Destiny*, is Rockman's attempt to visualize what the world would look like after global climate change's effects have run their course. But *Manifest Destiny* is not simply a product of Rockman's imagination. Representative of many of his other works, Rockman engaged in painstaking research to ensure his painting was powerful, yet realistic. According to Rockman, when dealing with unfamiliar images "you want as much credibility as possible" (Weart, 2005, p. 772). Thus, Rockman consulted with architects, biologists, and climate scientists before painting *Manifest Destiny*. The final product has, according to Spencer Weart, "caused a considerable stir, with prominent features in the media and reproductions showing up on environmental websites" (2005, p. 771). Rockman has certainly been successful in garnering the attention of audiences beyond the artistic elite, leaving the general public "flattened by



Figure 2. Alexis Rockman's 2004 painting *Manifest Destiny*.

the display of a truly possible future" (Weart, 2005, p. 773). Rockman's bleak depiction of the future is precisely why *Manifest Destiny* is a visual rhetoric of the irreparable.

Not only does Rockman's painting visually depict Cox's dimensions of uniqueness, precariousness, and timeliness, but it also confronts audiences with the Heideggerian interpretation of human existence.

Rockman's painting certainly depicts the quality of uniqueness. Although brimming with detail of birds, buildings, and bacteria, the painting's most recognizable object is the Brooklyn Bridge. In terms of the *locus* of the irreparable, the Brooklyn Bridge is a one of a kind. There are no other bridges like it in the world. The choice of the Brooklyn Bridge was a deliberate one. According to Rockman, "I felt that I needed something iconic, like the Statue of Liberty in the 'Planet of the Apes'" (Yablonsky, 2004, p. AR28). Rockman's painting suggests that in a future changed by pollution, the unique qualities of the Brooklyn Bridge will no longer be available to humans. Additionally, taking a step back, one can understand the unique nature of the entire city, depicted in the painting under the watery depths of the Atlantic. What today is recognized as the East Coast of the United States is no more in Rockman's fatalistic future. What is depicted as unique in Rockman's work is perhaps best described as a specific, geographic location, a location that is valued because there is no other place in the world quite like it.

In addition to the dimension of uniqueness, *Manifest Destiny* also exhibits precariousness. According to Cox, rhetors develop a sense of precariousness by noting the way established, stable or secure objects can be threatened and destroyed unless an agent intervenes (1982, p. 230). Although it is difficult to imagine all of New York submerged, Rockman's piece brings the possibility to life. The stable slabs of concrete and the secure foundations of skyscrapers are no match for the effects of global climate change. The new stadium that is being proposed is illustrated in its completed state, submerged. The power plants and smokestacks of Con Edison are likewise illustrated in the watery depths. The audience is reminded that their physical location, their home, is not established, stable, or secure.

Manifest Destiny also exhibits the dimension of timeliness. Rockman has commented that his painting is a reference to Americans' "long tradition of entitlement in terms of natural resources" (Weart, 2005, p. 772). If the irreparable loss of our place on earth is to be avoided, Rockman's painting implies we need to change the system of entitlements to natural resources that we have developed since the start of the Industrial Revolution. The combined influences of the Hudson school of painting and the Industrial Revolution have allowed Rockman

to see what he calls "the dark side" of natural resource use, use that must be halted (Yablonsky, 2004, p. AR28). Rockman's painting works as a "forewarning, an opportunity to act in appropriate ways before it is too late" (Cox, 1982, p. 232).

In addition to exhibiting all of the dimensions Cox has outlined, Rockman's painting also confronts audiences with the Heideggerian interpretation of human existence. For Heidegger, humans are in a temporal field that perpetually leads us to be "thrown-ahead-of-ourselves-toward-the-future" (Barrett, quoted in Cox, 1982, p. 233). Also recall that, for Perelman and Olbrechts-Tyteca, the ultimate source of terror, interpreted in Heidegger's language, is a human being thrown so far into the future that he or she no longer exists, an awareness and fear of death. In Rockman's work, audiences are confronted by that which terrifies them most: the end of humanity. In Rockman's rust-colored world, humans are nowhere to be found. The only life one sees is the growth of vegetation on ruins and the parasites that have filled the new niches created by human degradation. Rockman's 3,000 year projection fails to project any humans. Yablonsky rightly titles her commentary on *Manifest Destiny* "New York's Watery Grave." Weart observes, "At a deeper emotional level, the imagery of human absence evokes universal personal anxieties about abandonment, connected with the death of the individual and the end of all hopes" (2005, p. 773). An art observer noted, "This painting should scare everyone" (Yablonski, 2004, p. AR28). Perhaps this is why Cox has noted that "the irreparable does not offer hope" (1982, p. 233). Audiences are asked to throw themselves into the future only to find that they are not there.

At this point it is clear that Rockman's work is indeed a visual example of the rhetoric of the irreparable. *Manifest Destiny* contains each of the dimensions mentioned by Cox in addition to engaging the Heideggerian interpretation of human existence. However, Rockman's efforts also reveal the rhetorical limitations of the *locus* of the irreparable.

Rhetorical Limits of the Rhetoric of the Irreparable

My analysis of Rockman's work not only establishes the possibility of having a visual rhetoric of the irreparable, but it also reveals

three ways this kind of rhetoric is limited and constrained by the nature of the topic being addressed. First, the rhetoric of the irreparable, when used in isolation, offers no solutions to environmental problems. Second, our understanding of the timeliness dimension of the irreparable must be revisited in light of specific subject constraints. Third, understanding the rhetoric of the irreparable through the reading of individual texts and images leaves the critic with a methodological blind spot. Scholars have not yet fully explored the role of argumentative conflict between various works that use the *locus* of the irreparable.

In terms of solutions, Rockman's work leaves the audience without a solution to the very problem being identified. *Manifest Destiny* has thus been extremely effective in garnering attention, but may not be the scientific popularization attempt environmental activists have been longing for. Attention is one thing, but action is another. What audiences are left with is a feeling of pessimism and terror. Even the title of the work, *Manifest Destiny*, hints at the fatalistic feeling one gets when confronted by humanity's lack of existence 3,000 years into the future. Viewers are left with a sense of urgency, but no sense of agency. What is the viewer to do to hold back what appears to be an imminent deluge of humanity's own doing? The painting itself testifies to the futile attempts humans may make. Visible in the painting are the remnants of a wall built to temporarily hold back the waves of the ocean, but to no avail. Used in isolation, the rhetoric of the irreparable draws audiences' attention to problems as it depresses and disempowers them. However, this is not to say we should stop using the rhetoric of the irreparable. On the contrary, what we need is not less rhetoric, but more rhetoric. We need additional attempts to visualize global climate change, especially in terms of what we can do to solve the problem.

The rhetoric of the irreparable is also limited when environmental problems impose limitations on the amount of time decision makers have to act. Recall that Cox highlights four different ways decision makers can adapt their actions in light of the irreparable. People can lengthen the amount of time to consider action, seek additional information, adopt a minimal condition rule, or engage in extraordinary measures. However, many of the options are not available when the subject being

considered is global climate change. Take the first two of Cox's adaptations as examples. Today, scientists are concerned that humans are fast approaching a physical point of no return, a tipping point, when the environmental systems most influenced by global climate change will be well on their way to making human existence miserable, if not extinct. Although there is disagreement about how much time humans have left to take action, with a small minority believing there is no problem at all, the amount of time left to work with is finite. Thus, lengthening the amount of time to consider what should be done only delays action that must be done now. In terms of additional information seeking, this has long been used as a stalling tactic by global warming skeptics. Seeing that Rockman's work is consistent with the majority of the most recent scientific reports (IPCC, 2001, 2007), one wonders how much additional information is needed. The problem here is to be found in the nature of the topic being considered. If one has not yet taken an action that leads to an irreparable state of affairs, then the option of seeking additional information appears viable. However, when the action to be taken will prevent an irreparable state of affairs, a condition already approaching because of earlier actions, seeking additional information appears to be unwarranted.

Finally, understanding the rhetoric of the irreparable through the reading of individual texts and images leaves critics with a methodological blind spot. Scholars have not yet fully explored the role of argumentative conflict between various works that use the *locus* of the irreparable. In other words, what happens when one rhetoric of the irreparable meets another in the constant renegotiation of social hierarchies and values? For example, although Rockman consulted a number of scientists and his work reflects their most recent findings, if the results were projected into the future at their worst, my reading of Rockman's work does not put the painting into conversation with other rhetorics of the irreparable. Many opponents of greenhouse gas reduction legislation couch their opposition in the rhetoric of economics. However, their oppositional rhetoric also uses the *locus* of the irreparable in a way similar to Rockman. For opponents, the current strength of the economy is unique, precarious, and needs to be defended today. Not doing so would jeopardize the lifestyle Americans have grown accustomed to having. Although questions of whether or not the

opponents' case holds merit is open to debate, that there are ways of invoking the *locus* of the irreparable on more than one side of an issue seems clear. Scholars have not yet fully explored the implications of having competing rhetorics of the irreparable.

Conclusion

Given that this paper is part of a panel dedicated to exploring and reflecting on a landmark essay in environmental rhetoric, it seems fitting that I conclude with more questions than answers. Looking back on how Cox's article can be invoked in analyses of rhetoric that use the *locus* of the irreparable, such as my reading of Rockman's work, I am left to wonder where our future research will take us. Will communication scholars develop an alternative rhetoric that sufficiently suggests solutions for our world's biggest problems? Or perhaps a supplemental rhetoric to be used in conjunction with a rhetoric of the irreparable is a better

option. I am also left to question whether or not those wanting reductions in greenhouse gas emissions will begin to shift their rhetoric away from an emphasis on the irreparable and more toward a rhetoric of solutions. Will we successfully replace our pessimism with optimism? Already there are some signs that this shift may be happening. Although it does not significantly engage national legislation possibilities, Al Gore's recent movie makes some suggestions in terms of solvency. And what about the counter-rhetorics being generated that also use the *locus* of the irreparable? What are rhetorical critics to make of the messy and complicated clash of environmental and economic values? These questions, and many more, have yet to be explored. However, it is with a sense of optimism that I end this paper. I believe that there is a rhetorical potential in avoiding what Cox has called the fatalistic announcement of forces over which we have no control (1982, p. 239).

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Exploring Anxious Dimensions of the Irreparable Considerations from Psychoanalysis¹

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Abstract

This paper revisits Cox's landmark paper (1982) by paying particular attention to references to existential, and arguably affective, dimensions of the locus of the irreparable. By exploring Cox's reference to the potential for an 'inauthentic existence' in the face of the irreparable, the paper argues that in fact Cox's assertions of the strategic and ethical implications of the locus of the irreparable are in fact concerning anxiety. The paper argues for an explicit engagement with psychoanalytic thought to strengthen our understanding of this dimension of the environmental irreparable. In particular, it is suggested that the work of Hannah Segal, and object-relations theory in general, can bring deeper understandings and sensitivities to the psychic dimensions of communicating, particularly concerning the experience of anxiety and defence mechanisms. The paper concludes by referencing a recent media campaign regarding the Great Lakes, and calls on environmental communications scholars to take into consideration the affective and psychic dimensions of the irreparable, particularly with regard to anxiety.

Introduction

J. Robert Cox's (1982) paper, *The Die is Cast: Topical and Ontological Dimensions of the Locus of the Irreparable* has been significant for scholars and practitioners of environmental rhetoric for the past twenty-five years. His analysis helped to enlarge our understandings of the irreparable in light of environmental discourses, and in so doing brought rhetorical studies into dialogue with environmental advocacy. It was a prescient paper, evidenced by the increasing saturation in our media about the potential for or already irreparable damage to ecosystems, places, species, and our collective future. To some degree, the paper helped us see that the irreparable – and appeals to uniqueness, precariousness, and timeliness – are a subtext of environmental discourses, as we struggle to mediate and represent the real and potentially irreversible consequences of our actions. This discourse is as much about loss, warnings, and finality, as possibility, hope, and repair (and not necessarily in equal measure).

It seems that as environmental communicators, we are constantly negotiating the fine line described in the paper of the *turn toward* or *away* from the future. And this has implications for the issue of agency and response. What determines which direction is taken? What are the best practices to educate and

inspire action? What leads to despair and the 'turn away'? We all struggle with these issues, and yet how much closer are we to understanding what mobilizes and what paralyzes?

This question draws attention to the *affective* dimension of the environmental irreparable – a dimension that is rarely engaged in environmental communications, and yet one that underscores our discussions around crisis, melodrama, and irreparable events. It seems that anxiety is the great 'unsaid' in environmental communications (Billig, 1999, p. 52). I argue that, in fact, *anxiety* (and its potential by-products, paralysis and inaction) is of a piece with the topological and ontological dimensions outlined in this landmark paper on the *locus* of the irreparable (Cox, 1982). In addressing the capacity to 'turn towards' or 'turn away' from our future, and discussing the risks and dangers of the irreparable, Cox (perhaps inadvertently) highlights psychic processes that often have less to do with rational thought, and more with fear, desire, and anxiety. For my interpretations, I draw primarily from work in psychoanalytic thought, which has for decades helped to illuminate how (often unconscious) responses in the face of acute threat or anxiety can exert powerful influences in our actions and decisions, both individually and socially. A theory of the irreparable, I argue, is greatly enhanced by an appreciation, or at least acknowledgment, of how

these influences are animated in our work on the irreparable.

In what follows, I will quickly revisit the points in *The Die is Cast* with regard to the theme of anxiety and affect. I will then touch on the work of British psychoanalyst Hanna Segal and sample some of her ideas around anxiety and nuclear threat. (A proper address of these themes goes beyond the scope of this paper, and is indeed the focus of the present PhD research.) I will conclude with a look at a recent campaign advert for the Great Lakes, in light of the discussion below. This paper draws from my PhD, in which I am exploring psychosocial dimensions of environmental communications around the restoration and preservation of the Great Lakes, and as such is a work in progress.

An Inauthentic Existence: Apathy, Denial and the Turn from Reality

In presenting the topical and ontological dimensions of the *locus* of the irreparable, Cox makes clear the ‘existential dilemma’ of our ability to stand beyond time (Cox, 1982, p. 232). That is, in our ability to foresee comes the ability to forewarn and forestall (to paraphrase Rachel Carson’s epitaph in *Silent Spring*.) It also brings with it the awareness of separation, loss, and death. As Cox writes, in the experience of time and knowledge of death, “We experience the future as closed. When this happens, time becomes threatening; the future becomes a source of anxiety and dread...Whether in turning away or in resolving to face the future, we risk irreparable loss. *In turning from the future as a way of reducing anxiety, we choose an ‘inauthentic existence’*” (Cox, 1982, p. 233, emphasis added). Cox continues, that in our ability to “stand beyond” ourselves in time, we “recoil at its loss; to lose the opportunity for meaningful choice is to lose something vital in ourselves” (Cox, 1982, p. 234).

By rooting the *locus* of the irreparable in ontological and temporal dimensions, what is also being done is an existential move, to suggest that in fact, much more is at stake psychically in these claims than we may realize. Indeed, deliberation about irreparable events occasions a *departure from the ordinary* (Cox, 1982, p. 234). Cox also describes the *locus* of the irreparable as creating an ‘effective rhetorical vision,’ drawing from “a reservoir of myth, a complex of psychic

and cultural associations of enormous nonrational persuasion” (Cox, p. 234; citing Solomon, 1979, p. 263). I would argue that such a phrase – a *complex of psychic and cultural associations of enormous nonrational persuasion* – is largely considered the domain of psychoanalytic thought. I now turn briefly to this tradition.

Introducing Hanna Segal

Central to Freud’s conceptualization of mental life is the idea of psychic conflict – conflict between conscious and unconscious desires and realities, between conflicting desires. Equally central is the notion that such conflicts, when unresolved, undergo repression, become unconscious, and find expression and ‘compromises’ in dreams, symptoms, and so forth. In British object-relations theory, and notably in the work of British psychoanalyst Hanna Segal, attention is drawn to the capacity to experience guilt, loss, and ambivalence in the face of our destructive capacities, and the harm we potentially or actually cause. Segal notes, “Ambivalence is a term sometimes used loosely to denote any ambiguity, but as a psychoanalytic term it has come to mean, more precisely, a conflict between aggression and love” (Segal, 1973, p. 92).² It is possible we can observe ambivalence in the description of how the Melians responded to the threats from Athens (Cox, 1982, p. 227). We may never know. What is clear, however, is that the ways we respond to irreparable events is of far greater psychic complexity than has been previously acknowledged.

For now, I wish to draw attention to the work of Hanna Segal, as one of the few analysts to have married psychoanalytic insights with socio-political concerns. Much of Segal’s work in the 1960s and 1970s was located in the clinical context. However, starting in the 1980s, she began to write openly about the nuclear threat (and later in the 1990s and 2000s, about terrorism and group anxieties). For Segal (1987; 2001; 2003), nuclear bombs and ‘deterrence’ epitomized the ultimate irreparable event. Much of her work considers the psychic dimensions of the irreparable, and the kinds of anxieties it evokes. The concern underlying these theories is with how we create strategies, often unconscious, for negotiating difficult, painful, and anxiety-producing thoughts, feelings, and

experiences. In light of what Cox tells us regarding the dread and anxiety of the irreparable, consider the following:

I contend that anxiety produced [by nuclear weapons] mobilized the worst psychotic fears and defences. It tended to convert the normal fear of death to the unnameable terror of total annihilation without symbolic survival. Against that primitive fear defences of a schizophrenic type are mobilized, including increased projective identification, splitting and deadly self-idealization, paranoia, confusion, etc. (Segal, 2003, p. 259).

What Segal describes is the way in which, when confronted with an 'unnameable terror,' on some level it is 'unthinkable' – which can lead to a fragmentation of awareness, feeling, and action. We defend against the experience of threat or anxiety in a variety of ways, from denial to projecting the unwanted onto others, or splitting where we create 'good' and 'bad' things. These defences 'against fear' are another way of describing what Cox refers to as '*inauthentic existence*' – turning away, and engaging (escaping) in delusion and fantasy to avoid the unthinkable, or acute anxiety. We may see denial as such an inauthentic existence. Such defences are engaged in precisely to avoid feeling, and to avoid the confrontation with the reality being presented. This move, as Cox notes, is 'inauthentic' – it is not based on a relationship with reality or authenticity, but falsehood and delusion.

The issue of turning away from the future is fundamental to the experience of the irreparable, and there is much work in psychological and psychoanalytic literature regarding the choice to 'not know,' ranging from the clinical context when people confront their own limitations or neuroses, to studies of the Holocaust and other incidents of genocide and trauma (for example, see Felman and Laub, 1992). This phenomenon of choosing not to know is closely related to what Freud referred to as 'disavowal.'³ The 'turning of a blind eye' is something Segal (1997) discusses extensively in relation to how chronic issues – nuclear threat, ecological crises – are responded to. She notes that as more of the discourse appears in popular media, more people engage in 'Ostrich politics'

and bury their heads in the sand. She describes this turning away as "close to denial, but is not identical to it; it is a particular form of splitting... in this split we retain intellectual knowledge of the reality, but divest it of its emotional meaning" (Segal, 1997, p. 145).

At the core of the potential paralysis in the face of the irreparable event, is the issue of helplessness and apathy. As Segal (1997) writes,

We seem to live in a peculiar combination of helplessness and terror and omnipotence – the helplessness and omnipotence increasing each in a vicious cycle. This helplessness, which lies at the root of our apathy, is partly inevitable. We are faced with a horrifyingly threatening danger (the nuclear threat). But partly it is self-induced and becomes a self-fulfilling prophecy. Confronted with the terrors of the powers of destructiveness, we divest ourselves from our responsibilities by denial, project and fragmentation (p. 154).

In this excerpt, Segal points to the multiple, contradictory, and irrational ways people can respond to acutely threatening situations; in this case, the horrible threat of nuclear bombs, and all that such a threat entails. She remarks on the ways in which we tend to shield ourselves from difficult or overwhelming dangers, *particularly* if we feel ourselves to be powerless or helpless. To compensate, we assume ourselves to be 'omnipotent,' a stance she has written about extensively (see Segal, 1987). Seen in this light, it is possible to rethink conceptions of apathy, not as a clear lack of concern, but rather as a complicated expression of difficult and conflicting affective states. As I wish to suggest, if we approach apathy and a 'turn away' from the future through this perspective, we may start to see how in fact messages and vehicles for transmitting environmental issues may in fact do more harm than good.⁴

Healing Our Waters

I want to turn (very briefly and topically) to a recent advertising campaign produced by a regional advocacy effort seeking federal funding

for restoration and protection of the Great Lakes, working with national and regional state organizations. The advert, which was the result of extensive pilot testing and focus group research, was designed for an audience that is likely to be moved to action. The dominant image is of a young girl facing toward a Great Lake (presumably), with a beach sign reading, **“Warning: No More Swimming. No More Fishing. No More Drinking Water. NO MORE GREAT LAKES.”** For many of us, this is a classic form of environmental media; we are presented with the irreparable consequences of our actions, unless we do something. We see an image of a world with no more Great Lakes, and are left to ponder what this may mean.

If we are to look at this advert through psychoanalytic concepts of anxiety, and defending against the ‘unthinkable’ or ‘un-nameable’ – in this case, literally the *end* of the Great Lakes as we know them – how might we look at this ad differently? The Lakes are presented as vulnerable, finite, and gravely threatened. There is the sense that unless we do something now, we risk losing such magnificent resources forever. It is the construction of the irreparable event. We are presented with a choice to act, but if we consider how such images may touch people on an affective, potentially unconscious level, can we safely *assume* this is necessarily an impetus to act?



WARNING:
NO MORE SWIMMING
NO MORE FISHING
NO MORE DRINKING WATER
NO MORE
GREAT LAKES

The Great Lakes hold one fifth of the world's fresh water supply and provide drinking water to over 30 million people. Yet each day, our Lakes are damaged economically and ecologically by untreated sewage, industrial pollutants and invasive species. Unless we invest in a solution today, the price we will pay tomorrow will be much higher and future generations may never experience the Lakes as we know them. Fortunately there is a solution—you. You can sign a petition to urge Congress to pass the Great Lakes Collaboration Implementation Act, a comprehensive regional plan that dedicates funding to protect our drinking water, economic future and way of life. Log on to www.healthylakes.org to let your voice be heard. In just a few minutes you can protect the Great Lakes.

 **TAKE A FEW MINUTES AND URGE CONGRESS TO
PROTECT THE GREAT LAKES**
WWW.HEALTHYLAKES.ORG

NEW! BEGINNING JUNE 1, ENTER THE GREAT LAKES PHOTO & STORY CONTEST.
Visit www.healthylakes.org to win prizes.

Implications

If we follow from Segal and other psychoanalysts the notion that in the face of threat, we may feel threatened ourselves, and employ any number of strategies to *avoid feeling* – how may we see an advertisement such as this? How do these ideas complicate the ways we choose to mediate the irreparable?

The question I want to raise, using the advert as an example, is this: What would a communications strategy or message look like that did actually account for anxiety, threat, and the ways we ‘turn away’ from a potentially threatened future? Might we be stimulating responses in people that are the *opposite* of what we want, through an ignorance of the psychic and affective dimensions of the irreparable? We can’t know for sure. In this case, this ad was tested with focus groups and found to be motivating for people who are already inclined to be quite active. This ad [Vulnerable] was tested and generated out of focus groups, based on public opinion polling as well, with those who are *less* inclined to be active. Might these ads trigger different responses that may or may not involve anxiety?

Perhaps it is time for environmental communications to more actively engage with psychological and psychoanalytic ideas. However, I feel it is to clinicians we must turn to first. As Hanna Segal wrote, “We

[psychoanalysts] have a specific contribution to make. We are cognizant of the psychic mechanisms of denial, projection, magical thinking and so on. We should be able to contribute something to the overcoming of apathy and self-deception in ourselves and in others” (1997, p. 155). I agree.

If, as Cox suggests, the *locus* of the irreparable involves the existential dimensions of being and time, and therefore threatens our concepts of futurity and existence, then we may be well served by turning to research and literature that has explored anxiety and ontological insecurity in more depth. We need as communicators to be more aware of the psychic dimensions of these issues if we want to comprehend what it means to learn about and respond to serious ecological issues. This includes work in psychoanalysis and psychology on issues of guilt, loss, mourning, and anxiety that can inform how people respond to messaging and campaigns. There is no easy translation between clinical theories in psychoanalysis, and the theory and practice of environmental communication. That said, I raise these questions for discussion and debate, and to invite us to consider what a theory of the *locus* of the irreparable would look like, twenty-five years later, if it took on-board the psychic, emotional, and affective dimensions.

Notes

¹ Presented for the panel, “Twenty-Five Years After the Die is Cast: Mediating the Locus of the Irreparable,” The 9th Biennial Conference on Communication and the Environment, DePaul University, Chicago IL, 22-25 June 2007. This is a version of the talk presented.

² In light of this topic, is it of no minor significance that the concept of *reparation* itself is a central topic in the work of Melanie Klein, one of the most significant psychoanalytic thinkers in recent time. Klein’s theory of reparation concerns the process by which reparation – the desire to repair, make right, restore – arises out of experiences of guilt, loss and ambivalence. Our ability to experience ambivalence toward that which we have harmed (mother, nature, etc) enables the move and desire to repair others and our environment (Klein, 1992; see also Segal 2001). It is a complicated discussion for another time, particularly in light of Cox’s analysis.

³ In *An Outline of Psycho-Analysis*, Freud described the phenomenon of disavowal as the ability for recognition and anxiety to ‘persist side by side throughout their lives without influencing each other. Here is what may rightly be called a splitting of the ego’ (1940: 203). The concept of disavowal may prove to be highly productive for those studying environmental communications and levels of engagement.

⁴ Such an argument towards a theory of environmental anxiety and its relation to communications is the subject of the PhD project of which this talk comes out of; it is needless to say, part of a much larger discussion.

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Beasts, Burgers, and Hummers: Meat and the Crisis of Masculinity in Contemporary Television Advertisements

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Abstract

This paper examines three recent television advertisements that symbolically link meat not only with masculinity, but specifically with the “crisis in masculinity.” Using an ecofeminist lens, I engage in an intersectional, poststructuralist analysis of these ads to demonstrate how they articulate the eating of meat with primitive masculinities as a response to perceived threats to hegemonic masculinity. These ads demonstrate that scholars interested in the status of masculinity must pay attention to the “threats” to masculinity posed by environmental and animal rights movements, and that scholars interested in environmental movements must pay attention to the role of masculinity in resisting moves towards more sustainable systems.

Meat, specifically red meat and beef in particular, has long been associated with masculinity in Anglo-America and western Europe (Adams, 2000; Rifkin, 1993; Sobal, 2005). From literature to everyday speech, from art to advertising, the articulation of hegemonic masculinity with the consumption of red meat is pervasive (Adams; Heinz & Lee, 1998). It comes as no surprise, therefore, that 2006 and 2007 offered television viewers a host of advertisements linking meat, beef specifically, with masculinity. Burger King, Del Taco, Hummer (GM), Jack in the Box, Quiznos, TGI Fridays, and others played on the gendering of red meat, and bloggers called attention to their antifeminist, antivegetarian, and (in the case of the Hummer ad) antienvironmental messages (e.g., Rubenstein, 2006; Stevenson, 2006). These ads articulate the oppositions of men’s versus women’s food, meat versus vegetables, and meat versus tofu to trivialize and oppose contemporary movements toward less meat-centered diets, diets motivated in part by concerns over animal rights and environmental sustainability.

The gendering of meat and the involvement of sexuality, race, ethnicity, and class in such gendering (Adams, 2000) continue in the contemporary context. However, in three ads aired in 2006 and 2007 meat consumption is specifically linked and constructed as a response to a presumed “crisis in masculinity.” In these commercials the eating of beef is not simply coded as a masculine activity; it (or other, substitute actions that are also environmentally destructive) is specifically coded as a means of restoring hegemonic masculinity (Hanke, 1998) in the face of threats to its

continued dominance. By understanding these ads as a response to a perceived crisis in masculinity and by paying attention to the role of intersectionality (the interplay of multiple lines of domination), new insights can be achieved concerning the contemporary state of masculinity, the “crisis” therein, and the role of environmental and animal rights movements in constituting the crisis.

These three ads not only involve the use of meat’s gendered symbolism to “revitalize” hegemonic masculinity; an analysis of the ads using the frame of the crisis in masculinity makes apparent important connections between masculinity and contemporary environmental movements. Understanding the rhetorical dynamics faced by environmental and animal rights movements necessitates attention to meat’s gendered symbolism and the oppositional articulations between the crisis in masculinity and those movements. Similarly, an understanding of the position of feminism in contemporary culture necessitates attention to the symbolism of meat and the roles of environmental and animal rights movements in the rhetorical construction of the “threats” constituting the crisis in masculinity. These ads constitute environmentalism as a threat to hegemonic masculinity; the backlash against feminism also involves a backlash against environmentalism.

Intersectionality and Ecofeminism

Since much of the conceptual and analytic groundwork for the meat-masculinity linkage was developed, a significant development in

critical/cultural studies has been a focus on intersectionality—the ways in which multiple lines of oppression (e.g., race, gender, and class) operate in conjunction. More radically, intersectionality reveals the very categories of domination and subordination (which also include nationality, ethnicity, sexuality, and ability) as mutually constitutive, pointing to an interdependence between and lack of any firm foundation for such categories (Ashcraft & Flores, 2000; Bederman, 1995). Ecofeminism, among other forms of radical feminist theory, was an important contributor to this development, adding a general understanding of mutually-supportive lines of oppression as well as a specific focus on the ways gender, race, class, and other structures of domination are intertwined with the human domination of the other-than-human world (Adams, 2000; Gaard, 2002; Rogers & Schutten, 2004). In addition, critical analyses of the crisis in USAmerican masculinity (in contemporary times as well as circa 1900) have also achieved sharper insights into the nature and operation of the crisis by applying a poststructuralist, intersectional critical lens (Ashcraft & Flores; Bederman; Robinson, 2000; Rogers, 2007).

Using the literature on the crisis in masculinity as a guide, I engage in an intersectional, ecofeminist analysis of three advertisements that link meat to the crisis in masculinity—with the absence of meat as its cause and/or the consumption of meat as its resolution. After reviewing relevant literature on the crisis in masculinity, Del Taco's "Feed the Beast," Hummer's "Tofu," and Burger King's "Manthem" will each be analyzed (see Table 1). In addition to demonstrating the importance of intersectional analysis in understanding systems of oppression, these three analyses highlight the importance of these interconnections for feminist, animal rights, and environmental movements.

The Crisis in Masculinity

The crisis in masculinity, both historically and in post-1960s USAmerica, has been the subject of several analyses. Bederman (1995), for example, analyzes the crisis of middle-class Anglo-American masculinity circa 1900, identifying its sources in shifting patterns of work, threats from Others (women, working class, and racial minorities), and tensions over masculinity as physical strength versus self-mastery. Whatever the origins of the crisis, "working class and immigrant men...seemed to possess a virility and vitality which decadent white middle-class men had lost" (Bederman, p. 14). Similarly, many analyses of the contemporary crisis

in Euro-American masculinity point to shifts in work and economics, such as Faludi's (1999) focus on the loss of "utilitarian masculinity," which "required that a man wrest something out of the raw materials of the physical world" (p. 85) and that his work be "critical to society" (p. 86). Not only blue collar but also white collar masculinity is under siege by the feminization of (male) professionals. Ashcraft and Flores (2000) write, "whereas corporations have long supplied an institutional anchor for white, middle-class masculinity" (p. 23), "contemporary discourse casts suspicion on the white collar, as well as the notion that a man is defined by his professional achievements and material possessions" (p. 22).

Central to the crisis are a series of tensions or contradictions characterizing Western masculinities: physical strength versus intellectual capacity, sexual virility versus restraint, and blue versus white collar. Bederman (1995) focuses on the tension between civilized and primitive masculinities. The superiority of Anglo-American masculinity was predicated on the deployment of a civilized masculinity (based on self-mastery and intellectual capacity) over and against the primitive masculinity (based on bodily strength, sexual virility, and a lack of moral control) of racialized Others. Civilized masculinity, however, was also seen as feminizing middle-class white men, threatening traditional signs of male superiority such as physical strength and sexual virility, and questioning the inferiority of racial and working class Others. Bourgeois men therefore desired what "primitive" males were presumed to possess: strength and virility. Hence, Bederman notes a decline in civilized manliness and a rise in primitive masculinity circa 1900, although both models remained in circulation throughout the twentieth century. Bederman argues that the contradictions between these models of masculinity were not resolved or necessarily experienced as contradictions—both primitive and civilized masculinity were deployed in support of the hegemony of men over women, the bourgeois over the working class, and whites over immigrants and colonized peoples.

Ashcraft and Flores (2000) argue that tensions identified by Bederman remain in play one hundred years later in the contemporary crisis of white collar masculinity. Focusing on discourse that "mourns the imminent collapse of the corporate man, over-civilized and emasculated by allied obligations to work and to women" (p. 2), they demonstrate how both civilized and primitive masculine performances are deployed to maintain an elastic and mobile hegemonic masculinity. While the underlying

tensions involved in such a “civilized/primitive” masculinity are unresolved, this lack does not necessarily imply a failure of hegemonic masculinity; “there is ample evidence to suggest that white and male power reproduces itself through cycles of crisis and resolution” (Robinson, 2000, p. 86).

The narrative structure often used to articulate the current crisis establishes a basis for identifying parallels between the discourse of the crisis and contemporary “texts of meat” (Adams, 2000). The narrative is grounded in a period of (mythical) gender stability most commonly represented as “the 1950s.” Beginning in the 1960s, several factors eroded the stability, clarity, and harmony of the established gender configuration and specifically threatened the identity, social role, and prestige of (white) men. First, the women’s movement challenged traditional gender roles and promoted women’s entry into male-only realms. More broadly, a range of related movements (civil rights, gay rights, antiwar) challenged the validity of white male privilege (Faludi, 1999; Jhally & Katz, 1999). Second, economic changes eroded the basis for (white) male identity. The guarantee of a good income and job security were weakened as a result of globalization and corporate strategies such as downsizing, outsourcing, and automation. Industrial production gave way to an increasingly information- and service-based economy. The loss of blue collar work, the rise of pink collar work, and the perceived feminization of white collar work parallel a perceived loss of men’s status at home. The overall result is emasculation and feminization, with men feeling disempowered and angry (Faludi). Various versions of the narrative offer different resolutions to the crisis, including a return to primitive masculinities, homosocial configurations, and scapegoating women, minorities, and “soft men” (Ashcraft & Flores, 2000; Bederman, 1995; Faludi). The three ads analyzed below articulate many of these perceived causes and responses to the crisis.

“Feeding the Beast” and the Crisis of Utilitarian Masculinity

Del Taco’s television commercial “Feed the Beast” features a twenty-something white male and occurs in a domestic setting, a living room coded as middle class through its furniture and other décor. The ad opens with the man emptying a large cardboard box containing the parts of a prefabricated but unassembled piece of furniture. The box is labeled *förn*; the Germanic-looking (non)word resembles the English word *furniture* and is a possible reference to the Swedish retail giant Ikea.

The man is shown ineffectively sorting pieces of laminated particle board and bags full of hardware as well as examining the small wrench included for the assembly process. In apparent frustration he turns to the instructions, which viewers can see are labeled *dork*. This could be a nonliteral reference to a Scandinavian or Germanic language (again cueing Ikea), and/or an “inside” joke—the man who cannot assemble this furniture is indeed a “dork” in the Anglo-American sense.

At this point in the ad, several gendered cultural discourses are already cued. Ikea and its ilk represent feminized performances of shopping and home decorating, elements often referenced in contemporary discourses of the crisis in masculinity. For example, in the 1999 film *Fight Club*, a Hollywood blockbuster expressing the crisis in masculinity of the 1990s, the feminization of the narrator is highlighted by his participation in shopping through mail order catalogs and his attention to home décor; he is specifically shown looking through an Ikea catalog (the novel on which the film is based also contains references such as “Ikea boy” and “slave to Ikea”). Shopping and decorating as practices, and materialism as a lifestyle and basis for identity, are coded as feminine; the participation of men in these activities evidences their feminization by larger cultural forces (Ashcraft & Flores, 2000). The domestic setting of the ad (a well-decorated home) implies that this man’s actions occur in a feminine space. More specifically, his attempt at pseudocarpentry does not occur in a garage or workshop (masculine space), but in a living room (feminine space) (cf. Gelber, 1997; Hanke, 1998). The feminine coding of the physical, cultural, and relational settings of the ad is further manifested by the man’s female partner walking into the room, briefly looking on as he struggles to assemble the furniture, shrugging her shoulders, and walking away. This presence of an observing/judging female partner possibly cues discourses of “henpecked husbands” and the “honeydew syndrome (honey do this, honey do that)” (Gelber, p. 99).

The ad also invokes the image of the contemporary male who, unlike previous generations, is incapable of producing meaningful objects from the materials of the world—even with directions and prefabricated materials. The narrative presents a crisis of utilitarian manhood (Faludi, 1999) along with an indication of the feminine origin of his failure—presumably (following US American cultural logic, marketing strategies, and narrative forms), the woman initiated the purchase of the furniture to contribute to a proper domestic space. This man is

indeed a “dork”—he is both roped into feminized activities by his female partner and incapable of performing what has been asked of him or what he agreed to do. This crisis of utilitarian masculinity reaches a crescendo when the small wrench necessary for assembling the furniture falls out of his mouth. As he watches the wrench fall down a heater vent, he loses his hold on the semi-assembled furniture, which falls and knocks over a lamp, further illustrating his incompetence.

At this point, the man appears with a powered nail gun, wielding it above his head like a pistol, and violently attacks the furniture, yelling while “assembling” it in a brutal, unplanned way. The violent performance restores, in some sense, his hegemonic masculinity. He may not have demonstrated competency in his masculine task, but he has dominated the furniture and all that it may represent: his failure at utilitarian masculinity; consumerism, materialism and home decoration; and/or the feminizing forces of his female partner and domesticity. The primitive masculinity that this performance enacts is named by the narration that intercedes at this point: “Dude, if you’re freaking out on the furniture, maybe it’s a sign that you need to feed the beast.... The new shredded beef combo burrito.... It’s the only burrito beefy enough to feed the beast.” “The beast” is a common trope signifying “primitive masculinity” in its positive and negative forms. This ad uses both “the beast” and another, closely-affiliated trope—the eating of meat—to cue the fantasy of primitive masculinity as a response to the emasculation (inability to produce useful objects through physical labor) and feminization (domestication) of the ad’s protagonist.

The tropes of “the beast” and of meat consumption operate here in relation to another contemporary symbol of (white, middle class, suburban) masculinity: power tools. The combination of the assembly of the furniture as a kind of faux carpentry and the use of power tools to “finish” the job cues a set of cultural narratives. The development of carpentry and home improvement projects as leisure activities as opposed to “work” was grounded in the crisis of masculinity circa 1900 and continued throughout the twentieth century (Gelber, 1997). Urbanization, professionalization, and the rise of the white collar challenged existing definitions of masculinity. One response was to symbolically restore “utilitarian manhood” through the creation of workshops in the home and “do-it-yourself” tasks (Gelber). The ad cues intertextual references to power tools, to the “handy man” as part of fulfilling the role of “man of the house” (Gelber), and to the

representation of a “mock macho” image of contemporary masculinity (Hanke, 1998). While this parodic “mock macho” mode encourages laughter at the expense of hegemonic masculine performances, Hanke argues that “mock macho” discourse involves “the male power bloc tell[ing] the truth about themselves and den[ying] any ability to do anything about it” (p. 77), ultimately maintaining hegemonic masculinity.

As traditional forms of hegemonic masculinity are “endangered by the bureaucratic organization of corporate work...taking up power tools and outdoor barbecues” become symbolic means to reassert a form of hegemonic masculinity, however incompetently (Hanke, 1998, p. 79). The Del Taco ad reproduces a “mock macho” parodic frame, as the man turns to power tools and an “over-the-top” performance of violent masculinity to assemble the furniture, and the end result is catastrophe—the couple’s purchase is ruined and the man’s self-esteem is threatened. However, we see no questioning of the man’s attachment to hegemonic forms of masculinity. He may be incompetent, but he is still a beast in need of, and at least temporarily satiated by, meat. The ad is produced from and directed toward a masculine subject position in need of bolstering and reassurance. It highlights women/femininity as a cause of the crisis in masculinity and, while acknowledging changes in men’s roles, ultimately does not question the “naturalness” of hegemonic masculine performances.

After the narration encouraging the man to “feed the beast,” he eats a burrito while showing the results of his labor to his partner. The shelf unit he constructed lacks whatever functional and aesthetic qualities it might have had. He begins to say, “It’s...” just as the unit partially detaches from the wall on which it hangs, causing one end to drop several inches. The woman then finishes his statement: “...going to your mother’s.” Resigned to his failure (and contented by his beefy burrito), he submits: “Okay.” Significantly, the beefy burrito does not resolve the crisis by restoring the form of masculinity at which he failed, but by providing symbolic compensation, a fantasy performance of violent, primitive masculinity to balance out his failure to successfully perform other kinds of masculine scripts (utilitarian, blue collar masculinity). Consumerism still rules, the home is still controlled by the woman (as signified by her decision to dispose of the furniture), and he remains incapable of validating his masculinity in any way other than by eating the flesh of a cow. Nevertheless, the ad implies that beef consumption restores his intrinsically masculine

nature as a “beast” in spite of any and all efforts to “civilize” (feminize) him.

Tofu, Rabbit Food, and the Crisis in Masculinity

Of the recent ads linking meat and masculinity, perhaps none generated as much outcry as GM’s Hummer H3 ad titled “Tofu.” This ad combines two symbols loaded with ideological significance in relation to masculinity, environmentalism, and vegetarianism. Hummers are identified with the U.S. military and other figures of hegemonic masculinity, such as Arnold Schwarzenegger. While the Hummer-masculinity articulation is ever-present, it has in some ways been overshadowed by the Hummer’s role as a metonym for SUVs, which in turn serve as metonym for USAmericans’ love affair with the automobile and off-highway vehicle recreation as well as addiction to petroleum. The environmental symbolism of Hummers has also been enhanced due to publicity surrounding the involvement of the Earth Liberation Front in the destruction of more than 20 Hummers and other SUVs at a California dealership (Madigan, 2003).

In contrast, tofu is a prominent metonym for vegetarianism, which is, in turn, symbolized as feminine. Tofu is an alternative to meat, and insofar as the consumption of meat is linked to masculinity, the consumption of tofu is coded as emasculating and feminizing. This feminization is due to tofu’s role in a vegetarian diet as well as its role as a metonym—tofu stands in for everything in a vegetarian diet, such as vegetables, fruits, nuts, and grains. In turn, it stands in for identities, lifestyles, and politics generally associated with vegetarianism, such as hippies, “granolas,” environmentalism, pacifism, feminism, and animal rights (Gaard, 2002). In this sense, and consistent with the dualistic structures upon which dominant Western ideologies are based (Gaard), tofu is not just *nonmeat*, it is *antimeat*. Recently some social critics have suggested that tofu and other soy products are inherently feminizing. For example, Jim Rutz (2006) claims that medical research shows that female hormones in soy will not only make girls reach menarche years earlier than normal, but result in delayed puberty, decreases in testosterone, testicular atrophy, smaller penises, and increasing homosexuality in boys. According to commentators such as Rutz, cultural shifts away from meat and toward soy products do not simply present a symbolic challenge to individual men’s masculinity (cf. Sobal, 2005), but present a broad-based cultural threat because such dietary shifts are biologically feminizing. Tofu is, therefore, not just feminine, but antimasculine and linked to the crisis in masculinity.

Against the symbolic backdrop of Hummers, tofu, and the crisis in masculinity, GM offers the following narrative in its “Tofu” ad. Two twenty-something white men are in a grocery store checkout line. The first guy watches while the female checker scans a large item labeled “tofu” (the package also includes, in smaller letters, the word “organic”). Other visible items being purchased by the first man include sprouts, an artichoke, carrots and radishes with abundant greens still attached, a container labeled “soy,” and a bottle of (Odwalla) juice. The second guy places large packages of meat and charcoal on the checkout belt while the first guy’s stuff is being scanned. After seeing the tofu, he looks at first guy, and they exchange a slight smile/smirk. At this point, the first customer looks down and away in an indication of subordination or shame. He then looks to the checkout belt to see what the second guy is buying: two large packages of intact rib sections (apparently beef), two more large packages of beef (steaks or some other form), a large bag of charcoal, and two large bottles of barbeque sauce.

The symbolic dynamics here are not reducible to tofu versus meat. First, the other products being purchased along with the tofu are symbolically important: not simply veggies, but veggies presented with prominent greens. The carrots in particular are significant, both for their abundant greens and for their direct association with another label often applied to veggies and “women’s food”: “rabbit food” (Sobal, 2005). Perhaps to enhance the visual effect of the greens and the veggies, they are not shown in plastic bags but sit bare on the checkout belt. Even if the absence of produce bags is for visual effect, not using plastic bags potentially signifies environmentalism. Along similar lines, labeling the tofu “organic” heightens many associations, with organic foods consumed due to concerns over individual, human, and/or environmental health. Second, the other customer is not only purchasing large chunks of cow flesh—he is also buying charcoal and barbeque sauce. Here the association of not simply meat, but the grilling of meat outdoors by men, adds to the second customer’s greater embodiment of primitive, hegemonic masculinity, of the need for men to escape the domestic space (inside the home) for a more masculine space (backyard, tailgate party, or other outdoor setting) (Hanke, 1998; Rifkin, 1993).

This ad’s narrative articulates a crisis in masculinity. Tofu symbolizes feminization; the presence of the meat, combined with obvious indications of shame and inferiority, clarifies that it also symbolizes emasculation. Why the first customer

is buying tofu and veggies is not made clear; presumably, it could be due to animal rights, environmental ethics, or health reasons. Regardless of the reason, the effect is emasculation, the inability to claim the identity of “real man,” and public humiliation. Another possible reason for the first man’s purchases is the feminization of men’s diet as a result of marriage. Sobal (2005) explores how conflict and negotiation over diet in the context of marriage involves conflict and/or negotiation over gender roles and identities, with heterosexual men often perceiving their female domestic partners as inhibiting their preferred diet of meat in favor of vegetables and other nonmeat foods. Therefore, another possible reason for the man’s emasculating diet is domesticity, the “taming” of masculinity by female partners. This dynamic is consistent with the discourses of the crisis in masculinity, wherein women and their “civilizing” and “moralizing” influences are blamed for men’s emasculation (Ashcraft & Flores, 2000; Bederman, 1995).

The H3 ad not only cues anxieties over the crisis in masculinity through the symbols of meat and tofu, but also offers a resolution to the crisis. As the first (tofu-buying) customer avoids eye contact with the second (meat-buying) one, his eyes fall on a magazine ad for a Hummer. At this point, tofu-guy hurriedly leaves the store. He slams his empty shopping cart into the others; while returning the cart to its designated place indicates that he is still “civilized,” this is in contrast to the needlessly forceful manner with which he returns it. From this point on in the ad, driving rock music is heard. He returns to his car (a midsize sedan: plain and practical) and leaves the grocery store parking lot with a screech of tires. Similarly, when he arrives at a Hummer dealership, he comes to an abrupt stop with another screech. His masculinity has been challenged and he responds, in part, by driving aggressively.

After purchasing the H3, tofu-guy places his groceries in the back of the Hummer and drives off the lot in his new vehicle. At this point, the message is clear: If your masculinity is threatened, a Hummer will restore it. But the ad offers some final complexities. Originally, the ad presented the phrase “Restore Your Manhood” in large letters across the screen. However, in response to criticisms received, GM changed the ad to read “Restore the Balance” (Stevenson, 2006). The final shot of the ad shows tofu-guy taking a bite of a carrot (with the greens still attached) as he drives his new Hummer. As an ad for a car, not food, it is not surprising that this ad does not suggest that “manhood” is best restored by eating red meat. Instead, the ad offers its (male) viewers a

“balance”: The apparently necessary emasculation involved in a vegetarian diet should not be rejected, but counterbalanced, “cancelled out,” by driving a Hummer, a vehicle epitomizing hegemonic masculinity. Lack of meat is a manifestation of the crisis, but its resolution lies not in meat but an SUV.

This dynamic, in which meat manifests the crisis but is not offered as a resolution thereof, takes on added significance if vegetarian and environmental issues are highlighted. One reason to consume tofu and veggies as opposed to meat is environmental sustainability: The production of beef in particular is both inefficient and a cause of substantial environmental degradation (Heinz & Lee, 1998; Rifkin, 1993). Yet this ad recommends that one’s (potentially) environmentally-motivated avoidance of meat be counterbalanced by the purchase of a vehicle that simultaneously symbolizes and materializes environmental destruction. Therefore, this ad cues a connection between the crisis of masculinity and the symbolic emasculation/feminization involved in being environmentally responsible, be it through the consumption of food or of vehicles and petroleum. The “balance” that this ad restores is the dominance of hegemonic masculinity—not an environmental balance, as any benefits achieved through vegetarian dietary choices are “balanced” (counteracted) by the operation of the Hummer. At the end of the ad, the “restored” male is eating “rabbit food” but driving one of the most inefficient vehicles available.

Feminism, Class, and “Primitive” Masculinity

Burger King’s commercial “Manthem” celebrates meat and manliness, and is presented as a parody of Helen Reddy’s 1972 feminist anthem “I Am Woman.” However, this parody is not simply a trivialization of the women’s movement and a reiteration of the meat-masculinity connection—it articulates the contemporary crisis in masculinity and relies on the symbolism of meat as well as class codes to articulate a resolution to the crisis.

“Manthem” opens with a well-dressed young woman and unshaven young white man being served their entrées at a restaurant clearly coded as upper class. It is dominated by white space: walls, floors, table cloths, cloth napkins, plates, and servers’ aprons are all white and there are minimal decorations, such as a single flower in a small vase on each table. The camera focuses on a plate, which has a small but aesthetically-presented dish on it (two tiny piles of food and a small amount of sauce), being set in front of the man by a well-mannered, effeminate white male waiter.

The man who has just been served looks down at the sparse food on his plate and starts to sing the ad's parody of "I am Woman": "I am man, hear me roar. In numbers too big to ignore." At this point the man rises from the table and continues, "And I'm way too hungry to settle for chick food." As he walks through the restaurant, he throws his white cloth napkin over his shoulder in a rejection of what it symbolizes: taste, class, civilization, and etiquette. He then grabs a piece of food from a plate carried by a passing waiter and at the phrase "chick food" throws this over his shoulder as well, symbolizing that it is effete, inadequate. His female companion can be seen in the background with head bowed, hand to her forehead in embarrassment at her companion's crass behavior. The woman's judgments about her male partner's "roaring" are clear.

The man throws open the restaurant's doors, revealing a city street in a business district, and continues to sing: "Cuz my stomach's starting to growl, and I'm going on the prowl." Prowling is associated with predatory animals or human thieves, the nonhuman animals being more relevant here because of their link to hunting as well as the trope (utilized by Del Taco) of men as "beasts" and the song's reference to roaring. Wild animals and hunting contrast starkly with the setting of the ad: upscale restaurant, city street, and business district. Urbanization is a key element of the crisis in masculinity—the move to the city (and accompanying changes in work and family) is often identified as a civilizing/feminizing force and a central factor in the discourse of the crisis in masculinity (Bederman, 1995; Rogers, 2007).

The man heads toward a Burger King as he sings the next line, "For a Texas Double Whopper, man that's good." A black man in front of the Burger King joins the singing, raising the whopper he holds in his hand above his head in a sign of victory and enthusiasm. Four men exit the Burger King: one is apparently Asian, dressed in business attire; the other three (apparently white) are dressed in more working class or casual styles (e.g., "wife-beater" undershirt, baseball cap, and jeans). The four men walk down the sidewalk, whoppers in hand, singing "Oh yes, I'm a guy. I'll admit I've been fed quiche." The black man who began singing earlier runs to join the group. Two young, casually-dressed white men, each of whom is shown eating with a woman at a sidewalk café, also react to the singers marching down the sidewalk: One pushes his food away from him in sync with the singing of the word "quiche" and another leaves his table to join the march.

This segment continues to play off the coding of certain foods as not just upper class, but as specifically feminine. The invocation of quiche references "women's food," specifically the 1980s backlash book and phrase "real men don't eat quiche." The narrative is clear: Women have emasculated men through the ingredients as well as the preparatory and presentational style of their preferred food. That this emasculation has to some degree been forced upon unwilling men is indicated by the men's choice to abandon their female partners as well as the food they are sharing with them when offered a better option: a food that features red meat, is produced in a low-brow establishment (a fast-food chain), and is explicitly coded as working class and masculine through its labeling as a "Texas double whopper" (cueing images of cowboys and cattle). Significantly, these men do not just reject their female partners' food—they abandon women's company in favor of a homosocial gathering of men.

The song continues, "Wave tofu bye-bye. Now it's for whopper beef I reach." In this line, the binary codes in operation are not simply masculine versus feminine and blue collar versus white collar but now explicitly include meat versus nonmeat. As this line is sung, other men begin hopping over metal barriers (the kind used for crowd control) to join the march. Most of these men are young, white, and casually dressed. Significantly, one young man comes onto the sidewalk from a storefront, clothed in a hairdresser's cape and a cosmetic mask/treatment on his face. Here the ad cues yet another threat to traditional forms of hegemonic masculinity: metrosexuality (Sender, 2006). The drive by female partners and the cosmetics industry to get men to pay more attention to their physical appearance (dress, hair, skin), consuming products and services conventionally associated with women (and gay men), represents another facet of the contemporary crisis in masculinity. This man's choice to leave the salon and join the marchers represents another rejection of the feminizing forces bombarding men from multiple directions.

The next line, "I will eat this meat," is followed by its logical (following the hegemonic articulation of meat and masculinity) consequent: "til my innie turns into an outtie." The leader of the marchers raises his whopper-holding hand to emphasize the empowerment signified by a man's "innie" turning into an "outtie"—that is, this common reference to the configuration of one's belly button is used as a metaphor for female becoming male. This line specifically evokes the long-standing association of eating red meat with male virility (Adams, 2000;

Rifkin, 1993), implying that the eating of red meat allows one to grow a penis. An “outtie” signifies the phallus, the symbol of male strength, power, and prestige that will be restored by eating meat.

The class and occupation codes so prevalent in this ad, codes closely linked to the ad’s preferred definition of masculinity (primitive, blue collar, hegemonic), manifest themselves visually in conjunction with the next line of the song, “I am starved.” The marchers walk by three white men striking a common pose: They flex their upper arm muscles and put their whoppers toward their mouths in a choreographed movement that combines a classic performance of masculine physical strength and the eating of a whopper. While one of these three men is dressed in business attire (slacks, white shirt, tie), the other two are more casual (jeans and t-shirts), pointing out that while class is key, *all* men have a desire to return to “real manhood”—defined by the rejection of small portions, bourgeois aesthetics, quiche, and tofu, as well as by eating meat and performing acts of physical strength.

This emphasis on blue collar performances and physical strength—the loss of which are key elements in the symptomatology of the crisis of masculinity—continues in the next scene, featuring two white men holding whoppers. These men are wearing hardhats and sleeveless shirts, have tanned skin and well-toned muscles, and have leather work gloves tucked into their belts—they are construction workers, icons of the blue collar. One of the men also has a large tattoo visible on his upper arm, further signifying “primitive” masculinity and a rejection of bourgeois respectability. One of the men punches the other in the stomach, though there is no sign they are fighting. Again, the ad cues the popular book and film *Fight Club*, in which men cooperatively, voluntarily, and in a homosocial setting inflict physical damage on each other with their bare fists. “Primitive” masculine performances involving risk, pain, and the infliction and reception of unarmed physical violence are one recurring response to the crisis in masculinity.

The ad returns to the crowd of protestors marching down an empty elevated freeway in the midst of the city, carrying signs reading “I Am Man” and “Eat This Meat.” A minivan drives down the freeway, skidding to a stop in front of the marchers. A pudgy, bespectacled, middle-aged, polo-wearing white man gets out, takes a whopper handed to him by a marcher, smiles, and triumphantly lifts the whopper above his head while other marchers respond with raised fists. Here, as the ad nears its climax, the main “enemy” has been “named” in the

form of a minivan: suburban, thirty- to forty-something, middle-class, familial, and feminized domestication. The minivan is a kind of anti-Hummer, representing family, responsibility, practicality, domesticity, and femininity in contrast to the Hummer’s associations with individualism, adventure, excess, and hegemonic masculinity.

The marchers then collectively lift the minivan and toss it over the edge of the freeway, where it falls into a large yellow dump truck on the street below. The ad then cuts to a shot of an older, heavily-muscled man wearing tights and with a shaved head (a classic circus muscle man) who is harnessed into a set of heavy chains connected to the dump truck. In front of him stands a woman holding a shovel with a whopper on it; she is dressed in pink and appears to be taunting him with the reward he cannot quite reach. Here the ad highlights the theme of women controlling men through their “manly” desires. While pulling the truck does demonstrate “primitive” aspects of hegemonic masculinity in its portrayal of physical strength, this act is framed as slavery due to the woman’s control of the man’s desired food and through the connotations of being in chains. As with the beginning of the ad, in which a man is trapped in a feminine, upper-class environment that offers only “chick food,” this scene emphasizes women’s negative role in the contemporary crisis in masculinity. The homosocial quality of the march, as well as its embracing of primitive and blue collar masculinities, serves as a counterbalance to the men’s enslavement by women, fashion, class, and profession. Finally, a deep-voiced male narrator closes the ad: “Eat like a man, man.”

“Manthem” contains almost all of the major themes identified in analyses of the crisis of masculinity. It identifies femininity, family, metrosexuality (fashion), urbanization, white collar work, middle- and upper-class aesthetics, “women’s food” (tofu, quiche, and gourmet food), and women’s control over men as symptoms and/or causes of a crisis in masculinity. It also clearly identifies male homosociality, a blue collar aesthetic, physical strength, utilitarian manhood, the ability to inflict and take pain, the eating of meat, and men taking control over their dining and other habits as central to restoring a “primitive” hegemonic masculinity. While the ad’s use of Helen Reddy’s “I Am Woman” and other references to the women’s movement clearly identifies feminism as a source of men’s emasculation, the ad’s solution is not simply a rejection of feminism but a rejection of what it is understood to have ushered in: men’s subordination to women’s values and tastes. The consumption of

red meat, a whopper specifically, is articulated with symbolic meanings of “resistance” and the restoration of men’s “authentic” masculinity. Eating beef is both rebellious and a reclaiming of privilege lost.

Backlash Discourse and Environmental Movements

One commonly-identified source of the contemporary crisis in masculinity are important social movements from the 1960s and 1970s: the civil rights, women’s, gay rights, and antiwar movements. Each of these movements challenges the supremacy of the dominant male identity: hegemonic masculinity, defined as white, heterosexual, economically productive, socially valued, and both dominant and dominating (Faludi, 1999; Hanke, 1998; Jhalley & Katz, 1999). Few commentators, however, add—let alone highlight—what seems obvious: the environmental movement (an exception being Connell, 1990). Many proenvironmental ideologies, goals, and practices challenge the privilege and ideological position of the white, straight, dominating male (Connell).

Each of the ads analyzed above is obviously about masculinity, and feminist critiques are an appropriate response to such backlash rhetoric. But the references to the crisis in masculinity each contains are not simply mechanisms to sell products or, more generally, to perpetuate male privilege. These ads are all antienvironmental. Only the Hummer ad is generally interpreted and responded to as such due to the Hummer’s environmental, as well as masculinist, symbolism, but the Burger King and Del Taco ads are not just antifeminist ads—they are also deeply antienvironmental and anti-animal rights. As Adams (2000) points out, any time meat is consumed or symbolized, the “absent referent” is the suffering, exploitation, and slaughter of animals, as well as the interconnection between not just the oppression of women and animals, but also systems of power structured around the dualisms of race, ethnicity, class, sexuality, and nature/culture. These ads not only support systems of privilege and oppression structured along gendered lines, they also support the abuse of animals and natural resources, the degradation of ecosystems, and racist economic

systems. A primary dynamic used to legitimate and normalize such practices is gender, the crisis in masculinity specifically.

Vegetarianism, whether motivated by concerns over individual human health, environmental sustainability, or animal rights, is a threat to hegemonic masculinity (cf. Baker, Thompson, & Palmer-Barnes, 2002; Heinz & Lee, 1998). Eating meat not only manifests class privilege and male privilege, and is not only used to symbolize virility and primitive masculinity—its association with hunting and the outdoors, as well as the obvious (though generally hidden) domination of animals involved in its procurement or production, make the eating of meat a central symbol of human control over nature (Baker et al.), of “power-over” (Warren, 2000) and the “master identity” (Plumwood, 1993).

Recognizing the mutually-constitutive relationships between multiple forms of oppression is now a well-established critical principle. Ecofeminism introduced the connection between the oppression of women and the exploitation of animals and nature, and broadened that to include race, ethnicity, sexuality, class, and other lines of difference (Gaard, 2002). Poststructuralist influences in critical/cultural studies similarly led to a strong emphasis on intersectional analysis in understanding systems of oppression and resistance (e.g., Bederman, 1995). But aside from ecofeminist and environmental justice work, little attention is paid to human/nonhuman as one of these lines of difference whose role in the larger configuration must be interrogated. Investigations of the crisis in masculinity will be limited until it is understood that the environmental and animal rights movements stand alongside the gay rights, civil rights, women’s rights, and antiwar movements as (real and perceived) threats to hegemonic masculinity. Similarly, an appreciation of the barriers faced by the environmental and animal rights movements will also be incomplete without an understanding of the role of hegemonic masculinity in maintaining and defending the structures, ideologies, and practices those movements seek to change. The discourses of the backlash and the crisis in masculinity are not only about gender and feminism—they are very much about the ongoing domination of nature.

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Appendix

Table 1: Television Advertisements Analyzed

Company	Ad Title	Airdate*	URL	Date Retrieved
Burger King	“Manthem”	July 2006	http://www.bk.com	Aug. 6, 2006
Del Taco	“Feed the Beast”	Apr. 2007	http://feedthebeast.deltaco.com/	May 18, 2007
Hummer (GM)	“Tofu”	Aug. 2006	http://www.hummer.com/ hummerjsp/tv_popups.jsp? spot=tofu	May 18, 2007

* Airdates are based on my observations and/or published information; actual airdates may have been over a longer period.

Public Participation in Environmental Planning and Decision Making by Tribal Governments: a Case Study of the Citizen Potawatomi Nation

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Abstract

Environmental laws and policies, including their requirements for public participation, are based on western European cultural constructs and whether these translate effectively to culturally, linguistically, and historically unique sovereign nations within the United States has yet to be determined. I conducted a focus group of 6 tribal administrators from the Citizen Potawatomi Nation to evaluate participation in environmental planning and decision making by individual tribal members and by tribal administrators at the state and federal level. An evaluation metric based on western concepts of participation, particularly access, standing, and influence found individual participation was satisfactory to participants, but that participation at the local, state, and federal level was not.

Introduction

Public participation is a vital component of the theoretical foundations of democracy. The minimum legal standards for public participation in environmental planning and decision making at the federal level is outlined by the National Environmental Policy Act (1970). Since its inception, the realization of the role of the public in environmental planning and conflict resolution is unclear and largely considered lacking (Depoe and Delicath, 2004). As scholars and practitioners gain a better understanding of the cultural, social, and economic influences on and constraints to public participation, issues of environmental justice and racism surface. Environmental laws and policies, including their requirements for public participation, are based on western European cultural constructs and whether these translate effectively to culturally, linguistically, and historically unique sovereign nations within the United States has yet to be determined.

Understanding public participation in environmental planning and decision making by tribal governments will require a multidimensional investigation. Public participation in tribal governments occurs at two discernable levels. One, individuals participate within the tribe to influence decisions made by tribal officials within their jurisdictional bounds. Second, tribal leaders/administrators participate at the local, state, and federal level to represent the needs and interests of tribal members as a collective stakeholder. As Indian nations are sovereign, the United States government is required to consult with tribal leaders on actions with foreseeable impacts within the tribe's

jurisdiction or that are likely to impact resources or areas of cultural or religious importance. For example, Secretarial Order 3206 outlines the federal-tribal relationship for endangered species issues. However, if such relationships are realized as intended by Secretarial Order 3206 or if this mandate is even acceptable from the tribal perspective is not known.

The rapidly changing economic status of many tribes and the resulting cultural changes further blurs our understanding of the tribal perspective on participation. Tribal gaming ventures have flourished in recent decades bringing an influx of prosperity. Such new found wealth has increased the number of services tribes can provide but also increases development demands on tribal lands and the need to acquire additional properties. Rapid growth and development will also result in increased dealings with local, state, and federal agencies through planning initiatives, revenue generation issues, and permits. Many tribal governments are culturally bound to manage tribal resources, both natural and non-natural (i.e., socio-economic and cultural) for future generations. Understanding the historical and cultural context for public participation by tribal governments will help increase cooperation with state and federal governments and may help tribes assess their ability to balance economic prosperity with cultural preservation.

This paper seeks to assess public participation in environmental planning and decision making via a case study of the Citizen Potawatomi Nation. As there are > 500 federally recognized American Indian tribes in the United States alone, this endeavor will surely be insufficient to fully understand the

historical and cultural context of public participation by tribal governments. However, insights gained may be useful for shaping future inquiries which are vital for improving environmental planning and decision making by native and non-native governments in the United States.

Methods

The Citizen Potawatomi Nation

The Potawatomi of Oklahoma are related to the Algonquian-speaking peoples that include the present day Potawatomi, Ottawa (Odawa), and Chippewa (Ojibway). The Potawatomi, as do the Ottawa and Chippewa, refer to themselves as the Anishnabe. The Potawatomi were settled in the Michigan area approximately 500 years ago and were an autonomous tribal entity. Early contact with Europeans began around the 1650s when French fur trappers settled around Lake Michigan (www.citizenpotawatominaton.org/Culture/History/, 2006). The Potawatomi lived in relative harmony with European settlers and eagerly adopted many technological advances brought by the settlers. Inter-marriage with the French was relatively common without effect on Potawatomi culture. Later European settlement had greater impacts on the Potawatomi, which culminated in the tribe's removal.

By 1800, tribal villages were displaced by white settlements and pushed farther and farther to the outskirts of the Potawatomi tribal estate. It was during the Removal Period of the 1830's that the Mission Band (today known as the Citizen Band) of Potawatomi was forced to leave their homelands in the Wabash River Valley of Indiana. From Indiana, the Mission Band was forced to march across four states (over 660 miles) to a new reserve in Kansas. Of the 850 Potawatomi people forced to move, more than 40 died along the way. The event is known in Potawatomi history as the "Potawatomi Trail of Death" (September-November 1838). In 1867, Mission Potawatomi members signed a treaty selling their Kansas lands in order to purchase lands in Indian Territory with the proceeds. To reinforce the new land purchase and learning from their Kansas

experience, tribal members took U.S. citizenship. From that time on, they became known as the "Citizen Potawatomi."

(www.citizenpotawatominaton.org/Culture/History/, 2006)

Today, the Citizen Potawatomi Nation is the 8th largest federally recognized tribe in the United States with approximately 26,000 tribal members. The Citizen Potawatomi Nation's government is defined by their constitution as amended in 1985 (<http://www.potawatomi.org/Government/Executive>, 2006). The Constitution provides for "separation of powers between the Citizen Potawatomi Nation Indian Council, the Executive Officers, the Business Committee, the Judicial Branches of the Tribal Government, and the Election Committee" (<http://www.potawatomi.org/Government/Executive>, 2006). Tribal jurisdiction spans 12,000 acres located in Pottawatomie County, Oklahoma "in an area bounded by the North Canadian River, the South Canadian River, the Pottawatomie-Seminole County boundary (on the east), and the Indian Meridian (on the west). Tribal land holdings are divided with approximately half held in trust by the Bureau of Indian Affairs and half that are fee simple; fee simple lands are taxed according to applicable state and federal law while trust lands are not.

Focus Group

To understand the role of public participation in environmental planning and decision making, I conducted a focus group of the Citizen Potawatomi Nation. A Focus group is a small facilitated group interview that relies upon open ended interview questions (Bloor et al., 2001). Drew et al. (2003) stated, "Focus groups are often used as part of an exploratory research protocol to identify questions of interest for further inquiry" (p. 265). As such, the Citizen Potawatomi Nation case study will serve as a pilot study for additional research in public participation by tribal governments.

I contacted the tribal Chairman at a regional council meeting to obtain permission to pursue this research. With the Chairman's permission, I contacted six individual administrators from the Citizen Potawatomi Nation via e-mail to debrief them on the intended research. An administrative assistant facilitated coordination of the meeting time, place, and invitations. Participants were given a hard copy of the confidentiality agreement, a list of discussion questions, and a letter describing the research as well as my interest in conducting this research as a tribal

member. To ensure accessibility of the focus group to participants, I arranged to conduct the focus group at the tribal headquarters on a weekday prior to a meeting that was to be attended by all participants (Bloor and Frankland, 2001). Notes were taken throughout the focus group and comments were transcribed immediately to maximize account details and accuracy (Bloor and Frankland, 2001). While participants have been identified as administrators of The Citizen Potawatomi Nation, responses are not identified by participant to maintain confidentiality. This research was approved by the Institutional Review Board of Texas A&M University (Protocol # 2006-0173).

Focus group participants were given a brief introduction on the theory of public participation in environmental planning and decision making. I encouraged participants to share their opinions and experiences as administrators and tribal members. I provided prewritten questions to serve as a discussion guideline, which were introduced and/or modified as appropriate to maintain the focus of the discussion or to elicit additional comments on related topics (Appendix 1).

I evaluated participants' responses to assess how they described participation by individual tribal members in tribal issues and participation by tribal officials at the local, state, and federal level. Participant responses were analyzed using Senecah's (2004) Trinity of Voice to evaluate how an individual's access, standing, and influence affects their ability to participate.

Results

Participation by individual tribal members

Focus group participants felt tribal member's access to tribal administrators was adequate and equitably distributed. One participant noted that they [the tribe] did not receive a lot of public comment on proposed activities. It was not clear if and to what extent individual tribal members are involved in planning activities or whether individual tribal members rely on trust of tribal administrators for planning tribal activities. Participants stated that tribal members were generally satisfied with their ability to gain access to tribal administrators and were supportive of the tribe's progress and direction. When asked why dissent was largely absent one participant responded "I think that we're doing a good job". Another participant responded "Now were not saying that we don't get complaints period,

we're talking about public comment. We're 26,000 tribal members, we're going to get complaints."

Tribal protocol for informing tribal members and community residents of proposed tribal activities or changes to services was not clearly uniform. Individual motivation appeared to be an important factor in whether or not someone sought information on such activities. Participation appeared to require direct inquiry or action on the part of the individual as noted in the following comment.

...all of our meetings are open to the tribal membership, um all the meetings of the business committee and the council are open to the tribal membership....We'll hold and post notices all the way around all our buildings that we're going to hold a meeting... they can say they don't like the building, they don't like the location, its completely open... [another participant agrees "it's all open door policy"].

Participants relied on many diverse media to contact tribal members and community residents.

Information is routinely disseminated via the tribal newspaper, The HowNiKan, the CPN website, at the annual heritage festival and family reunion, as well as, directly at tribal headquarters or when services are rendered. Individuals appeared to rely on receiving information and providing feedback via the media with which they were most comfortable.

...They can call. They have the right to contact tribal administration. We have the regional directors. We do have our regional directors to gather input from the areas [regions] and, um we have the internet, people can make comments on the internet.

However, it was unclear at what stage in the planning process information was made available to interested parties. It was also not clear if tribal ventures or changes to services resulted from direct input by interested individuals or generated from within tribal administration nor was it clear how tribal administrators were guided in their decision making and planning.

Participants were asked if there were distinct cultural guidelines for participation. One participant

remarked that the previous constitution gave undue standing and influence to a very small minority of members who controlled most of the tribe's decisions.

We are a representative democracy, we aren't a true democracy.... in '71, we had 11,000 tribal members and a quorum at council was 50, so 26 people if we made the quorum, which was difficult ...could decide virtually everything for the tribe. You could throw out all the tribal elected officials... you could decide everything and that is not inherent to our culture...

Two-thirds of tribal members do not live within the tribal jurisdiction; to better communicate with and serve the needs of these members, the Citizen Potawatomi Nation established 12 regional councils. The Citizen Potawatomi Nation administration travels to each region annually to provide information and services, cultural education, and ceremonies. Individuals may ask tribal administrators questions, request additional services, or suggest changes to existing services. Input from tribal members appears to be given equal weight, and participation does not seem to be hindered by an individual's standing or influence. Participants showed a clear understanding that residence outside the tribal jurisdiction posed a challenge to the access of individual tribal members. To improve this, the Citizen Potawatomi Nation is currently attempting to amend their constitution as stated by the following response.

We are about to embark on the most ambitious governmental experiment an Indian tribe has ever embarked on. We are going to change our constitution to allow elected representation from the regions... there's going to have to be some trade off between the 8 members that are going to be from the regions and the 8 members that are from Oklahoma as to what [money] stays here for reinvestment back into the tribal estate ...it is going to be a fascinating experiment in government and I hope its successful.

When participants were asked if they felt this change would improve the influence of tribal

members and increase their participation one individual remarked, "It's already happening."

Cultural services were frequently noted as an important component for individual participation as shown by the following excerpt.

Until it becomes important to every member of this tribe that they are a Potawatomi and that the tribe represents something of value in their lives, we won't get an increased level of participation. If you don't have the cultural things happening, the services provided, then you're not going to get the participation.

Additionally, cultural openness was improved by eradicating blood quotas as requirement for tribal membership or services. Subsequently, the equity of individual tribal members was improved.

Everyone in the tribe should know every ceremony so they can teach their children...we take that view point that there isn't any religious elite...what blood degree boils down to in 2006 for other tribes is how to divvy up the money. How to restrict access to membership so we don't have to divide the money any further and that's an ugly reason to deny someone access to their culture.

Cultural openness was also noted for improving tribal participation by young members. Participants stated that the vitality of the tribe was dependent upon improving the participation of tribal youth and increasing their knowledge of the tribe.

By being open with it [government] we've actually brought our youth back into the tribe...because that is our future. By and large most of the kids we bring in... have not been involved in the tribe...they all walk away with that [a summer youth program held at tribal headquarters] being one of the most positive, fulfilling experiences that they've had [another participant interjects "they all want to come back"]. We see them at the regional meetings. [another

participant continues: they actually want to come back and participate in the legislative body of our tribe... we're getting back to where you're proud to be Native American. That's the number one thing.]

Participants noted that it was important for tribal elders to guide the new youth that were returning to the tribe but stated many tribal elders were reluctant or unwilling to participate out of shame. United States policies of the late 19th and early 20th century resulted in many tribal members renouncing their heritage to avoid the ills of racism and discrimination. Non-tribal policies and experiences were noted to have directly limited the influence older generations of Potawatomis have on the tribe's progress.

Participation by Tribal Officials at the Local, State and Federal Level

Participants generally agreed that cooperation with local, state, and federal governments is a worthwhile goal but could be difficult. Establishment of a tribal EPA office has increased tribal compliance with notification and permitting processes as required by federal law.

Because we do have an EPA department, we probably do a little bit better job than some of the other tribes and than we did before we had our EPA department.... [our EPA director] has been real good at recognizing that we have all these rules and regulations... prior to that time [4 years ago] we didn't actually have an EPA department per se, we still tried to comply in every manner that we needed to but [our EPA director] is a little bit more particular about our compliance now.

Public participation as outlined by the NEPA process was generally followed by the tribal administration but participants did not elucidate how they followed such a procedure.

Participants felt tribal relationships with local, state, and federal governments were better but still required much improvement for administrators to effectively represent the tribe. Participants felt the tribe's administration was more transparent than

local, state, and federal governments. Transparency of the tribal administration was viewed by participants as beneficial for individual tribal members but presented unique challenges for tribal administrators when dealing with other non-tribal governments.

One negative to an open form of government, it's so much with the tribal members as it is with the general public. Racism is alive and well in Oklahoma and there is certainly a healthy segment of the population that is not happy that the tribes are flourishing economically...culturally. There is certainly a negative to that [another participant interjects "absolutely"] that the people [non-Indians] see us as [another participant interjects "deadbeats"]....It seems to be okay for that mentality to flourish...because we're so open with our government...

Racism was considered to be a significant barrier to tribal administrators gaining standing among non-tribal peers. Tribal growth, both economic and socio-political, was perceived by participants as being exploited without equal consultation afforded non-tribal governments.

...for most of my life, we were condemned as being drains on the economy, we were drains on society... and now, we are seen as a revenue source by an avaricious legislature that decides that we are not entitled to the things we've worked really hard to get.

Participants felt competent to take over management and regulation issues currently managed by state and federal agencies. One participant noted, "There's going to be a time when the tribe itself will have to take care of its own trust land instead of the government coming in and monitoring. It will be the tribe itself that will cover the trust land." Economic growth has resulted in the tribe's increased independence from state and federal agencies and improved the tribe's standing with tribal members and the non-tribal community. As a result, resistance to increased tribal power is diminishing.

...those in government aren't real ready to antagonize us because we

own a radio station, we have access to the media and resources at which to defend our point of view and they don't kick us like they used to. And with economic power, comes political power.

However, resistance and racism remain significant barriers to tribal access:

Senator Inhoff who is the senior member of the Senate committee on Indian Affairs... first of all, we can't get in to see him, even though we are the 8th largest Indian tribe in the United States, he does not individually see Indian tribal leaders. ["So you are denied access?" the author asks]. Yes. When you go see him [Senator Inhoff] you may see a junior member of his staff, this is true of Rep Lucas.

As well as, standing:

The state legislature has ...Joint Committee on State Tribal Relations and that's who approves all of the agreements between the state and Indian tribes... the event in which this committee meets and the tribes goes up there there's a bunch of good ole boys...sitting around the table, the Indians come in, stand against the wall, are not introduced and they [the good ol' boys] banter back and forth about what [they] are going to do about this Indian deal and they finally get around to singing it and then they get up and leave ["That has occurred" asked by author] yes, today.

And influence:

...the legislature on a regular basis sponsors some piece of legislation that comes up and it will be in some way so overtly racist that is just staggers the imagination. We're still really vulnerable.... ... Inhoff... by inserting a [midnight] rider in the 2400th page transportation bill, 48 hours before

it was presented to the floor...no one read it...this is after the meeting of the joint committee...after the environmental committee did the review...before any notice to the EPA and before any legally mandated, mandated under federal law notice to any Indian tribe. He stuck a rider in that bill that only in Oklahoma, Indian tribes with direct relationship with the EPA must subject themselves to the Oklahoma Department of Environmental Quality... for one reason, because the Pawnee tribe tried to pass an air quality standard higher than the state's because they are in proximity to the Conoco refinery... Denying us the congressionally mandated consultation process flies in the face of what the whole issue of tribal sovereignty is about. He [Senator Inhoff] does not believe in tribal sovereignty. The worst part about this [midnight rider] is it proceeds on the assumption that tribes are not able to responsibly govern their territory and that they will act outside the best interest of the state or industry.

Discussion

As defined by Senacah (2004), access, standing and influence among individual members of the Citizen Potawatomi Nation appear to be sufficient and improving as described by focus group participants. Participants felt confident in their ability to represent the needs of tribal members. Tribal administrators valued an open government and culture and demonstrated a commitment to making sound economic and environmental decisions for the tribe. Environmental concerns were evident in the planning and decision making process of tribal ventures.

We try to think 50 years out. What's going to be here 50 years from now? We try to invest in grocery services, banking, utility infrastructure (electricity, water, sewer, those things that governments do), public health care, housing, elderly care.

Protection for the environment is very high on our list... all the new construction that we've done ... is ground source heat run. We've tried to look at environmentalism both from the concept of protecting mother earth and from an economic long term...

Culture was more important to maintain and increased individual participation than was an individual tribal member's interest in tribal affairs. Individual participation in environmental planning and decision making appeared to be hands off as depicted by participants. The Potawatomi culture is inherently participatory; however, the focus of individual participation is directed more towards acquiring information on the tribe's heritage and participation in traditional ceremonies.

At regional councils now for 20 years we'll have between 2,500 adult members that participate regularly in regional councils maybe more. Every meeting we have 15-20 new ones or so ["at least" interjection by another participant] but we have people more hungry for the cultural component than they are for finding out how well the government's doing, how well we are managing the money. People are there to learn about the traditions of the tribe, the language, the ceremony...there's no secret mumbo jumbo to our ceremony.

The ability of tribal administrators to participate in decision making by non-tribal governments was not satisfactory. Participants provided examples indicating that they had inadequate access, standing, and influence in decision making at the state and federal level. Other research examining tribal participation in federal initiatives provides interesting insight. Grannel and Grachen (2005) provide examples from 3 states noting they have improved the process of tribal consultation for transportation projects. They cite early consultation has helped streamline the consultation process but clearly state in their introduction that the tribal perspective is not considered. It is not clear if their focus is on improving public participation by tribes or making the process as painless as possible for those that may have to deal with interested tribal parties, as streamlining could limit tribal participation. However, the authors do state that "the key elements

for successful involvement of Native American tribes are the development of improved relationship and the building of trust," which most tribal leaders would also agree to be beneficial. Grannel and Grachen (2005) state, "It is expected that these efforts [to increase tribal consultation for transportation planning and programming] will continue with the reauthorization of the Safe, Accountable, Flexible and Efficient Transportation Equity Act a Legacy for Users" (p. 64) (SAFETEA-LU, Appendix 2). Ironically, focus group participants from the Citizen Potawatomi Nation cited a midnight rider attached to the recent reauthorization of SAFETEA-LU for single-handedly stripping all tribes in Oklahoma of sovereignty.

Other research examining issues of tribal representation are similar to the case provided with the Citizen Potawatomi Nation. Jarding (1999) found that "the era of Indian self-determination" of the past 25 years has not increased Native American control of land or natural resources with non-native interests winning conflicts more than native interests. The Anishnabe of Canada, a tribe culturally related to the Potawatomi, felt their participation was used to distort their viewpoints for the purpose of imposing a development project on tribally owned lands (Borrows, 1997). As a result of cases such as those provided, international initiatives are increasingly cognizant of the need to protect indigenous knowledge and rights to influence management of natural resources (Mauro and Hardison, 2000).

While Senecah's (2004) Trinity of Voice was useful for evaluating tribal participation at the state and federal level, it was less constructive for understanding cultural models for individual participation. Environmental laws in the United States are based on moral and cultural constructs from Western European culture, which do not directly translate into American Indian cultural models. For every distinct tribal culture, guidelines for individual participation may vary and are likely distinct from Western European guidelines as shown in the Citizen Potawatomi Nation case study. An individual tribal member's perception of and satisfaction with their own participation experience may also vary from the cognitive norm used when evaluating public participation. For example, tribal leaders may rely on guidance provided by historical visions of previous tribal leaders as well as their own visions. Tribal culture may dictate that such guidance is sufficient and may not necessarily be questioned by individual tribal members. However, individual participation in cultural matters may be expected for the cultural health and vitality of the

tribe. For example, in a Potawatomi ceremony, the tribes' ancestors are recognized and honored and each individual's participation is recognized. The ancestors in turn honor those that honor them by watching over the tribe and providing guidance. Increased cultural participation will ultimately result in better guidance given to tribal leaders for non-cultural matters. This example illustrates that western concepts of individual participation are not necessarily appropriate for evaluating participation by other cultures, particularly American Indian tribes. Participation requirements as defined by U.S. laws

and environmental policies can only be properly and fully executed if done so in a manner that is culturally and socially appropriate for all interested parties. Understanding the historical, cultural, socio-political, and economic basis for a tribe's perspective on participation is critical for improving cooperation on resource management issues and may improve relations for highly contentious or litigious proposals that will impact tribal lands (Ortiz, 2003; Toupal, 2003).

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Appendix A

Public participation in natural resource management planning by tribal governments: Citizen Potawatomi Nation (CPN) case study. Focus group questions, Spring 2006.

1. How does the Citizen Potawatomi Nation (CPN) view public participation in environmental/natural resource planning and decision making?
2. How do individual tribal members obtain access to decision makers?
3. Is access distributed equitably amongst all tribal members or key individuals (e.g. Regional Directors, elders) designated?
4. Does CPN have cultural guidelines for individual participation?
5. If so, how are those guidelines conveyed to interested individuals?
6. Do you as an individual administrator share CPN's vision for public participation?
7. Do you see differences in public participation between CPN and local, state and federal governments?
8. Are there benefits and/or downsides to CPN's approach to public participation? If so, what are they and how may they be enhanced or alleviated?
9. Can CPN's approach to public participation enhance tribal sovereignty?

Appendix B

PUBLIC LAW 109-59-AUG.10, 2005 11 STAT 1937 SAFE, ACCOUNTABLE, FLEXIBLE, EFFICIENT TRANSPORTATION EQUITY ACT: A LEGACY FOR USERS – SAFETEA-LU

- Sec. 10211. ENVIRONMENTAL PROGRAMS. (a) OKLAHOMA. – Notwithstanding any other provision of law, if the Administrator of the Environmental Protection Agency (referred to in this section as the “Administrator”) determines that a regulatory program submitted by the State of Oklahoma for approval by the Administrator under a law administered by the Administrator meets applicable requirements of the law, and the Administrator approves the State to administer the State program under the law with respect to areas in the State that are not Indian country, on request of the state, the Administrator shall approve the State to administer the State program in areas of the State that are in Indian country, without any further demonstration of authority by the State.

Sun, Sea, and Sand: Piping Plover and People in One Place A Case Study Evaluating Public Involvement at Cape Hatteras National Seashore

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Abstract

Local communities, individuals, visitors, and special interests groups are often called upon to participate in the decision-making processes of the National Park Service (NPS). Cape Hatteras National Seashore (CAHA) is engaging in a negotiated rulemaking process on visitor uses along its seashore. Negotiated Rulemaking is evaluated as a means to create meaningful public participation. This paper applies several theories to this case study of the public involvement process. Senecah's (2004) Theory Trinity of Voice (TOV) is used to analyze the CAHA rulemaking process and to suggest critical dimensions for achieving widespread social legitimacy. Participation of the public is analyzed using various theories of participant and deliberative democracy theory. The paper provides direction to improve the likelihood that the NPS will be able to achieve its goals of conserving natural resources while providing sustainable opportunities for the public to enjoy these resources. This analysis will provide public managers, academia, and the community of citizens seeking to become active in public land management one in-depth study of a case within the land conservation and tourism industry. The outcome of this research will inform the NPS and other park and tourism operators as well as the world community of the various elements that affect the success of a collaborative decision-making process.

The National Park Service (NPS) faces hundreds of lawsuits every year (Federal Register, 2006; Eilperin, 2006). A multiplicity of conflicts arises every year due to incompatible uses of a park's natural and cultural resources (Daniels and Walker, 2001; Hartzog 1998; Sellars, 1997). NPS land managers have a complex charge in managing the public's resources. The complexity arises due to the need for this agency to maintain the public's trust in how it makes decisions that protect the land while providing for the enjoyment of the public. Members of the public, especially those interest groups directly affected by management decisions, expect to have some say in how land managers regulate use of public land (Cox, 2006; Meier and Bohte, 2006; McCool et al. 2000; Walker et al. 2006; Sabatier, 2005). This paper explores the techniques used by one unit of the National Park Service to involve the public in the decision-making process of land management. Cape Hatteras National Seashore (CAHA) will be using a Negotiated Rulemaking process in an effort to achieve an outcome that results in a rule for Off Road Vehicle (ORV) use along its seashore. This paper analyzes the rulemaking process and suggests critical dimensions for achieving widespread social legitimacy to improve the likelihood that the NPS will be able to achieve its land management goals.

The NPS manages 84.5 million acres of land through its enabling legislation, the Organic Act of

1916 (CRS Report for Congress, 2004). The Organic Act instructs the NPS land manager to conserve the nation's invaluable natural and cultural resources and to provide the opportunity for people to enjoy these treasures in a manner that leaves the resources unimpaired for future generations to enjoy (Management Policies, 2006). There is a paradox faced by land managers through the dual mandates of enjoyment and conservation within the Organic Act (Sellars, 1997). The authors who wrote the founding legislation of the NPS had a specific intent when crafting the act. Fredrick Law Olmstead Jr. was the principle author of the Organic Act of 1916.

Olmstead was an accomplished landscape architect. His father was responsible for designing central park, the nation's first and most spectacular urban park (Winks, 1997). Olmsted's original intent was to establish legislation that would direct park usage as pleasuring grounds for the health and recreation of the American people. Sellars (1997) described Olmstead as "A landscape architect who had developed parks and other public places across the country, he made his living designing outdoor areas for the aesthetic appeal, enhancing their scenic beauty for the enjoyment of the people" (p. 41). Olmstead was not a pure preservationist in the same sense as individuals like 1960's Sierra Club president David Bower or his eloquent and passionate predecessor John Muir. Olmstead was much closer to

sharing the environmental doctrine of the utilitarian ideals of Gifford Pinchot's "wise use." These two environmental philosophies of conservation and preservation will be analyzed later in the document to illustrate how the NPS interprets its land managing philosophy based on the Organic Act. Stephen T. Mather was the first director of the National Park Service. He identified the potential conflict in the language of the Organic Act as having a "double mandate" (Sellars, 2006). Mather's view of the double mandate was, "that the parks be both used and preserved" (Sellars, 2006). Other perspectives on the language described the act as having a "fundamental dilemma" (Winks, 1997). Winks (1997) illustrates the issue, "that the Service was asked to attempt 'harmonizing the unharmonizable,' and that the dilemma is not capable of either logical or historical resolution" (p. 18). Winks clarified the Park Service's Statement of Purpose in an analysis through the use of logical rhetoric. The group of men who framed the legislation were distinguished citizens and Congressmen. They were educated in the use of rhetoric and organized the language of the act with specific persuasive functions. "The principles of rhetoric held that, when listing two or more elements to an argument, the most important be stated first...If the principle of rhetoric were applied to the language of the preamble, then conserving 'the scenery and the natural and historic objects and the wildlife' within a park took precedence over providing for public 'enjoyment,' and there was no contradiction between two elements of equal weight for the elements were not in fact, equal" (Winks, 1997). The NPS Management Policies of 2006 expressed the overriding philosophy of the Service when there is a conflict about the founding legislation. The document instructs managers to "ensure that conservation will be predominant when there is a conflict between the protection of resources and their use" (NPS Management Policies, 2006, p. iv).

The Management Policies of 2006 are "the basic policy document of the National Park Service (NPS) for managing the national park system. Adherence by NPS employees to policy is mandatory unless specifically waived or modified by the Secretary, the Assistant Secretary for Fish and Wildlife and Parks, or the Director" (NPS Management Policies, 2006, p. 1). Included in these policies are several points that are germane to the operations and management of all National Parks. The Organic Act directs the Service to preserve resources while allowing for public enjoyment. If there is potential or actual impairment due to visitor use, actions by the Service, or a third party, then the park manager is charged with intervening in those actions through thorough

investigations. According to the Management Policies of 2006, "If it is determined that there is, or will be, an impairment, the decision-maker must take appropriate action, to the extent possible within the Service's authorities and available resources, to eliminate the impairment...as soon as reasonably possible, taking into consideration the nature, duration, magnitude, and other characteristics of the impacts on park resources and values, as well as the requirements of the National Environmental Policy Act..." (p.13).

The National Environmental Policy Act of 1970 (NEPA) has charged land managers with informing the public and involving them in the decision-making process (Force and Forester, 2002; Nelson and Stieglitz, 2000; Hoogland, 1999; Walker, 2006). NEPA directs federal agencies to protect the nation's natural and cultural resources in a manner that is sustainable for future generations (National Park Service DO 12 ¶ 2). The NEPA process is lengthy. It affords the public an opportunity to participate in very specific areas of the decision-making process. The scoping and review phase of NEPA are areas for public involvement. When a federal agency is proposing an action that may alter the environment, they must draft a categorical exclusion, environmental assessment, or environmental impact statement. These documents explain the impacts and alternatives to actions proposed by the federal agency. The public is involved through the scoping process, which requests public comment to determine the impacts of the proposed federal action (Ugoretz, 2001; Black, 2004; Cox, 2006). The scoping process can take various forms ranging from written comments, public hearings, workshops, or other public involvement options (DO 12 ¶ 7). NEPA provides the opportunity for the public to become involved in decision making, without dictating specific styles of public involvement. The agency retains the latitude to deploy the tactics it deems appropriate for involving the public.

NEPA created the opportunity for the public to participate in the decision-making process directing government actions that may potentially affect the environment. Environmental Impact Statements (EIS) have become lightning rods for reactions of user groups. Hoogland (1999) and Cox (2006) have identified instances where the NPS became the victim of litigation charging inadequate responsiveness to EIS and NEPA regulations. In NEPA's first five years, more than 400 environmental impact lawsuits were filed (Meier and Bohte, 2006). Clear, early, and precise communication with the public leads to effective public involvement and socially legitimate

management (Lewicki et al., 2007; Walker et al., 2006; DO-75A:Civic Engagement and Public NPS, 2003). Meire and Bothe (2006) illustrated the public opinions affect on an agency's importance and overall effectiveness. "The public's regard for the agency's function affects the value other political elites place on the agency and thus, its relative position of power" (p. 55). Communicating with the public is crucial to accomplishing the NPS charge of conserving the nation's natural and cultural resources, while providing for the enjoyment of the visitor without causing impairment.

Critiques of NEPA

Critics of NEPA sight several issues with the policy. The main critique is that NEPA does not provide enough public involvement. More specifically the forms of public involvement used by the bureaucracy do not provide the public with an ample opportunity to provide informed input (Ugoretz, 2001). A corollary of this critic is that the environmental impact statements are too long and technical for the public to understand and place a burden on stakeholders to assess what they contain (Black, 2004). Federal agencies are accused of preparing lengthy, complex environmental impact statement as a means of protecting them from litigation from environmental groups. In defense of federal agencies, scholars and practitioners identify the potential for litigation if a federal agency misses addressing an environmental impact. The agency can be found liable for violating NEPA and a number of other environmental protection laws (Black, 2004). Critics charged agencies with producing quantity rather than quality. Another critical assessment of NEPA is the ability of environmental organizations to stonewall the review process in an effort to slow action they deem in conflict with their environmental goals (Anonymous, 2002). A last criticism is the expense of creating and assessing environmental impact statements by a federal agency (Anonymous, 2002; Black, 2004; Kaiser, 2006). The time and work necessary for a federal agency to write an environmental impact statement causes resource managers to dedicate valuable hours towards drafting highly technical documents at the expense of other resource needs.

CAHA is undergoing a NEPA process involving a user conflict that has caused impairments to park resource, wildlife, and the experience of other visitors. The conflict is contentious and the park has decided to seek public involvement that will render a decision that will be accepted and adopted by the affected stakeholders. NEPA is a lengthy, complex

process that seeks to provide opportunities for collaborative decision making through public involvement. The following section will illustrate the conflict at CAHA along with the proposed public involvement process for managing it.

The Identification of the Problem at Cape Hatteras National Seashore

National Park lands are sacred natural resources to many people in the United States. They are the nation's wilderness and unique landscapes, pleasuring grounds set aside for the enjoyment and recreation of the people (Hartzog, 1988; Sellars, 1997). CAHA has a long history of conflict over visitor use of the seashore. Off Road Vehicles (ORV) have been the focus of the conflict between users of this resource for almost thirty years (Draft Interim Management Plan, 1978; Cape Hatteras National Seashore: Negotiated Rulemaking Feasibility Report, 2006). Fishermen, sun bathers, beach walkers, birders, park preservationists, park conservationists, and vacationing visitors have varying perceptions about ways to experience and protect the park's seashore. These different segments of the population value this resource and are stakeholders in the decisions regulating uses of the land.

The conflict is over the lack of an ORV management plan at CAHA (Kozak, 2005). Stakeholders in this process charge CAHA with engaging in ad hoc regulations that result in arbitrary closing of segments of beaches along the 103 mile stretch managed by the park (Cape Hatteras National Seashore: Negotiated Rulemaking Feasibility Report, 2006; Federal Register, 2006). ORV users are threatened by the potential for permanent closures of portions of CAHA shoreline to their use. Environmentalists are placing litigious pressure on the NPS to effectively protect the beach habitat for plants and animals: specifically the piping plover through a permanent regulation on ORV use in the park (Federal Register, 2006; Kozak, 2005). The park establishing legislation provides that

"...said area shall be, and is hereby, established, dedicated, and set apart as a national seashore for the benefit and enjoyment of the people...(16 U.S.C. §459)...the legal residents of villages... shall have the right to earn a livelihood by fishing within the boundaries to be designated...subject to such rules and regulations...necessary in order to protect the area for

recreational uses...” (16 U.S.C. §459 a-1) “Except for certain portions of the area, deemed to be especially adaptable for recreational uses, particularly swimming, boating, sailing, fishing, and other recreational activities of similar nature, which shall be developed for such uses as needed, the said area shall be permanently reserved as a primitive wilderness and no development of the project or plan for convenience of visitors shall be undertaken which would be incompatible with the preservation of the unique flora and fauna or the physiographic conditions now prevailing in this area...” (16 U.S.C. §459 a-2). (Cape Hatteras National Seashore: Negotiated Rulemaking Feasibility Report, 2006).

The park has lacked a formal ORV management plan since its inception. The result has been an atmosphere of uncertainty affecting the relationship between CAHA environmental groups, recreation and commercial fishermen, and the local community (Cape Hatteras National Seashore: Negotiated Rulemaking Feasibility Report, 2006; Kozak, 2005). Several positions by interest groups on this conflict have been publicly stated. One previous superintendent had been reassigned and subsequently retired from the NPS as a result of his mishandling of this conflict. Currently there is a new superintendent at CAHA who is dedicated to achieving a more socially acceptable outcome to the decision-making process (M. Murray, personal communication, September 27, 2006). The current emotions surrounding this issue are high and the public involvement process will require agile leadership that is able to create an atmosphere of collaboration (McCool et al. 2000; Leach, 2005; Ury, 1993; Fisher and Ury 1991; Sabatier et al. 2005; Walker et al. 2006; Lewicki et al. 2007).

The Piping Plover the Little Bird at the Center of this Conflict

The piping plover is a small shoreline nesting bird. The piping plovers nesting habitat is found along the east coast of the United States from North Carolina to Texas. The bird is also found in the Northern Great Plains and the Great Lakes (Federal Register, 2006). Its migration pattern is up and down the east coast during the winter months and returns north in the

summer. North Carolina has been designated as a critical habitat for the wintering population of piping plover's by the Fish and Wildlife Service (FWS) on July 10, 2001 (Federal Register, 2006). ORV's have been cited by FWS as a direct threat to the habitat of the piping plover. The counties of Dade and Hyde as well as the Cape Hatteras Access Preservation Alliance filed a lawsuit against the FWS for the inclusion of ORV as a threat to the piping plover, which would result in limits in the use of the vehicles in this critical habitat. The court ruled that the Department of Interior had not factored in the economic impact on regulation on ORV use in the two counties. The FWS was forced to implement a public involvement process based on NEPA prior to designating the shoreline in North Carolina as critical habitat for the birds. The economic impact of restrictions of ORV use within this habitat was identified as lacking in the original designation (Federal Register, 2006). At the site of this current conflict, the piping plover habitat has been identified as being threatened by ORV use by visitors of CAHA. This assessment is done daily through the monitoring of beaches by National Park Rangers. Beach driving destroys the birds nesting areas, destroys the dunes along the shore, and causes erosion of narrow beaches at CAHA (CAHA Talking Points, 2003). There has been evidence of decreasing bird populations related to a variety of causes other than ORV including predators, beach walkers, pollution, road kill, and other causes (CAHA Managing Bird Use and Public Use a Balancing Act, 2003).

Stakeholders in CAHA Decision-making Process

Participants in this conflict include NPS staff, environmentalists, community stakeholders, park visitors, and ORV industry groups. Cape Hatteras is a major tourism destination. Fishing, bird watching, beach going, and visiting the local beach community draws tourists to the area. All sides of the issue recognized the need to maintain a high level of economic activity while protecting the natural environment. The beach plays an important social role for the community. The public space under contention has been used by the local community, as well as others, as a place to fish and recreate (Kozak, 2005). All parties recognized the need to preserve the environment through management of the area, which also allows for tourism, and local commercial and recreation uses of the park. The park has begun to organize the stakeholders for a negotiated rulemaking process. This process is defined as public involvement in decision making based on consensus (Cape Hatteras National Seashore: Negotiated

Rulemaking Feasibility Report, 2006; Sabatier et al. 2005; Murray, 2006).

The Facilitator

Through the support and leadership of the U.S. Institute for Environmental Conflict Resolution the Consensus Based Institute (CBI) was chosen as the independent impartial third party to facilitate the collaborative decision-making process. CBI conducted a consensus based rulemaking assessment of the 55 stakeholders proposed to participate in the negotiated rulemaking process. The assessment identified the perception and motivations of the stakeholders and found sufficient evidence to move forward with selection of the members of the rulemaking committee to collaborate on an ORV management plan. CBI was founded in 1993 by Lawrence Susskind, a scholar and expert in conflict management (Thompson, 2007). The mission of the institute is to "...improve the way leaders, advocates, experts and communities make public and organizational decisions. We use innovative strategies to engage diverse stakeholders, identify shared goals, manage conflicting interests, achieve joint gains, and build productive working relationships. We work with government agencies, community groups, businesses, advocacy organizations, researchers and educators." (Thompson, 2007). CBI was the facilitator chosen to consult on the Fire Island National Seashore Off Road Vehicle Driving Negotiated Rulemaking. There expertise was essential to accomplishing the rule on ORV use at Fire Island NS. CBI is an ideal choice to facilitate the conflict at CAHA.

Negotiated Rulemaking

The Negotiated Rulemaking Act of 1996 is a "consensus based approach in which an agency develops a proposed rule by employing a neutral facilitator and a negotiating committee consisting of representatives of the affected interests. It is intended as a flexible and optional supplement to traditional rulemaking processes" (Harter and Pou, 2001, p. 111). Negotiated Rulemaking has its proponents and opponents. Proponents of negotiated rulemaking value the process as taking less time than conventional rulemaking and resulting in less litigation on the rules created (Coglianese, 1997; Bingham et al., 2005). Opponents of negotiated rulemaking charge that the process is not more efficient than conventional rulemaking due to the agencies' staff preparation time for working with participants, the time necessary for meeting and working towards consensus, and the "additional time

drafting regulatory language and responding to comments" (Coglianese, 1997, p. 1286). The rules created through the negotiated rulemaking have been found to be as effectual as conventional rulemaking in regards to litigation on the formed rules (Coglianese, 1997). An important motivation for the National Park Service to use negotiation rulemaking is its potential for bringing adversarial parties together through deliberative discourse where the parties learn from one another, and through consensus that forms rules that they can "live with." A final benefit of public involvement is the increase of relevancy of the NPS through civic engagement of the parties involved in negotiated rulemaking. NPS Management Policies 2006 state that "Park and program managers will seek opportunities to work in partnership with all interested parties to jointly sponsor, develop, and promote public involvement activities and thereby improve mutual understanding, decisions, and work products" (p.17). The negotiated rulemaking process at CAHA is intended to provide a public involvement framework that will create better regulations through the participation of those persons and groups directly affected by the regulation. The park has identified the stakeholder groups that will be involved in the negotiating rule making process (see appendix).

Many of these groups have websites that eloquently state their position on the issue of restrictions on ORV use at CAHA. Several of the more conflicted stakeholder positions were identified by the Cape Hatteras National Seashore: Negotiated Rulemaking Feasibility Report of 2006.

- ORV's are necessary to reach certain locations along the beach for fishing and recreation
- Protected species like the Piping Plover as well as non-listed species are threatened by ORV's as well as other beach users
- Restriction of ORV's will threaten the economic salience of local business
- The wilderness experience is threatened by ORV use

The issues identified illustrate the complexity of this conflict. McCool, Guthrie, and Smith (2000) refer to complex decision-making scenarios as "messy". Webber and Rittel (1973) characterized this type of problem as a "wicked problem." The terms "messy" and "wicked" refer to how the complexity of the issues compel stakeholders to place personal values on the conflict and form adversarial

perceptions against one another. The agency is put in a decision-making position that will render one side unsatisfied with the outcome. Collaboration has emerged as a decision-making strategy that will allow participants to learn from one another in an effort to arrive at a solution that all parties can “live with” (Godschalk, et al. 1994; Daniels and Walker, 2001; Cape Hatteras National Seashore: Negotiated Rulemaking Feasibility Report, 2006; Sabatier et al., 2005). The nature of this issue is highly complex and contentious. The stakeholders have agreed to participate in the collaboration process to establish a rule that regulates ORV use at Cape Hatteras. There is feasible potential for this process to reach a settlement of the issue. In order to assess the feasibility of the collaborative process with this specific issue and this group of stakeholders, the theoretical framework of Trinity of Voices (2004) was chosen as the assessment tool.

The Theoretical Underpinnings of Senecah (2004) Trinity of Voice (TOV): Access, Standing, Influence

TOV was based on the work Jean Jacques Rousseau and J.S. Mill's Participatory Democracy Theory. Rousseau wrote about the importance of individual participation in the democratic system in his seminal work *The Social Contract* written in 1762. His philosophy was that through individual participation in democracy the individual citizen will support the laws and rules created through the participatory process (Pateman, 1970). The ordinary citizen practicing democracy through voting and expressing voice to elected leaders increases their support for the laws and rules that govern the land. He also believed that citizens must be free, that no one person must be the master of another. The politician can be no more powerful than the farmer and that each person shares equally in the benefits of society. All citizens are interdependent on one another for their livelihood and the prosperity of the nation. The participatory action of the masses in democracy is regarded as an educative experience for the participant. The citizen learns the mechanism of democracy and through practice the citizen is affected psychologically. The psychological attitudes of the democratic participant are shifted towards acceptance and support of democracy, which leads the citizen towards additional participation in the democratic processes of governing.

John Stuart Mill was directly influenced by the philosophy of Rousseau. Like Rousseau, J.S. Mill also believed in the importance of public participation in democracy. The citizens' action at the

national level of governance was one important part of achieving democracy, but according to J.S. Mill that was not enough (Pateman, 1970). His philosophy expressed the importance of citizens' participation at the local level of government. Voting, running for office, and participating in democracy in the work place provides for an educative experience in democracy by the participating citizen. The educative function of the participatory experience would enhance the acceptance and citizen's further participation in democracy. J.S. Mill's *Theory of Participation* is evident in the work John Dewey (1938) *Experience and Education* as well as Paolo Freire (1970) *The Pedagogy of the Oppressed*. These philosophers shared the idea that experience leads to transformation of the participant's attitudes and beliefs. TOV shares these elements of Dewey and Freire's work. The idea is that we learn by doing, and doing results in transformation of the actor's ideas and abilities. Participatory Democracy is achieved when citizens become actively engaged in the practices of democracy.

The Three Components of TOV

The first component of TOV is access. Access is the ability for people to speak to decision makers and the assurance that their voices are being heard. The ability to speak is the beginning to opening the doors to public involvement and influencing the ultimate decision. Access also involves provisions for education of the public in a manner that allows the public to be prepared for meetings or discussion. The ability to present and share information is a crucial element of access. There are multiple ways of interpreting a conflict, and the knowledge or science that influences the participant's position may come from different sources (Ozawa, 1991). The creation of a collaborative atmosphere where information sharing is possible is an important element of access. Trust is another important factor that arises early in the decision-making process through access. The public must trust that the decision makers are listening to their needs (Sabatier et al., 2005). They must trust the information being provided is objective and the education is empowering. Access leads to the second element in TOV, standing.

Standing is closely related to access. Standing involves the need for the decision makers to hear the participants in the decision-making process. Senecah (2004) described standing in this way: “it is the civic legitimacy, the respect, the esteem, and the consideration that all stakeholders' perspectives should be given. Access and standing are mutually dependent of each other to achieve influence” (p. 24).

The decision maker should show respect and indicate that the participant's suggestions and needs are being considered. Standing leads directly to the last element of the TOV influence.

Influence results from access and standing. The power to make an impact on the ultimate decision is influence. Power is important to achieving influence. The participant can claim power, but it also must be given by the ultimate decision maker through providing access and standing. Trust must be assured through the ultimate decision maker to the participants in the process. The assurance can be through a vocal or written statement signifying that the needs, ideas, and suggestions of the participants will influence the final decision.

TOV is a practical theory. Senecah (2004) borrows from the ideas of John Dewey. Senecah (2004) discusses the importance of practical theories, "John Dewey's admonishment to develop ways of studying social phenomena that take human experience seriously, to value what is in process and fraught with possibility ("ends in view") as much as what is finished and perfected ("ends"), and to avoid taking socially constituted phenomena for natural factors or powers" (p. 21). CAHA is involved in a decision-making process over a contentious issue. TOV will provide a critique of the effectiveness of the negotiated rule making process as conducted by the staff of CAHA and the facilitators leading the collaborative decision-making process. Interviews of participants have been conducted to discover their perceptions of the negotiated rulemaking processes ability to provide TOV access, influence, and standing. Scrutinies of informational materials provided to participants have been analyzed. Specific recommendations are suggested to CAHA staff and other NPS land managers to enhance the public participatory decision-making process based on the Senecah (2004) TOV.

Findings Participant Interviews

The data from the participant interviews were conducted by the Consensus Building Institute and Fisher Collaborative Services for the CAHA: Negotiated Rulemaking Feasibility Report 2006. The interviews occurred between April and May of 2005. They were "confidential, voluntary interviews with fifty-five (55) individuals who held a range of views on ORV management at CAHA. The interviewees are affiliated with businesses, environmental groups, recreational and commercial fishing, local civic organizations, ORV groups, and other organizations concerned about ORV management at CAHA"

(CAHA:Negotiated Rulemaking Feasibility Report 2006). Two separate interviews were also conducted with Mike Murray the current Superintendent of CAHA.

Access: The ability for people to speak to decision makers and the assurance that their voices are being heard.

Participants' responses indicated the park needs to be highly transparent in its approach to negotiated rulemaking process. The report provided this assessment of the interviewees' responses in regards to the relationship between local community members and the NPS. "While some people trust CAHA staff and see that they are operating in a situation where no matter what they do some park users will disagree with their choices, other distrust the CAHA staff. Some local residents feel they have been betrayed and ignored as historical uses become more restricted, and describe times when CAHA staff have solicited input from people and then not used it...Many people are skeptical that the NPS will listen to their input regarding developing a proposed management plan on ORV use. Most people want the NPS to be forthcoming with information in a straightforward way in order to rebuild trust...Some interviewees stated that community members should take some responsibility for the relationship between them and CAHA staff. They described community members who have been hostile toward CAHA staff and intolerant of NPS actions, and said they think that community members should make an effort to improve relations if they hope to see similar effort made by the NPS" (CAHA:Negotiated Rulemaking Feasibility Report 2006, p. 21-22)

According to Senecah (2004), the basic foundation for effective public participation is trust. According to these respondents, trust is low from the community perspective. Trust building must occur early in the negotiated rulemaking process to assure that access will lead to standing. Interviews with Mike Murray, the superintendent of CAHA, provided another perspective of the relationship between the park and the local community. Murray indicated that proactive timely communication has been occurring to let the people know what is going on and why. The park has built some trust among locals through providing information about the park's policies. He has put procedures in place to notify the public about beach closures through press releases, articles in county newspapers, radio addresses, web postings, and sending a frontline ranger to alert bait and tackle shops of the beach closures. He believes communication has improved people's ability to

accept closures. Last season the park conducted 100 closures (more than the previous season) and due to his notification process, negative responses received by the park were at a minimum. Murray takes responsibility for decisions. He has informed the public of his responsibility for closures that may result in anger among community members.

In regards to access, there are issues of lack of trust, but the park appears to be working to restore their relationship with the community as a good responsive land manager. Murray also indicated that the park through the negotiated rulemaking process is planning two trainings to build capacity among participants in the collaborative process in an effort to strengthen team-working skills among participants. The skill building will get participants to focus on interests not positions, creating more substantive outcomes without becoming combative, increasing the likelihood for success through working acquaintanceships (Fisher and Ury, 1991). There will also be opportunities for participants to share their scientific materials with one another. The NPS will share the legal constraints on their ability to accommodate the needs of negotiated rulemaking participants. This way all parties involved will be cognizant of what the NPS can and cannot do in regards to ORV management.

Standing: The need for the decision makers to hear the participants in the decision making process.

Participants indicated areas where standing may be lacking. “Most people described the communication between the NPS and local communities as strained and inadequate over the years, particularly in the last several years. We heard of actions by local community members and CAHA staff that contributed to these strained relations, including uncivil and disrespectful behaviors in community meetings, a lack of transparency on management actions, and negative and threatening comments on websites. Others describe CAHA staff as providing many opportunities for input by interested parties in the form of public meetings or opportunities for submitting comments, and people not taking advantage of those opportunities by not showing up or not submitting comments. The primary concern we hear is that people wish there was more NPS presence on the ground” (p.22).

Other participant responses spoke directly to the negotiated rulemaking process. “Almost all people we interviewed stated consensus processes may be a good idea in this situation, and that it can be

successful if everyone at the table is willing to accommodate a range of views and interests. Consensus may be possible if the final agreement is reasonable, rational and balances the needs of protected species and a variety of human uses. As one person said, ‘if a reasonable, transparent process for developing a management plan were put into place based on the best science, and all parties participated in its development, then it would be possible for all park user groups and species to co-exist’” (CAHA:Negotiated Rulemaking Feasibility Report 2006, p. 28). This response indicates the interests and perceptions that consensus can occur through participation in the negotiated rulemaking process. There is evidence of reluctance in the precautionary notes about the behavior and abilities of all participants to be respectful and stay at the table throughout the negotiation.

Mike Murray provided his most optimistic expectations of the process through “open ended influence, but not control of a large diverse group of stakeholders who would band together as a team and create solutions that everyone can live with, through a complete regulation with 100% agreement” (personal interview 2006). The worse case scenario was “a process that never gets off the ground” (personal interview, 2006). Murray indicated a dedication to provide all stakeholders with standing in the regulated negotiation process. His goal is for the participants to collaborate to form a park rule managing ORV use at CAHA.

Influence: The power to make an impact on the ultimate decision is influence.

Participants shared their expectation for the negotiated rulemaking process. “We heard that success could be achieved (a) if stakeholders are part of the process, (b) if all parties behave honorably at the table, and (c) if the participants believe their and others’ perspectives are worthy of attention and consideration. Many interviews noted that consensus process could build ownership of a resulting management plan that will create the conditions for success and peace rather than ongoing conflict in the coming years. Possible advantages of a collaborative process include the following: the opportunity for stakeholders to better understand the needs and concerns of other groups, the possibility of coming to an agreement that is more responsive to everybody’s needs than an NPS-prepared management plan, and that good facilitators and a fair process will be a step towards moderation away from the hard feelings and contention of the past few years. Several people described the selection of the neutral assessment team

as the first step toward collaboration among stakeholder groups. They described a tendency among those selecting the neutral team to reach out and find reasonable solutions. Even though the participants represented distinct positions, they came to unanimous agreement in selecting the team, demonstrating a willingness to move forward and find solutions to ongoing conflicts” (CAHA:Negotiated Rulemaking Feasibility Report 2006, p. 28).

It is apparent that participants are willing and intent on making an impact on the ultimate decision. There has already been collaboration in deciding upon the facilitator, which has given some participants optimism for the process. The staff of CAHA must continue to empower the local community through conducting open forms of communication by sharing information and listening to user group issues and when possible and lawful, to act on their suggestions.

Murray provided strong indications that the park was ready to empower participants to construct a rule that the park would submit to the federal registry for public comment and then be finalized through the rulemaking and NEPA processes. Murray expressed the park service’s intention to “discuss directions for decisions, but the decisions would be made by the stakeholders...facilitators and stakeholders would work together to identify procedures” (personal interview, 2006). Murray as the ultimate decision making authority has 100% buy-in to the negotiated rulemaking process. He supports providing the diversity of stakeholders participating in the negotiated rulemaking process with access, standing, and influence.

The Documents Created by the NPS and CAHA

The NPS operates a website that contains the latest documents regarding the negotiated rulemaking process. The CAHA website is also constantly updated with information that provides information to the public about the upcoming events in regards to the negotiated rulemaking process. The park also has an email list with over 400 contacts for persons who may have an interest in the formation of the ORV management plan. Updates are emailed out twice a day with information on negotiated rulemaking, meetings, resource management updates, and correspondences directly from the park superintendent. The federal registry also maintains files of the announcements regarding the negotiated rulemaking procedures for ORV management. Murray has also been directly meeting with local

organizations. Park rangers are physically delivering information at all of the local bait shops to maintain a presence and relationship with stakeholders. Many of the participating organizations have websites with updated material on the negotiated rulemaking process.

Discussion

CAHA has suffered over the years from a deteriorating relationship with its local community. The culmination of user and resource conflicts, poor communication, and threats of litigation have created the environment that the park and community are in today. Negotiated rulemaking is an alternative dispute resolutions technique based on consensus. The stakeholders in this process are diverse and are representative of thousands of individuals. The goal of creating a rule managing ORVs at CAHA is necessary by law under the Endangered Species Act and Executive Order 11644. The management strategy of involving the community in the decision-making process will yield a rule that more people will accept than if the park made the decision arbitrarily as it had done in the past. The cohesive relationships that are emerging are positive. Hopefully, the skillful leadership of Mike Murray will continue to garnish benefits that exceed the intended rule. The agency is also in support of techniques that enhance public involvement in decision making. TOV supports the use of negotiated rulemaking as a tool to create effective participation of the public in the decision-making processes of CAHA. There are areas where historical issues continue to cloud the optimism of participants, but their willingness to engage in the process along with the park’s work to amend the past is a sign of potential success for this process. Recommendations for conducting the public participation process are first to maintain healthy power relationships between stakeholder groups. A collaborative decision-making process should be based on respect for one another as identified in TOV. Daniels and Walker (2001) cite interdependence of theory of power as a technique for creating a negotiation environment where participant are interdependent on one another to achieve a mutually beneficial outcome. The negotiated rulemaking process is being developed along the lines of the Participatory Democratic Theory (Pateman, 1970). The process is based on achieving consensus where all groups can live with the outcome. If one group cannot live with the outcome, additional dialogue must occur to form a rule that meets the needs of all parties participating in the process. This negotiated format will help to even the playing field and result in a rule that receives

support of the parties participating in the negotiated rulemaking process.

Conclusions

The NPS was founded on the premise that the parks were designated for the people to enjoy in a manner that left resources unimpaired. The NPS Management Policies of 2006 have taken the public's central role in parks a step further through the forward thinking implementation of deliberative democratic principles of civic involvement. As ordinary citizens engage in the tough decision making process they gain a deeper appreciation of the management policies of the NPS. The resources will gain a deeper meaning to the participant through their generation of a shared knowledge. The mutual education contributed by the interest groups involved will lead all parties to emerge being more informed through cohesive ideas about their shared resources. Stephen T. Mather and Frank Law Olmstead, Jr. may have never imagined that the parks would have evolved to become not only places to learn about history, enjoy natural resources, but also places that ordinary citizens can participate in democracy

through forming policies and regulations that seek to conserve the scenery and the natural and historic objects and the wildlife therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations (Management Policies, 2006).

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Appendix

Stakeholder Group	Member Name and Organization	Organizations Mission Statement / Interest in this decision-making process	Authority in Decision-making Process
Federal Government	Cape Hatteras National Seashore	Protect the Piping Plover through creation of an ORV Management Plan, which also protects visitor experience and achieve the conservation goals of the NPS.	Ultimate decision maker in the conflict
	US Fish and Wildlife Service, Ecological Services, Raleigh Field Office	Protect the Piping Plover from extinction as mandated by legislating establishing FWS.	The enforcement agency of the Endangered Species Act
State Government	North Carolina Marine Fisheries Commission http://www.ncfisheries.net/mfc/ncmfc.com.htm	The North Carolina Division of Marine Fisheries (DMF) is responsible for the stewardship of the state's marine and estuarine resources. DMF is comprised of nine sections that collectively carry out this mandate.	Shares equal influence with other stakeholders on the ultimate decision maker
	North Carolina Wildlife Resources Commission http://www.ncwildlife.org/	Since its inception in 1947, the North Carolina Wildlife Resources Commission (WRC) has been dedicated to the wise-use, conservation, and management of the state's fish and wildlife resources. Our policies and programs are based on scientifically sound resource management, assessment and monitoring, applied research, and public input.	Shares equal influence with other stakeholders on the ultimate decision maker
County Government	Dare County http://www.co.dare.nc.us/	Dare County is one of the counties Cape Hatteras boundaries lies within. Their interest is to protect the economic viability of their communities as well as the natural resources to the extent that they support the profitability of the residents. Support use of ORV along the shoreline of CAHA and have filed a law suite against the FWS.	Shares equal influence with other stakeholders on the ultimate decision maker
	Hyde county (Oracoke business and Civic Association http://www.hydecountry.org/default.htm	Hyde County is one of the counties Cape Hatteras boundaries lie within. Their interest is to protect the economic viability of their communities as well as the natural resources to the extent that they support the profitability of the residents. Support use of ORV along the shoreline of CAHA	Shares equal influence with other stakeholders on the ultimate decision maker

		and have filed a law suit against the FWS.	
Civic and Homeowner Association	Rodanthe-Waves Salvo Civic Association http://www.rwscivic.org/	The association fosters community spirit by organizing events and sponsoring programs that benefit their communities. They work to improve the quality of life for their people and to preserve their rich coastal heritage.	Shares equal influence with other stakeholders on the ultimate decision maker
	Avon Property Owners Association	"To promote cooperation in all matters of interest to the property owners and the community; and to aid and protect its members and to all things as are properly within the scope of such an association for the welfare of its members and the community."	Shares equal influence with other stakeholders on the ultimate decision maker
	Hatteras Village Civic Association	Preserves the heritage of the people of Hatteras Village. The fishing culture of the area is of specific interest to this organization. Protection of this heritage includes beach access to commercial and recreational fisherman through Off Road Vehicle Access.	Shares equal influence with other stakeholders on the ultimate decision maker
Open Access	Outer Banks Preservation Association http://www.obpa.net/	"The goal of the Outer Banks Preservation Association Inc. is to work with the National Park Service to develop a comprehensive Off Road Vehicle use and management plan that will meet the concerns of the environmentalists without compromising Hatteras Island's distinctive lifestyle and economic growth."	Shares equal influence with other stakeholders on the ultimate decision maker
Off-Road Vehicle Users	United Four Wheel Drive Association http://www.ufwda.org/index.htm	The United Four Wheel Drive Associations also acts as your voice to keep 4x4 roads and trails open so that we can continue enjoying four wheeling in the great outdoors. Through our united efforts, the opinions and beliefs of four wheel enthusiasts are heard by land management agencies and by our elected officials.	Shares equal influence with other stakeholders on the ultimate decision maker

	North Carolina Beach Buggy Association http://www.ncbba.org/	The North Carolina Beach Buggy Association is a non-profit organization established in 1964, dedicated to the preservation of and vehicular access to the natural beach resources of the Outer Banks through conservation, a code of ethics for beach behavior and support of local, state, federal officials and other organizations dedicated to these same goals.	Shares equal influence with other stakeholders on the ultimate decision maker
	Cape Hatteras Anglers Club http://www.capehatterasanglersclub.org/	Their purpose is to promote and support the conservation and preservation of fish and all types of marine life and wildlife. To cooperate with all federal, state and local authorities, department and officials in carrying out the laws, rules and regulations promulgated and adopted by such agencies for the protection, conservation and propagation of all fish, marine life and wildlife. The organization is dedicated to retaining full access to the beach by members of the organization for fishing.	Shares equal influence with other stakeholders on the ultimate decision maker
	Recreational Fishing Alliance http://www.joinrfa.org/	Dedicated to maintaining access to fishing experiences throughout the country.	Shares equal influence with other stakeholders on the ultimate decision maker
	American Sport Fishing Alliance http://www.asafishing.org/asa/index.html	The American Sportfishing Association (ASA) is the sportfishing industry's trade association, committed to looking out for the interests of the entire sportfishing community.	Shares equal influence with other stakeholders on the ultimate decision maker
Other Users	Cape Hatteras Bird Club	The club was founded in 1988; it serves the Outer Banks. They participate in bird counts.	Shares equal influence with other stakeholders on the ultimate decision maker
	Cape Hatteras Recreational Alliance	Supports the use and access of Off Road Vehicle use along the shoreline of CAHA.	Shares equal influence with other stakeholders on the ultimate decision maker

	Watersports Industry Association, Inc http://www.watersportsindustry.com/20002_45.asp	"The mission of the Water Sports Industry Association is to provide visionary leadership to increase participation in water sports and to supply members with education and legislative action."	Shares equal influence with other stakeholders on the ultimate decision maker
Commercial Fishermen	North Carolina Fisheries Association http://www.ncfish.org/aboutncfa.htm	NCFA is committed to presenting an accurate portrait of the industry and the hardworking people comprising it, however controversial; and it stands behind the certainty that the commercial fishing industry begins and ends with families – from seafood-harvesting families to seafood-consuming families.	Shares equal influence with other stakeholders on the ultimate decision maker
Tourism, Visitation and Businesses	The Outer Banks Chamber of Commerce http://www.outer-banks.com/chamber/	The Outer Banks Chamber of Commerce is a nonprofit membership organization representing <u>1100 businesses</u> on North Carolina's Outer Banks. Their service area includes Currituck County, Dare County (including Hatteras Island) and Ocracoke Island in Hyde County.	Shares equal influence with other stakeholders on the ultimate decision maker
	The Outer Banks Visitors Bureau	The Outer Banks Visitors Bureau is the lead marketing and promotional agency for The Outer Banks of North Carolina and is funded by one percent of the occupancy tax and one percent of the prepared meals tax, collected in Dare County.	Shares equal influence with other stakeholders on the ultimate decision maker
	Hatteras Island Business Alliance	The organization protects the business interests of several businesses located in the Cape Hatteras Area.	Shares equal influence with other stakeholders on the ultimate decision maker
Environmental & Natural Resource Conservation Advocates	Defenders of Wildlife http://www.defenders.org/about/	Defenders of Wildlife is dedicated to the protection of all native <u>wild animals</u> and plants in their natural communities. We focus our programs on what scientists consider two of the most serious environmental threats to the planet: the accelerating rate of extinction of species and the associated loss of biological diversity, and habitat alteration and destruction.	Shares equal influence with other stakeholders on the ultimate decision maker

	Natural Resources Defense Council http://www.nrdc.org/about/	NRDC is the nation's most effective environmental action organization. We use law, science and the support of 1.2 million members and online activists to protect the planet's wildlife and wild places and to ensure a safe and healthy environment for all living things.	Shares equal influence with other stakeholders on the ultimate decision maker
	Wilderness Society http://www.wilderness.org/	Deliver to future generations an unspoiled legacy of wild places, with all the precious values they hold: biological diversity; clean air and water; towering forests, rushing rivers, and sage-sweet, silent deserts.	Shares equal influence with other stakeholders on the ultimate decision maker
	Coalition of NPS Retirees http://www.npsretirees.org/	We are all former employees of the National Park Service (NPS), numbering over 580 with more joining us each day. Many of us were senior leaders and many of us received awards for stewardship of our country's natural and cultural resources. In our personal lives, we come from the broad spectrum of political affiliations. As park managers, rangers, and employees in other disciplines, we devoted our professional lives to maintaining and protecting our national parks for the benefit of all Americans - both living and those yet to be born. We know that many more of our former National Park Service colleagues, who have served under several different Administrations, both Republican and Democratic, agree with our concerns. We have served this country well, and our credibility and integrity in speaking out on these issues should not go ignored.	Shares equal influence with other stakeholders on the ultimate decision maker
	Southern Environmental Law Center http://www.southernenvironment.org/about/	For the past 20 years, the Southern Environmental Law Center has used the full power of the law to conserve clean water, healthy air, wild lands, and livable communities throughout the Southeast.	Shares equal influence with other stakeholders on the ultimate decision maker
	North Carolina Audubon http://ncaudubon.org/	Established in 1997, the state office of Audubon North Carolina grew out of decades of volunteerism through chapters. Audubon North Carolina's mission is to conserve and restore NC's ecosystems,	Shares equal influence with other stakeholders on the ultimate decision maker

		focusing on the needs of birds.	

International Conservation Organizations vs. Indigenous & Traditional People: Conflict in Including Indigenous & Traditional Peoples in Conservation

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Abstract

Mac Chapin's 2004 essay in World Watch sparked an emotionally charged discussion among conservation professionals regarding the conflict between big international nongovernmental organizations for natural resource conservation and indigenous and traditional peoples who are more immediately concerned with their livelihoods and survival. Using a critical discourse analysis approach, I analyzed Chapin's essay as well as nine responses. The results indicate that most respondents agreed with Chapin in blaming conservationists for the conflict. The participants generally maintained a professional tone throughout, although variation in formality was consistent with the level of friendliness they felt toward others in the conflict. According to perceptions and goals, many participants tended to focus on a good/bad dichotomy to which they assigned different participants, while some tried to minimize differences between participant groups. To work toward a solution, I recommend employing Senecah's Trinity of Voice. Senecah's framework for structuring communication processes helps participants achieve trust, an essential component of successful environmental dispute management that seems to be missing.

Introduction

In late 2004, Mac Chapin published a controversial essay in *World Watch* that focused attention on the long standing controversy over the relationship between Big International Nongovernmental Organizations (BINGOs) that concentrate on conservation and Indigenous and Traditional Peoples (IATPs). Many IATPs interpret *conservation* as identical to *preservation* and then equate both with outsiders appropriating local residents' sovereignty, cutting off their access to land and natural resources, and destroying their ability to support their families. Local residents, particularly indigenous and traditional peoples in areas with high levels of biodiversity or other natural resources, often view environmental conservation as a threat. From their perspective, the goal of the government-imposed eviction or access restriction to traditional lands does not matter. Whether it occurs for the purpose of mining, logging or protecting the natural resources near or within their homelands, the immediate effect on their lives is unambiguously negative. Examples of such actions taken for the purpose of environmental conservation include the establishment of Yellowstone National Park, USA (Bolaane, 2004); Great Smoky Mountains National Park, USA (Weaver, 1992); Kruger National Park, South Africa (Bolaane, 2004); Gir National Park, India (Borgerhoff Mulder and Coppolillo, 2005); and

the Central Kalahari Game Reserve, Botswana (Bolaane, 2004; Hitchcock, 2002).

In light of this history, conservationists should not wonder when they are met with apprehension and distrust from local communities. Over the last two decades, however, the international conservation movement has stepped up its effort to acknowledge and incorporate the motivations, needs, and desires of IATPs into conservation planning through dialogue and participatory approaches (Beltrán, 2000; Borgerhoff Mulder and Coppolillo, 2005; Hudson, 1998).

In the late 1980s, the South American indigenous organization called the Coordinating Body for the Indigenous Peoples Organizations of the Amazon Basin (COICA) unexpectedly initiated talks with North American environmental groups in hopes of forming an alliance to support the goals of all parties. This led to a series of meetings that made slow but significant progress toward mutual understanding (Hudson, 1998). Subsequently, the international conservation community achieved some major milestones in acknowledging the importance of IATP's needs, motivations, and wisdom in effective conservation.

An important milestone was reached in 1992 when the Convention on Biological Diversity (CBD)

at the Earth Summit formally recognized that successful conservation of biodiversity required a change in approach to include what they termed “a comprehensive strategy for ‘sustainable development’” (Secretariat of the Convention on Biological Diversity [SCDB], 2000, p. 2). The CBD defines sustainable development as meeting the needs of the current population in such a way that maintains the health and functions of the Earth and its organisms for future generations (SCBD, 2000).

1994 brought a new World Conservation Union (IUCN) system of categories for protected areas defined by the principal management aims; the new categories recognized that different levels of protection and use are possible and appropriate in different contexts (IUCN, 1994). In October 1996 at the IUCN World Conservation Congress in Montreal, participants passed Resolution 1.53, which enumerated several crucial points, especially the “necessity of reaching agreements with indigenous peoples prior to the establishment of protected areas in their lands or territories” and “the rights of the indigenous peoples concerned to participate effectively in the management of the protected areas established on their lands or territories” (IUCN, 1997, n.p.). The resolution requested active, concrete support of policy action by the IUCN organization and members at all levels (IUCN, 1997). Unfortunately, as the International Work Group for Indigenous Affairs (IWGIA) commented (1998), developing these approaches beyond theory and vision to methods and implementation has proved difficult.

Natural resource conservation is important to the survival of nearly all life on Earth, including humans, because these natural resources constitute systems that function together as ecosystems to provide life-support services for the planet. These ecosystem services include functions such as waste absorption, food, climate regulation, and water purification. Though some are performed primarily at a local or regional level, the interactions between ecosystems is great and occurs at long distances. For example, degradation of forests in the tropics not only has the potential to decrease biodiversity, but deforestation around the world is responsible for nearly 25% of the carbon dioxide entering the atmosphere each year (Ginn, 2005). Studies have shown that an increase in atmospheric carbon dioxide has global effects as well as local and can alter ecosystems as well as ecosystem functioning such as the hydrology, in turn affecting ecosystem services provided (e.g., Betts, 2007; Dekker, Rietkirk and Bierkens, 2007).

The long distance interactions between ecosystems, their functions and their services illustrate how natural resource conservation is virtually always an international issue. It concerns us all and can directly as well as indirectly affect our quality of life. Natural resource conservation is a complicated and long-term process that requires cooperation, and better yet collaboration, to be effective and successful. The conflict that Mac Chapin addresses in his essay published in *World Watch* (2004) is not one he created, but one that he perceives as ongoing and obstructing progress toward productive natural resource conservation. To deal with the issues, he brings them out in the open for discussion. The current article intends to contribute positively to this process by analyzing the discourse people are using in the conflict to see what it tells us about the major issues involved. This can help conservationists negotiate these problems with one another to increase the chances of success in natural resource conservation. The amount of resources necessary to create successful, sustainable conservation programs can only be assembled if all the major stakeholders – local, international, and those in between – can work together with similar, complementary priorities and goals.

Chapin Initiates Debate

Chapin’s essay (2004) addressed conflict between conservation BINGOs and IATPs, whose lands are very often the focus of major conservation efforts. He asserted that meaningful cooperation between BINGOs and IATPs rarely occurs and is exceedingly difficult to engineer, though “cooperation among groups and sectors is crucial” (Chapin, 2004, p. 29). According to Chapin, while most conservation organizations continue to give lip service to the ideal of respecting and collaborating with IATPs, many conservationists are unable or unwilling to act on this theoretical tenet of successful conservation primarily due to a perceived disparity of agendas between conservation agencies and IATPs (Chapin, 2004).

Chapin’s essay stimulated a vigorous debate among a wide variety and large number of organizations and individuals; *World Watch* published over 30 letters to the editor responding to Chapin and received even more (T. Prugh, personal communication, 23 October 2006). Chapin himself responded to the public in a follow-up letter (2005). Many of the responses praised Chapin for reopening these ever-present issues to public debate (e.g., Brechin, 2005; Brockington, Igoe and Schmidt-Soltau, 2005; Dedina, 2005; Farías, 2005;

Kostishack, 2005; McCormick, 2005; Roberts and Hails, 2005; Sansom, 2005; Seligman, Supriatna and Ampadu-Agyei, 2005; Tchozewski, 2005).

Framework of Study

To investigate the communication employed in the conflict surrounding Chapin's essay (2004), I used Critical Discourse Analysis (CDA) framed in an ethnography of communication context to analyze his essay and nine of the letters written in response to him. Discourse analysis focuses on written and spoken texts as a product and producer of social practices. According to Potter, "[d]iscourse is the vital medium for action. It is the medium through which versions of the world are constructed and produced as pressing or ignorable" (2003, p. 791). The critical discourse analyst takes a sociopolitical position, seeking "change through critical understanding" (Van Dijk, 1993, p. 252). Indeed, "any critique by definition presupposes an applied ethics" (p. 253). Van Dijk's theory provided the framework for this analysis. Fairclough (1989) created a list of ten questions that could productively structure a critical discourse analysis focusing on the author's textual choices, specifically the structures, lexicon, and grammar. The flexibility of Fairclough's framework allows the researcher to select the most appropriate items, expand on them and delete those less applicable to a given situation (1989).

The ethnography of communication framework concentrates on the social context of a text that might or might not be explicit in the text itself (Downes, 1998). In this case, it suggested questions regarding

how the political and economic context of this exchange defined form, structure, content, and acceptable expression.

My choice of critical methodology was based on the belief that providing more information about the writers' goals and their perceptions of the issues can benefit all parties by encouraging more productive communication. Cox (2006) stated that "[i]ndividuals and communities have a stronger chance to safeguard the environmental health and quality of their local environments if they understand some of the dynamics of and opportunities for communication about their concerns" (2006, p. xix). In this analysis, I focused on Cox's "opportunities for communication," with the intent of encouraging all parties to develop increased understanding of other stakeholders and their goals. This understanding may open doors to exploring ways to cooperate and even suggest collaborative approaches that respond to the needs and goals of all the stakeholders (Daniels and Walker, 2001; Morris and Su, 1999).

I analyzed Chapin's initial essay and nine of the more than thirty published responses. I selected responses from each of the three BINGOs he focused on, Conservation International (CI), the World Wide Fund for Nature (WWF), and the Nature Conservancy (TNC). I also analyzed three responses from apparent IATP professionals and three responses in the category of non-IATP professionals (Table 1). In this context, the term non-IATP professional does not indicate professional affiliation or employment, rather it is intended to indicate a person's

Table 1: Texts analyzed in this conflict (in addition to Chapin's original text)

Conservation BINGO responses	IATP responses	Non-IATP responses
Conservation International (CI)	Serge Dedina Executive Director, WiLDCOAST	Peter Kostishack Co-Director, Amazon Alliance for Indigenous and Traditional Peoples of the Amazon Basin
World Wildlife Fund (WWF)	Tashi Wangchuk Department of Forestry, Bhutan	Kathleen Lowrey Rockefeller Foundation Postdoctoral Fellow, Center for International and Comparative Studies
The Nature Conservancy (TNC)	Prodipto Roy Council for Social Development, India	Mike Sansom African Initiatives

apparent ethnic position in the conflict. All nine responses were written by people whose professions connect them to conservation.

First, I completed a basic ethnography of communication template (Downes, 1998) for each of

the four textual categories: Chapin's initial essay, the BINGO responses, the IATP responses, and the non-IATP responses (Table 2). Similarities and differences were noted.

Table 2: Ethnography of communication framework template

S	Situation	Setting: Situation:
P	Participants	Speaker: Addressor: Immediate Audience: Larger Target Group:
E	Ends (purposes)	Goals: Outcomes:
A	Act Sequences	Form: Content (topics):
K	Key	Tone, manner, spirit:
I	Instrumentalities	Mode of discourse: Form of speech:
N	Norms	Interpretation: Interaction:
G	Genres	Genre(s) employed:

(adapted from Downes, 1998:303)

After completing the ethnography of communication template, I used two questions from Fairclough's critical discourse analysis framework (1989) to examine lexical usage within the texts:

1) What *relational values* do words have? (Fairclough, 1989, p. 116)
Relational values of words paint a picture of the social relationships surrounding this particular dialogue as embodied by the text. Specifically, I looked at the patterns of address toward other participants, especially as they related to varying degrees of formality used in referring to other participants in the dialogue.

2) What *expressive values* do words have? (Fairclough, 1989, p. 118)
Expressive values illustrate the text producer's assessments and judgments of ideas, people, organizations, situations, actions, events, etc. Authors express assessments largely through "classification schemes, which are partly systems of evaluation, but also ideologically contrasting schemes symbolizing different values in different discursive domains" (Smith, 2006, p. 85). I looked for evidence of dichotomous classification systems such as good/bad or positive/negative.

The ethnography of communication template and the two CDA questions described above formed an analytical framework that facilitated understanding of the conflict between conservationists and the IATPs living in many of the areas targeted for conservation.

Analysis and Results

Ethnography of Communication

The ethnography of communication templates provided interesting information on the political and economic situation facing the authors. The setting was the publication *World Watch* around the end of 2004/the beginning of 2005. *World Watch* is a magazine published by the Worldwatch Institute focusing on issues and topics related to people, the environment and relationships between the two (Worldwatch Institute Publications). Readership includes much of the conservation community. Chapin's essay addresses an issue perceived as a long-standing conflict between many of the stakeholders deeply and immediately involved in

natural resource conservation efforts, and it does so within a respected publication dedicated to dealing with human-environmental concerns. The participants change roles as the writers change, but the body of participants is approximately the same in each case. In most cases, the speakers are the addressors in this dialogue; though in the BINGO responses, one could consider the organizations as a whole to be the addressors with the speakers being the writers. The instrumentalities are essentially the same for all texts as well. All are printed in the same professional publication (mode of discourse), and as a consequence, all are written in professional, standard English to fit the situation and maximize participation among readers. The genre is the same for all, in that they are letters to the editor, though Chapin's differs from the others. As the lead text, his is more in the form of an essay than a letter and is consequently less directly addressed to the magazine's readership. He has the positional power to introduce the basic issues (topics) of discussion and sets the tone to a large extent. The others are direct responses to his essay, and at times, to each other.

The analysis revealed a high level of similarity overall with one notable exception: the letter by Sansom (2005) stood out as a tirade against the BINGOs and did not observe the same rules for socially appropriate discourse that other participants perceived as applicable to the dialogue. Aside from Sansom's rejection of politeness norms, the other texts were similar, all employing a serious, professional and generally constructive tone. The interpretational norms of letters written to a professional publication require that the texts be reasoned, logical arguments supporting an individual (as opposed to institutional) position. As mentioned above, this claim may not be appropriate for the BINGO responses, because BINGO authors are likely to represent formalized organizational positions. Interactional norms for the situation demand that all participants be treated as respected professionals.

The major differences emerged in the two categories: "ends" and "act sequences." The desired ends and outcomes stated in each text varied, with many responses providing no clearly identifiable end goal. In his lead text, Chapin (2004) stated his desires to (1) open a public dialogue to (2) improve the situation by (3) raising important issues, which he advances by pointing out the problems and then starting a public dialogue to find ways to address them and improve communication. He used his desired outcome, a set of recommendations for conservation professionals, as the starting point to

evaluate the situation and begin to work toward solutions. The BINGO responses offered markedly similar goals to one another with no stated outcomes. Each organization aimed to set the record straight by correcting some of the information about it in Chapin's essay. All defended their practices, illustrated their openness to discussion and innovation; and claimed to operate inclusively rather than exclusively. The IATP professionals attempted to provide additional support for Chapin's arguments, which I will address more in depth below. The non-IATP professionals had an assortment of goals, which can be expected, since this category is the functional equivalent of "other" and includes all conservation professionals who do not fall into one of the BINGO or IATP categories. Lowrey (2005) pointed out what she considered a flaw in Chapin's use of the term "traditional and indigenous peoples (or communities)" (Lowrey, 2005, n.p.), while Sansom's goal was clearly to extend Chapin's argument even further (2005). Kostishack (2005) wanted to support Chapin's essay and strengthen or reinforce the importance of the debate.

The act sequences include form and content (topics). Of course, since all were letters to the editor, they shared a certain form as it relates to genre. Most used similar rhetorical devices perceived by the participants as appropriate for a professional discussion. The primary devices that writers incorporated were the ethos (persona) of a qualified professional in the arena of conservation and/or development work with indigenous groups and reasoned argument following the guidelines of a scientific argument. The responses to Chapin were noticeably shorter than his original essay, which necessitated a more abbreviated form of scientific reasoning. Despite this constraint, most supported their assertions methodically with documented examples and personal experiences. Again, Sansom's letter deviated from this norm as he employed blatantly inflammatory language toward the BINGOs. For example, he made a thinly veiled accusation that conservationists bribed IATP leaders to support conservation and referred to the "'fortress Eden' fundamentalism community conservation waffle of conservation organizations" (Sansom, 2005, n.p.).

Despite their formal consistency, the content of the letters varied greatly. The content each writer chose to highlight indicates what topics were of greatest importance to the participant-writers. Particularly in short pieces such as these, writers must make critical decisions as to what merits inclusion in the very limited space available. As

pointed out earlier, Chapin's essay was much longer and was therefore able to address many more issues than any single response letter. The topics the writers selected became issues for discussion, which demonstrates a certain amount of power through the access required to set the talking points, and complementarily, what was not open for discussion (Van Dijk, 2006). As the starting point, Chapin framed the issues and opened the discussion by touching on a large variety of issues relating to his perception of the conflict between conservationists and IATPs. In reply, each BINGO focused the content on defending itself from possible negative connotations in Chapin's essay, creating a rather defensive mood.

The IATP professionals provided a variety of examples to support Chapin's thesis. Roy focused on two main topics. First, he pointed out that very few participants in the dialogue appeared to be indigenous themselves, leading him to the conclusion that "[t]he white man...still manages the indigenous people's biodiversity assets" (2005, n.p.). Second, he shared a number of examples of people, mostly tribal minorities, evicted in the name of conservation for the benefit of the dominant group. Wangchuk (2005) chose to describe an appalling interaction he himself had with WWF-US in late 2004 when an official from WWF-US unashamedly threw his weight around by using threats to achieve what the organization wanted in Bhutan. Dedina was not as specific, but focused on what he appeared to see as the major transgression of the BINGOs in their dealings with IATPs and their resources, namely that

"global conservation NGOs are largely absent from the front-line battles to protect local resources from predation by governments, speculators, multi-national predators, and resource pirates. The irony, of course, is that these organizations often make deals with the very entities who most threaten the natural resources local communities depend on for survival." (p.9)

Again, the non-IATP professionals demonstrated the greatest variation. Kostishack (2005) added to Chapin's argument by supplying information from his own experience working with IATPs, along with additional examples. Lowrey (2005) addressed what she considers an overgeneralization or stereotype of IATP goals that could negatively impact the cause of conservation. Sansom made a number of more and

less direct accusations toward the BINGOs while promoting the nongovernmental organization with which he is associated (2005).

The ethnography of communication framework indicated that the participants in this conflict function within a fairly unified social structure (Downes, 1998); the rules seem to have been reasonably clear to all. Two of the more prominent discourse rules governing the situation were that personal attacks should be avoided and that the conflict dialogue should be formulated in terms of scientific argument; both of which were reinforced by Sansom's brash deviations. The participants clearly employed this dialogue to share their experiences, beliefs, and perceptions through their own voices.

Relational Values of Words

Within these texts, the level of formality used when writers referred to other participants in the dialogue was striking. Here I will focus on how respondents referred to Chapin in their replies. Two of the BINGOs referred only to the article itself, using the title and omitting any mention of Chapin himself. All three IATP professionals, Chapin supporters, referred to him as "Mac Chapin," at least the first time; most then shortened his name to Chapin. Of the non-IATP professionals, Lowery (2005), whose response indicated her disagreement with Chapin's essay, used only his last name. In his tirade, Sansom (2005) did not use Chapin's name until forced to because of a direct quotation from Chapin's essay. Kostishack (2005), a supporter of Chapin and the claims made in the original essay, used the same conventions as did the IATP professionals. The remaining BINGO and the TNC followed a similar pattern, referring to him initially as "Mac Chapin" and later as "Mr. Chapin" (McCormick, 2005).

The differing degrees of formality between the participants reflect the relationships and/or appearances the writers were trying to create or maintain in this dialogue. A clear trend developed: Those friendly to Chapin and his argument tended to

use both first and last name in the first reference to him. This convention was clearly intended to demonstrate a collegial, affable attitude toward him and solidarity with the arguments made in his essay. Two BINGOs chose to remain professionally distant by referring to the article rather than the author. This format supports the appearance that their attacks, and even disagreement, are focused on Chapin's arguments, as opposed to his person. TNC followed the pattern of Chapin's supporters, using his first and last name the first time, then shifting to "Mr. Chapin" for the remainder of their response. Perhaps TNC was attempting to demonstrate its friendliness toward him, and then chose to use the "Mr." as a way to cast their relationship as one between respectful professionals.

Expressive Values of Words

These authors also revealed their judgments through their lexical characterization and categorization of other participants in the dialogue. The major scheme used to classify participants was the dichotomy Chapin initiated in his essay. He portrayed the BINGOs as bad—the powerful cowards, and the IATPs as good, or at least mostly blameless (i.e., the innocent victims). Van Dijk (2006) refers to this as "positive self-presentation by moral authority" (p. 378). Table 3 contains some illustrative samples of Chapin's text painting this dichotomy. With the exception of the BINGOs' letters and Lowrey's letter, the other writers supported this dichotomy in varying degrees, though some try to mitigate it by observing that neither group was wholly good nor wholly bad (e.g., Kostishack, 2005). In spite of the logical and reasonable form used by Chapin and several of the others, many participants cast the BINGOs as the villains, while they portray the IATPs as struggling and helpless in the face of the powerful BINGOs. Smith (2006) and Kurz et al. (2005) noted similar lexical dichotomization in the conflicts they analyzed, which manifests itself in family (good) versus corporate (bad) farms and conservers (good) versus wasters of natural resources (bad), respectively.

Table 3: A sample of Chapin's dichotomous schema for categorizing the two major conflict participants (2004)

BINGOs (powerful coward = bad)	IATPs (innocent victim = good)
...the attitude of many conservationists is that they have the money and they are going to call the shots (p. 21)	...like most other people, [IATPs] are not even good conservationists, sometimes choosing economic wellbeing over preservation of natural resources. (p. 18)
...the relationship becomes glaringly asymmetrical, with virtually all the money and power held by one side [the BINGOs]. (p. 22)	COICA's arguments combined human rights considerations with practical suggestions for actions in the areas of sustainable development, territorial defense, conservation, and research, all reflecting indigenous priorities. (p. 19)
Whatever we may think of the science, there is no doubt that the new focus on global conservation is profitable. (p. 23)	When funds finally trickle down to the local NGOs, they are often so tangled in strings that the locals have little room to carry out their own programs. (p. 26)
...either they [BINGOs] tend to use their sheer heft to press their agendas unilaterally or they exclude the smaller groups altogether. (p. 25)	This linguistic shift [from "indigenous" and "traditional" peoples to more neutral "rural" and "local" and outright negative "marginalized" or "poor"] robs the dignity of indigenous peoples. ...[such people] end up being, in a very real sense, a people with no value. (p. 27)
... CI has been accused of bullying and riding roughshod over local NGOs and indigenous organizations in...Peru. (p. 28)	...multinational companies [are] extracting natural resources and destroying ecosystems in fragile forest areas, and that indigenous peoples [are] fighting these companies while the conservationists who were working there stood by in silence. (p. 28)
...large NGOs' recent inclination to withdraw from working with indigenous and traditional peoples at all (p. 28)	Some of the actions taken by indigenous groups to resist the depredations of extractive industries, for example, have been likened to the actions of terrorists. (p. 29)
[BINGOs'] abandonment of indigenous partnerships (p. 29)	Often they [IATPs] are responsible for the relatively intact state of those ecosystems. (p. 30)

The participants' choices in referring to Chapin and his article in their responses adds to the construction of the dichotomy. By referring to Chapin as Mac, participants signal their affiliation with him and their acceptance of his position. Referring to him more formally as Chapin or Mr. Chapin creates more distance between the participants. The effect is to substantiate an attitude of "us versus them," the innocent victims and their supporters battling the powerful, cowardly BINGO giants.

In contrast, the BINGOs endeavored to create the impression that they were being impugned falsely despite their good works. CI describes Chapin's essay as "fraught with errors and unsubstantiated assertions" while it potentially "drives a wedge between conservationists and indigenous people, thereby distracting attention from what really matters: protecting and maintaining biological diversity..." (Seligman, Supriatna and Ampadu-

Agyei, 2005, p. 5). The WWF uses "exaggerated and peppered with inaccuracies" to describe Chapin's essay (Roberts and Hails, 2005, p. 6). TNC takes a slightly different tack and begins with its positions and "core values," not getting to the counter-statements until midway through the reply, at which point McCormick states that "Mr. Chapin's underlying premise ... is simply incorrect" (2005, p. 7). All three organizations provide specific examples of their activities to contradict Chapin's allegations that the BINGOs have been ignoring IATPs' rights, needs, and issues. The WWF calls them "examples of the ways WWF embraces local human needs and aspirations as part of improving the ecological integrity of the planet" and claims "there are many more" such examples (Roberts and Hails, 2005, p. 7). As alluded to earlier, one of the strategies they employ to keep the discussion professional rather than allowing it to appear personal is the words they choose to refer to what (or whom) they are contradicting.

The BINGOs also tend to choose words that move the focus away from their organizations to the more general field of conservation. One example of this in the TNC response, which states that “Mr. Chapin suggests that as conservation groups increasingly rely on science, they grow increasingly dismissive of indigenous populations” (McCormick, 2005, p. 8). Chapin’s BINGOs become McCormick’s conservation groups, irrespective of size, location of home base, or other demographic details. Along the same lines, CI emphasizes that the organization “welcome[s] new ideas for how conservationists can work with indigenous peoples” (Seligman, Supriatna and Ampadu-Agyei, 2005, p. 6).

The BINGOs strategically employ words to negate the dichotomy that Chapin establishes as a structural framework for the conflict. Their words are calculated to connect themselves with other conservationists, very much including IATPs. Clearly, they see themselves as wrongly held accountable for problems that they have tried to overcome with some degree of success, as evidenced by their supporting examples. Although the reader definitely gets an alternate perspective on the situation from their letters, their tone is sometimes too defensive to be truly successful.

What We Can Learn from this Interaction

Together, these texts demonstrate what various participants found most important in the conflict between BINGOs and IATPs and consequently provide an opportunity to improve the situation, the goal of CDA. This analysis indicated that most of the participants in the discussion supported Chapin’s assertions, even adding personal experiential evidence, indicating that Chapin identified issues that professional colleagues also perceive as problematic. Due to an apparent underlying distrust of the BINGOs, the BINGO conservationists have been assigned most of the fault for this conflict. The distrust could be due to beliefs, verifiable knowledge, misinformation, a knowledge gap, or a negative perception of the BINGOs being translated into a strategy to discredit them and redistribute the power they are perceived to wield (Smith, 2006).

Research shows that trust is the basic building block for cooperation and collaboration, though defining and operationalizing “trust” can be difficult due to the variety of values, experiences, and behaviors that aggregate to form our perceptions and interpretations of trust. The analysis reported here supports previous findings that trust between individual stakeholders and stakeholder groups is

crucial for effective natural resource conservation to take place (e.g., Hamilton, 2004; Lewicki and Wiethoff, 2000).

The perceived lack of IATP power in the relationship with conservation BINGOs must be addressed immediately in order to create a path for progress in international conservation. Senecah’s *Trinity of Voice* (2004) offers a constructive way to begin addressing issues of trust and in turn power. By clearly creating and delineating access, standing and influence for all participants, the conflict can move toward building trust. Access gives participants the means and opportunity to construct an informed opinion as well as an appropriate forum in which to articulate it. Standing refers to “civic legitimacy,” which involves “the respect, the esteem, and the consideration all stakeholders’ perspectives should be given” (Senecah, 2004, p. 24). Lastly, influence is a product of the first two: it means that the participants’ voices are heard and listened to, then taken into serious, respectful consideration during the decision-making process. This is not to say that every group will get its way in the conflict solution, that consensus will be possible, or that either of these is necessarily desirable in a given situation. Peterson et al. (2005) argue that if consensus were implemented across the board in natural resource management and conservation, the effects would be destructive to the environment. However, the playing field must be level, and the process should encourage everyone to feel equally important and included in the process.

Achieving access, standing and influence will not happen overnight, but getting a solid start and moving toward full partnership between the participants can give all sides a feeling of inclusion and progress. The dialogue Chapin’s essay set off has provided a shove toward building effective collaboration between the major participant groups. The participants could use this debate as an opportunity to work toward creating agendas that include priorities of all groups. While their priorities may not be identical, many seem compatible or complementary, if not reciprocally necessary. As CI, one of the BINGOs involved in this debate, stated: “[w]hat really matters [is]: protecting and maintaining biodiversity, and the basic ecological processes and ecosystem services that are the foundations for sustainable livelihoods, indigenous cultures, and economic development” (Seligman, Supriatna and Ampadu-Agyei, 2005, p. 5).

Without the natural resources they have traditionally had access to in and around their

communities, the IATPs are unlikely to be able to support themselves and their families. In the past, such a situation has often led to mass migrations and the dispersal of cultural groups along with their values, beliefs, and practices. In order to reduce the perceived necessity of such choices, sustainable, effective natural resource conservation is essential. Chapin's essay provided an opportunity to reopen this conflict in the form of a dialogue, thereby giving the participants an opportunity to work toward improving the situation.

Following Chapin's essay, the president of the Worldwatch Institute also responded. Firstly, Flavin identified participant agreement on the core issue "that the needs of indigenous peoples and healthy ecosystems must be more effectively integrated in conservation programs than they are today" (2005). Secondly, the Institute planned to host "a roundtable discussion that [would] bring together the key players" to work out a plan of action to advance the goal of improving the effective interface of indigenous and traditional peoples and natural

resource management (Flavin, 2005). Due to resource limitations, however, the Worldwatch Institute has not yet been able to host this discussion (T. Prugh, personal communication, 23 October 2006). The IUCN has facilitated some meetings to encourage productive dialogue between participants in the conflict. These have focused on the relationships between the international conservation organizations and nongovernmental organizations in the developing countries of Latin America, however, and for the most part did not include indigenous issues (G. Oviedo, personal communication, 15 November 2006).

The conservation BINGOs should devote significant resources to developing venues that provide opportunities for extensive person-to-person dialogue between the BINGOs and IATPs. Using Senecah's Trinity of Voice (2004) to promote equality between participants will encourage the necessary trust to make significant progress toward sustainability for IATPs and conservation of natural resources.

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Sound bytes and Celebrity Expertise in Contemporary Environmental Activism

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Abstract

The complicated celebrity world includes the complex persona known as Woody Harrelson. Working from the broad spectrum of celebrity discourse toward the narrowed rhetoric of Harrelson's activism, I believe it becomes clear that little of this discourse can be separated from the rhetorical texts associated with Harrelson's environmental advocacy. My analysis progresses from the broad discourse of celebrity and the culture of sound bytes through a narrowed discussion of Harrelson's representation in the media as a celebrity expert and sound byte speaker. Finally, I draw upon the expectations and experiences of viewers within these discourses to engage a new media text from Harrelson's activist website, a Flash recreation of his poem "Thoughts From Within." This engagement reinforces the finding that sound bytes and celebrity expertise are potent forms of activism in a fragmented field of discourse.

Introduction: A Confusion of Woodys

Some might be surprised to learn that Woodrow Tracy Harrelson was born in 1961 in Midland, Texas. Surprised perhaps at his definitive middle age or, alternatively, in his common Texas origin with President George W. Bush.ⁱ Some might seem to recall Harrelson originating from the mid-west—and certainly he couldn't be more than 35? Our recollections, I would argue, are blurred by a confusion of Woodys. Woody Harrelson was born in Midland, Texas in 1961. Woodrow "Woody" Tiberius Boyd, however—Harrelson's breakthrough character on the NBC sitcom *Cheers*ⁱⁱ—was born in Hanover, Indiana and remains forever (in syndication) the young assistant bartender to the properly middle-aged, ex-Red Sox relief pitcher Sam Malone (Ted Dansonⁱⁱⁱ). A confusion of Woodys illustrates several of the qualities of celebrity in a soundbyte world. First, it points toward the blurred boundary between celebrity life and celebrity product. Woody Harrelson is an actor from Texas in his mid-forties. Woody Boyd is a bartender from Indiana in his late twenties. Harrelson is an environmental activist in support of simple living. Boyd is simple in another sense. While their lives and rhetoric are far from unified, they do share portions of the common celebrity persona, Woody, and inhabit some of the same discursive space in a soundbyte culture. Of course, one is a fictional portrayal by the other. Still, the distinction is not as clear as one might assume it would be.

The celebrity phenomenon in the United States isn't as simple as the fame of good performance,

rather the ability to "manufacture fame," according to Gamson, leads us "into mistaking the signs of greatness for its presence."^{iv} Celebrity is complicated in a few critical ways. One complication is the marketing of celebrity status in advertising and other forms of product promotion (including promotion of the celebrity themselves). This has the effect of dimming the distinctions between the text and the celebrity voice of the text, which is the reason for the celebrity spokesperson in the first place. As Marshall writes, "the celebrity as public individual who participates openly as a marketable commodity serves as a powerful type of legitimation of the political economic model of exchange and value—the basis of capitalism—and extends that model to include the individual."^v A second complication is the parallel use of celebrity life and celebrity product as entertainment. We are entertained by the product of celebrity work, but also the product of celebrity life, what Gamson calls the "illusion of intimacy."^{vi} *Entertainment Tonight*, for example, isn't a show about the products of celebrities but about the celebrities themselves. Heiress Paris Hilton seems to derive all of her celebrity status from her lifestyle. Thus, Marshall argues that "Fundamentally, celebrities represent the disintegration of the distinction between the private and the public."^{vii} Third, the arena of public politics is particularly complicating in its relationship with celebrity. Celebrities are politically outspoken, celebrities run for (and win) political office, and celebrities campaign with politicians. On the other side, politicians are celebrities, with their lives and work blurring into the realm of popular entertainment.^{viii}

More specifically, the complicated celebrity world includes the complex persona known as Woody Harrelson. Working from the broad spectrum of celebrity discourse toward the narrowed rhetoric of Harrelson's activism, I believe it becomes clear that little of this discourse can be separated from the rhetorical texts associated with Harrelson's environmental activism. My analysis progresses from the broad discourse of celebrity and the culture of soundbytes through a narrowed discussion of Harrelson's representation in the media as a celebrity expert and soundbyte speaker. Finally, I draw upon the expectations and experiences of viewers within these discourses to engage a new media text from Harrelson's activist website, a Flash recreation of his poem "Thoughts From Within." This engagement reinforces the finding that soundbytes and celebrity expertise are potent forms of activism in a fragmented field of discourse.

Woody Goes Further

In the Spring of 2001 Harrelson took a break from appearances on the television program *Will and Grace* to travel down the western U.S. coast from Seattle to Santa Barbara—on a bicycle. The Simple Organic Living, or SOL, tour, combined a 1500 mile bike ride with a mural covered bio-diesel tour-bus inspired by Ken Kesey, a raw food chef, a Yoga instructor, Harrelson's wife Laura Louie, various other friends and family, director/producer Ron Man, a film crew, several speaking engagements at colleges along the way, a visit with Ken Kesey (just months before his death), a tour of an organic farm, and a short stay at a RUCKUS society activist training camp. The website *Voiceyourself.com* was launched by Harrelson and Louie to support and extend the tour. Ron Man released a documentary film, *Go Further*, which chronicles the trip.^{ix} Later, the book *How to Go Further: a Guide to Simple Organic Living* was produced from film footage transcripts and other interviews with Harrelson and his colleagues.^x

Woody in the News

When we think of the Hollywood actor as spokesperson, we typically imagine celebrities hawking beauty products, beverages, and other corporate wares. Actors are just as likely to be selling themselves and their films, however, as they are anything else. It is no coincidence that guests on *The Tonight Show with David Letterman* almost always have some recently released film or other project. Nor is it a coincidence that the same celebrity will turn up on Letterman, *The Today Show*, and *Ellen* in

the span of a day or two. Similarly, actors are never so available to entertainment writers and lifestyle editors than the few weeks before and after a movie release. Woody Harrelson is no exception. Interviews and appearances by Harrelson spiked in the months surrounding the launch of *VoiceYourself.com* and the SOL tour in 2001, the release of the *Go Further* film in 2003, and the *How to Go Further* book release in 2005. Interviewed by the *Washington Post*, Harrelson offers frankly that he will make promotional appearances for the film in Portland, Seattle, and San Francisco. A press release on the *Canada Newswire* similarly notes that readers can "meet actor and activist Woody Harrelson as he signs copies of *How to Go Further*...Don't miss the opportunity to meet Woody Harrelson." Each case demonstrating the clear use of Harrelson's celebrity status to promote his products.

In this case such self-promotion could be alternately read as use of celebrity status to either gain material profit from product sales or to disseminate his activist message. Whatever the interpretation, it does indicate that Harrelson is operating within the discursively-produced expectations of the celebrity. His own statements—with whatever value we can ascribe to them—point to the latter interpretation. In interviews, Harrelson repeatedly refers to himself as a role model, particularly in relating his lifestyle. "The [environmentally conscious] model is the most important thing to bring about change in other people," he is quoted as saying in the *Palo Alto Weekly*.^{xi} The *Toronto Star* surmises that "He's more interested in winning over recruits to his way of life than in scoring debating points."^{xii} If Harrelson does use his fame to advance his message it is an operation of means to end.^{xiii} His status provides a means and activists often believe they are obligated by the primacy of their cause to utilize all means to reach their end.^{xiv} The point of promoting and documenting the SOL bicycling trip is to make use of this means. The complexity of the celebrity life is revealed in such obfuscations of life and product, status and activism.

The celebrity life and celebrity product are not only confused but are often packaged equally as entertainment.^{xv} Consider this extended quote from Harrelson

I made a book about how to go further, which is just coming into bookstores. I just did my first book signing in Toronto. And that's kind of based on a documentary called

Go Further with me and my friends going down the coast from Seattle to Santa Barbara and talking to people about how to leave a lighter footprint. I know it sounds like heavy lifting, but both the book and documentary are entertaining. And then I've got a website with my wife called voiceyourself.com and that's really the heart of what we're doing in terms of our activism. You should look at "Thoughts From Within" there. It's a poem I wrote, putting pictures to it, and that will tell you exactly where my head is at.^{xvi}

Harrelson clearly dances between the promotion of his products and the promotion of his message by moving between the entertainment value of his life and work. The passage above is about a book and then a bike ride, a message and then entertainment, activism and then personal insight.

But the celebrity confusion between life and work doesn't end with Harrelson's self-promotion. The discourse surrounding Harrelson never seems to clearly separate Harrelson the actor from Harrelson the activist. Most news articles, in fact, define Harrelson in a way that confuses the two aforementioned Woodys. One article is headlined "Former 'Cheers' actor lectures Stanford students on the benefits of organic living" and later describes his activism: "The 'EdTV and 'Natural Born Killers' star faced a similar fate [arrest] later that year when he and some friends climbed the Golden Gate Bridge to protest the cutting of redwood trees."^{xvii} The inter-stitching of life and work is so common as to seem formulaic, which it is. The Associated Press, for example: "'It has solar panels on top and hemp cloth on the ceiling and walls,' said Harrelson, perhaps best known for his role as a bartender on the long-running sitcom 'Cheers'."^{xviii} CNN.com similarly reports that "'Go Further' follows the former 'Cheers' star and Oscar nominee for 'The People vs. Larry Flint' during his environmentally conscious trek."^{xix} Santa Barbara's *Daily Nexus* writes that "Harrelson is known for the roles he played in the sitcom 'Cheers' and in the movies 'White Men Can't Jump' and 'Natural Born Killers' and is also the founder of voiceyourself.com."^{xx}

In particular, there is a clear over-determination of Harrelson as the "affable young bartender in the TV sitcom 'Cheers'."^{xxi} Bill O'Reilly dismisses his activism through it, calling him "the 'Cheers'

guy."^{xxii} Other media outlets seem genuinely surprised to discover a distinction between the two Woodys: "The actor's real persona is nowhere near the bumbling bartender on NBC-TV's hit 1982-1993 series" according to the Media Industry Newsletter. Interviewers' questions similarly point toward a confusion between the two Woodys. London's *Independent* moves fluidly between "What do you think Woody would be doing now?" to the next question "You're a vegan, no coffee, sugar, additives – do you miss these?" followed by a question on his promotion of hemp.^{xxiii} Similarly, in *Film Monthly* the questions turn from "When you were on the cast of Cheers, did you imagine it would lead to where you've gone in your career?" to "What are you focusing on in the environmental movement these days and what do you think the status of the environmental movement is?"^{xxiv}

Even more pointed is how Harrelson responds to these questions. There is some confusion between Woodys even for him, it would seem, when he remarks that: "'There's a lot of similarities between me and Woody [Boyd], although I wish I was more like him in terms of the purity of heart. If remembering Cheers makes people happy, then it makes me happy, too."^{xxv} In discussing his lifestyle the confusion is also apparent: "I'm vegan and eat raw as much as I can. And we mostly grow our own food – probably 90 percent. I played a farmer for so long it's ironic I finally got around to it."^{xxvi} The farmer Harrelson refers to is Woody Boyd, who grew up on a corn farm.

The discourse surrounding Harrelson—with its complexities and in-distinctions—is similarly murky in the separation of celebrity and politics. Harrelson's politics are portrayed as another extension of his fame, and, as such, another form of entertainment. One writer describes the movie in terms akin to a review of superior acting in film: "Go Further seems downright prophetic, but you won't catch Harrelson acting smug about it."^{xxvii} Most articles simply weave his politics into the story as if they were a new acting endeavor, a film in promotion: "the same year he was nominated for an Oscar for his starring role in 'The People vs. Larry Flint'—Harrelson was arrested in Kentucky for planting industrial hemp seeds."^{xxviii} Several news leads mark the confusion of entertainment and politics by referring to "Actor Woody Harrelson" promoting "organic living."^{xxix}

The Celebrity Expert

The celebrity image is so matter-of-fact in contemporary narratives—be they marketing,

entertainment, or political—that the voice of the celebrity functions as a form of intellectual, the celebrity expert.^{xxx} Reasons for such a conclusion go far beyond Harrelson’s case: celebrity athletes promote cosmetics; celebrity actors are the narrative voices of documentaries; professional wrestlers, bodybuilders and actors are elected governor, Senator, even President. Americans are rather used to being told what to wear, drink, and vote by celebrities.^{xxxi} A celebrity pitching a movie or a beverage or a politically oriented lifestyle are not only equal in the eyes of entertainment discourse, but also equal in the world of soundbyte culture.

Harrelson expresses his own celebrity expert within the fragmented world of articulation his style of speaking—the soundbyte. In contrast to the narrowly defined and derogatively employed “sound bite” of electronic news and political campaigns, I use the term *soundbyte* to describe a broad style in contemporary culture. Although often derided as a “disturbing” trend in public deliberation,^{xxxii} Stephens points out that the emergence of sound bites in electronic news are actually an “efficient use” of the medium, a necessary adaptation.^{xxxiii} I argue that this adaptation has now permeated much of contemporary discourse, an argument that has also been the basis for further sound bite derision. In the aptly titled *Sound Bite Culture: The Death of Discourse in a Wired World*, the editors summarize the position of the collected essays: “We have deceived ourselves and cheapened the value of genuine discourse if we look around and believe that what we hear is meaningful communication.”^{xxxiv} Suspending judgment in favor of the analysis of rhetoric as it occurs I consider the *soundbyte* culture.

Speaking to a crowd in Santa Barbara, Harrelson says, “Our message is not for everyone; it’s just for the hardcore.” This is a demonstration of the expert position and deft use of soundbyte rhetoric, as reported in the *Palo Alto Weekly* article on his speech.^{xxxv} While we might think of “hardcore” as an exclusive reference, the term in popular usage is a buzz word for everything from music (hardcore techno, hardcore rock, hardcore rap), to “hardcore gamers” (video game enthusiasts), to almost any reference involving an inside perspective (super-nerd Bill Gates calls his software company “hardcore”^{xxxvi}). Harrelson is here placing himself in the center of the action, promoting his own lifestyle buzz. The same article leads with a Harrelson soundbyte as well: “The world is having some issues,” Woody Harrelson said with a movie-star smile on his face.^{xxxvii} While the quote is colloquial and the attribution confuses Harrelson’s celebrity

roles, as a unit the fragment of discourse matches the cultural norms of unified entertainment, politics, and promotion.

In other instances, Harrelson’s use of soundbytes are polished catch-phrases, like “evolution, not revolution” and “personal transformation equals planetary transformation.”^{xxxviii} He has even been given credit for the terms and catch-phrases of others, such as “leaving a lighter footprint on the earth” which refers to the term coined by William Rees and Mathias Wackernagel that is in widespread use to measure individual impact on the environment.^{xxxix} Another example both misattributes and mis-defines a common phrase: “what Harrelson calls ‘going off the grid’ – getting away from corporate products and influence,” writes The Associated Press. Not only has the term “off the grid” been in use for decades, the phrase specifically refers to homes using self-sustaining power systems, thus they are “off” the electrical “grid.” Harrelson’s own home in Hawaii is “off the grid,” which is the context in which he often uses the term (correctly).

Nevertheless, Harrelson is offered as an expert, and his soundbytes and catchphrases function to direct the combined forces of promotion, entertainment, and politics in the general direction of his environmental message. More explicitly, however, Harrelson directs readers to continued exposure to the message at voiceyourself.com. Voiceyourself.com is frequently presented as the conclusive source for Harrelson’s ideas, or as the end-product of his activism.^{xl} Harrelson clearly encourages this. Consider again this statement:

I’ve got this website with my wife called voiceyourself.com and that’s really the heart of what we’re doing in terms of our activism. You should look at “Thoughts From Within” there. It’s a poem I wrote, putting pictures to it, and that will tell you exactly where my head is at.^{xli}

A viewer of “Thoughts From Within” (TFW) comes to the experience within the discourse of celebrity and the world of soundbyte rhetoric. An individual may or may not have read any of these articles, or seen Harrelson in appearances, the film, or the book. Nonetheless, the expectations of celebrity and soundbyte culture remain. There is a general social narrative that conjoins the life and work of a celebrity, interweaves politics and entertainment, and sometimes melds the actor and the characters

portrayed. Within this state of affairs, the celebrity expert not only exists, he/she resonates as a comfortable constant. As Marshall writes, “Celebrity status operates at the very center of the culture as it resonates with conceptions of individuality that are the ideological ground of Western culture.”^{xliii} The culture of soundbytes operates similarly, as the technology of new media communication favors pith and aphorism. As the viewer experiences the flash version of TFW the celebrity expert and soundbyte style are powerful rhetorical options for articulating activist messages.

“Thoughts From Within”

www.voiceyourself.com was created in 2001 to coincide with Harrelson’s Simple Organic Living Tour (SOL). Although Harrelson is listed as the website’s “founder,” his wife Laura Louie is named as both “co-founder” and “creative director.”^{xliii} Louie is given credit as the site’s manager when interviewed in the film, *Go Further*—where she is also shown working on site design and blogging. The website’s current design was produced by Tree Media Group, a media production company with a mission “to use media to support and sustain civil society.”^{xliv} The content of the site, however, is a collaborative effort by the “team of people who put their hearts and minds to work.” The VoiceYourself team currently consists of Harrelson and Louie, an executive producer, moderator, technology chief, ‘team rabble rouser’, chef, and two contributing editors. The site also offers internships and contains entries by guest editors and contributors. The VoiceYourself team works under the organizations mission statement: “We believe all life on earth is sacred. VoiceYourself promotes and inspires individual action to create global momentum towards simple organic living and to restore balance and harmony to our planet.”^{xlv}

Voiceyourself.com’s main page features three prominent sections (Figure 1).^{xlvi} First, a section titled “What’s New” offers short blurbs and links to newer and featured sections of the website. Included in this section is a large photograph of Harrelson which links to information for the *Go Further* film and *How to go Further* book. The second feature section, “Action Alert,” also provides short blurbs and links. The links provided here take the viewer to other organization webpages, most frequently involving a petition of some kind. Finally, a sidebar on the left of the page functions as a table of contents gateway to the rest of the website. Tabs here include: “Da Kine Kitchen,” offering information on raw food diets and recipes; “Wood’s Goods,” “eco-conscious products”

recommended by Harrelson; and “Thoughts From Within,” a link to the flash production of Harrelson’s poem.



Figure 1. The Home Page for VoiceYourself.org

TFW is the top link on the sidebar, and has been available on the site longer than any other content.^{xlvii} The webpage containing the flash production features the first image seen in the flash version (Figure 2). This picture of Harrelson’s knit-capped head from behind, surrounded in thick smoke and looking into a mirror, is overwritten with links to the flash production, the website for downloading Flashplayer, and a related page containing the text of the poem alone. Above the links is the title of the poem, “Thoughts From Within,” along with its first line: “Sometimes I feel like an alien creature for which there is earthly explanation.”^{xlviii}



Figure 2. The launch page for TFW shows the first image from the Flash production

Although TFW is not graphically or textually the website's core element, it is the only individual text referred to by viewers and reviewers on the web. Many outside links to VoiceYourself.com, in fact, either link directly to the TFW sub-page, or refer viewers to seek it out. Anita Roddick, founder of the eco-sensitive business The Body Shop, blogs about being referred to a "short film" on her friend Woody Harrelson's website. "I checked it out. You should too," she writes. She provides both a link to TFW and the text of the poem, "if you have technical difficulties."^{xlix} Popular link blog MetaFilter.com similarly offers a direct link to TFW, writing, "Thoughts From Within is an interesting multimedia poem from Woody Harrelson."^l Another blog, JimBlog.net, also supplies the link and text of the poem, writing that "The Ron Mann documentary film of Woody's "SOL" (Simple Organic Living) contained this poem, and I went to the website and found it."^{li}

Posts on VoiceYourself.com's bulletin board, called "village forum," have cited TFW as the key text on the website. One forum member writes that "'Thoughts From Within' really grabbed me...pure heart felt brilliance. Looking back, it seems that it was a small part of my wake up call."^{lii} Another writes that TFW "hooked" him to the site and says that "thoughts from within resonated greatly within

myself."^{liii} In the analysis of TFW that follows I argue that what grabs or hooks the viewer are resonant moments that function through alignment with the discursive expectations of celebrity expertise, and soundbyte rhetoric.

"Thoughts From Within" was converted to a Flash movie by adding photographs, graphics, worded text, and music to a recording of Harrelson reading the poem.^{liv} Harrelson's voice is calm and tonally flat. The lines are read with steady meter, holding many of the final vowel sounds to maintain rhythm. Although the printed versions of the poem are 63 lines divided into eight stanzas, the alignment of phrases and images in the Flash production divide the piece into 32 sections which lasts just over three minutes. Images in the production are all photographs with the exception of two. One exception is a parody of the iconic painting "March of Progress" by Rudy Zallinger.^{lv} The drawing shown in this section depicts the evolution of humans from ape to hominid and then continuing on to a hunched form over a computer terminal (Figure 3). This coincides with Harrelson reading the lines "Sure I have human form / walking erect and opposing digits."^{lvi} The second exception is a textual representation of the coinciding lines of poetry. In this image a jumble of incoherent letters appears while Harrelson reads "I feel like a run-on sentence / in a punctuation crazy world / and I see the world around me."^{lvii} This jumble sorts itself out so that the words on screen match Harrelson's final line of the section, "like a mad collective dream" (Figure 4).^{lviii}

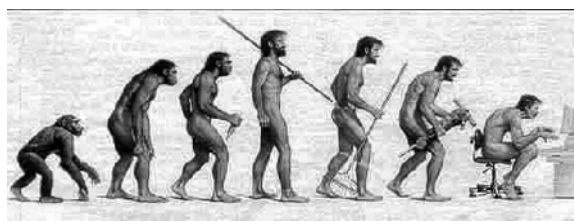


Figure 3. This image is a parody of a well-known image depicting evolution



Figure 4. The jumble of words (left) resolve to match the spoken line "Mad collective dream" (right).

Like these two non-photographic exceptions, the remaining images, all photographs, also offer representations of the spoken words. Many of the Flash movie's sections also include printed lines of the worded text. Thus a section with the voice-over saying "An endless stream of people / move like ants from the freeway / cell phones, pc's, and digital displays" contains a photograph of line lanes of one-way traffic while the words "an endless stream" appear over the picture and then fade away.^{lix} While all of the visually reproduced words appear in the same small, white, plain sans-serif font, simple effects are used to provide movement and tie lines of words or sections of the production together. For example, as Harrelson reads the line "And war is the biggest money-maker of all" the text "War = \$" fades into the upper left corner of a photograph showing two fighter-jets in flight. That text remains on screen for the next image, depicting a small group of soldiers watching a missile launch in the distance as Harrelson reads the line "we all know missile envy only comes from being small."^{lxi} Other text moves across the screen or fades word by word into one-another. The words "revolution," "evolution," and "solution" appear and rotate around an axis above a photograph of several wind-turbines as Harrelson reads "You say you want a revolution / a communal evolution / to be part of the solution."^{lxi}

Soundbyte Style in "Thoughts From Within."

The use of visual fragments of the spoken text, in compliment with the photographs, not only add coherence to segments of the production, they also highlight the soundbyte quality of the poem. These pieces of written text punctuate what Harrelson's

even tone does not, providing emphasis on phrases like "a mad collective dream," "modified irradiated Big Mac," "strange change in the weather," and "living as loving." Combined in turn with powerful imagery, these soundbyte moments collectively provide strong resonance. One such moment punctuates the lines "like a genetically modified irradiated Big Mac / is somehow symbolic of food" with a giant fast food burger, so large the screen fails to contain it, while the words fade in one by one: "modified," "irradiated," "Big Mac" (Figure 5). Similarly, the spoken words "politicians and prostitutes" who "talk about the strange change in the weather" are accompanied by a photograph of a smog concealed city-scape. Harrelson's voice and identical printed words "living as loving" are punctuated with a photograph of smiling, ethnically diverse children grouped with arms draped over one-another (Figure 6).

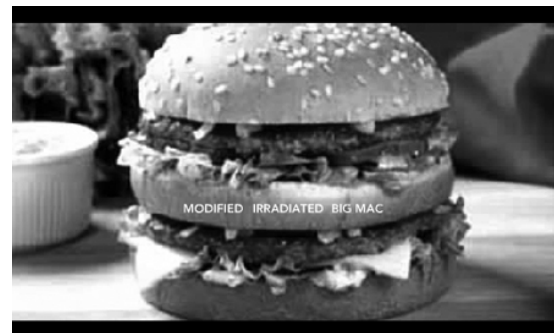


Figure 5. The irradiated Big Mac



Figure 6. Smiling children shown in "Thoughts From Within"

These strong, multi-dimensional elements of rhetoric coalesce in the communicative encounter. The combination of spoken and printed words with a representative image as the rhetorical moment "living as loving," for example, offers the viewer an aphoristic articulation of living (as loving), a byte of sound punctuated with a byte of worded text. The two reinforce each other, and are further articulated with a particular exemplar: the smiling, multi-ethnic children. Appealing to the discursively prevalent values of diversity, childhood innocence, and youthful bliss, this image evokes what the words describe. This is the potential of soundbyte resonance in the setting of new media. Although there is a tendency for distraction and narrative fragmentation, new media texts like TFW can condense diffuse yet common discursive experiences into moments of rhetorical force. The pith of these statements align with the experience of the television viewer, the headline reader, and the web-surfer. In addition, these soundbytes match the technological characteristics of the medium. The hypertextual, multi-media rich internet communication form is well suited to delivering resonant, forceful, and, yes, short messages. So TFW contains a series of interconnected moments that draw on the technologically compelled style of contemporary communication. Another aspect of the soundbytes in TFW, however, also draws upon the *content* of the soundbyte culture.^{lxii}

"In Money We Trust," a slogan borrowed and reworded, the missing "God" implicating a capitalist-centered society for forsaking its spiritual history, is a soundbyte with pith and depth, but also with familiarity. In the Flash presentation, the written words "Money" and "Trust" slide across the screen over a photograph of anxious stock-traders forcefully jostling for position on the market floor, as Harrelson

reads the lines "'In Money We Trust,' / we'll find happiness." The moment plays Money against Trust as a familiar slogan plays against a parallel tension between Money and God. The image of stock-traders, a human condensation of capitalistic greed, provides punctuation. The discursive elements evoked from the memory of the viewer—a national slogan, spirituality, "the market"—collide with the rhetoric of the moment—Harrelson's mutation of the slogan, the tension between Trust and Money, Money and God, greed and happiness. This is the opportunity a new media soundbyte generates for shifting consciousness. Of course, there is no guarantee in any single moment of potential, but a text like TFW provides many opportunities.

Some opportunities are created by aligning soundbytes and the communication context of new media with pithy statements and punctuated, evocative images. For example, TFW combines the soundbyte, "the room that they call living," with the image of an entranced family staring blankly at the glow of a television. Other opportunities draw upon the experiences of the audience within the soundbyte culture, taking common phrases like "the man behind the curtain"—a reference so frequently used its cultural resonance goes well beyond the *Wizard of Oz* origination—and adding an image showing a collection of corporate logos, each recognizable in themselves, cluttered along a retail strip, itself a familiar image (Figure 7). From the obvious Beatles' reference ("You say you want a revolution") to creatively expressive turns of phrase ("a communal evolution") to an in-between of the untraceable yet familiar ("part of the solution"), *Thoughts From Within* pulls together elements that function in alignment with the content, style, and technology of the circumstances of communication.



Figure 7. Corporate logos by the roadside in "Thoughts From Within"

Celebrity Resonance in "Thoughts From Within."

Like the soundbyte style, celebrity expertise functions through appeals to the prevalent discursive experiences of its viewer by aligning with the characteristics of prominent forms of communication and by the production of potential rhetorical forces. Living in the celebrity world, where discourse regularly conflates the life and the product, entertainment and politics, interactions with a celebrity's voice create a general expectation for authoritative delivery. Although there is an ambiguity characteristic of celebrity discourse, the use of a celebrity voice maintains one consistency: authority. Whether as spokesperson, promoter of self and product, or as political activist, the celebrity maintains the role of the expert in cultural expectations. These expectations exist as rhetorical parameters in play when a viewer encounters TFW. Harrelson's voice meets expectations by providing complementary rhetoric, a rhetoric of celebrity expertise. The rhetorical elements present within TFW's Flash presentation function to direct the celebrity expectations toward Harrelson's politics. Since politics and entertainment are also within the realm of celebrity expectation, the repulsing force of a patronizing lecture are tempered by the viewer's desire for insight on the celebrity life.^{lxiii}

Even the title, "Thoughts From Within," suggests expert opinion, assuming viewers would have interest in a set of "thoughts" produced in poetic form, that occur "within" the mind of the celebrity expert. This presumption continues with the first moment of the production as Harrelson reads the lines "I sometimes feel like an alien creature / for which there is no earthly explanation." The line "I sometimes feel like an alien creature" is punctuated through visual display of the words and the photograph of Harrelson, surrounded by smoke, with a strong light in the background (Figure 8). The smoke and light are suggestive of alien encounters in science fiction films like Stephen Spielberg's classic *Close Encounters of the Third Kind* (Figure 9). The image is also suggestive of Harrelson's well known activism for hemp and marijuana legalization, as the smoke appears to have emanated from Harrelson himself. Harrelson's image complements the subject of the first line of the poem "I"—also Harrelson. As a narrative opening, this moment sets Harrelson apart from the world, as a visitor from above, with "no earthly explanation." Positioned as different, and otherworldly, Harrelson's perspective is that of the objective outsider, the alien creature that we know from movies is beyond our comprehension, deity like.

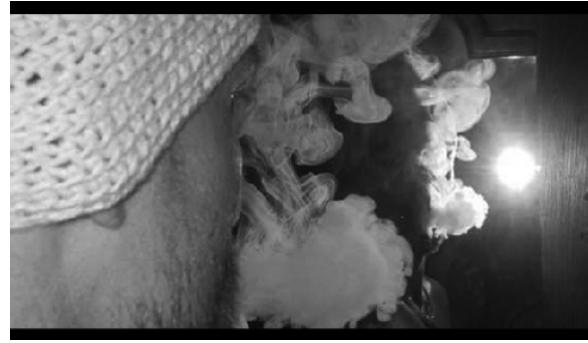


Figure 8. Harrelson is shown in smoke and light in "Thoughts From Within"

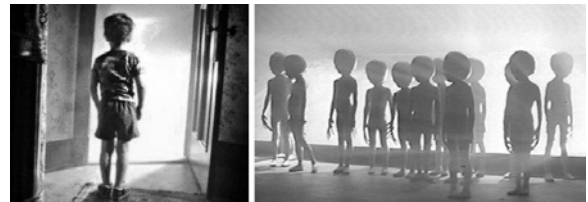


Figure 9. Two scenes from *Close Encounters of the Third Kind* (1977) showing alien lights

The narrative structure of the text separates Harrelson (the expert) and the viewer from a demonized other. As a poem, the narrative structure begins in the first person, with four "I"s and one "my" in the first stanza. The next two stanzas switch to the collective, with two uses of "we" and one "us" in the third stanza, one "I," one "everybody," and one "us" in the forth stanza. The forth stanza also includes the beginning of a bifurcation between this collective "we" and "they," represented by "government," "politicians" and "the man behind the curtain pulling the strings." In the fifth stanza Harrelson reinvigorates his position of expert, casting himself in opposition to "a billion people sitting watching their TV" as the one who sits "on the grass under a tree." The sixth stanza switches back to confirm the enemy, "they: 'the earth rapers / like Monsanto and Dupont.'" In the seventh stanza Harrelson returns to the development of a collective, an "us," guided by the expert to "imagine" when "God was nature." In the final stanza, Harrelson speaks directly to the viewer, now a member of his collective, challenging: "Do you dare." Five uses of "you" and one "your" occur in the first six lines of this final stanza. On the final line Harrelson's expert persona returns to declare "Maybe I'll be seeing you around."

Within this narrative structure of celebrity expertise there are individual moments of celebrity

expertise. Breaking the poem into the individual lines which correspond more faithfully to the 32 images in the production, we find lines one and two corresponding to image number one of Harrelson in smoke and light. Second, lines 40 and 41 in the fifth stanza, “and since there is no loving room / I sit on the grass under a tree,” corresponds to image number 21, a photograph of Harrelson, in profile, sitting shirtless in the lotus position on the grass under a tree (Figure 10). Here the moment compliments the narrative but also visa versa, as the flow of rhetorical forces predisposes the viewer to consider Harrelson as expert. The moment, with its Buddha-like image, entertains the viewer with an image of the celebrity life, politicizes with a celebrity authority, and fulfills the expectation of a resonant moment between Harrelson, the “I” and “us” the viewer. Finally, in the closing line and image of the production, Harrelson offers a clear enticement into celebrity entertainment/politics. Not only does Harrelson lead the repeated reference to the individual “you” with the spoken “maybe I’ll be seeing you around,” but he is similarly pictured in casual clothes, on the street, shaking hands in a small crowd (Figure 11). The implication here is obvious, meet his challenge “to be part of the solution” and you can meet the celebrity. In a culture of idealized celebrity life, the face-to-face moment is the ultimate enticement. Harrelson plays on the celebrity culture by offering himself as enticement to political activism.



Figure 10. Harrelson in the lotus position in "Thoughts From Within"



Figure 11. Harrelson Shakes Hands in "Thoughts From Within"

Conclusion

I feel like a run-on sentence
in a punctuation crazy world.
and I see the world around me
like a mad collective dream.

An endless stream of people
move like ants from the freeway
cell phones, pc's, and digital displays
"In Money We Trust,"
we'll find happiness
the prevailing attitude;
like a genetically modified irradiated Big Mac
is somehow symbolic of food.
-from Woody Harrelson, "Thoughts From Within"

Harrelson's poem is a rousing indictment of modern American society, and it also shows how our rhetoric, even our dissent, is mired in the grand flows of discourse. While the elements and fragments within texts maintain the potential for rhetorical force, communicative encounters always occur within some fields of discourse. The moment of the rhetorical event collides textual forces, individual interpretation, and communicative circumstances within an infinite chain of moments, a flow of discourses driven by the derivations of each encounter. In the passage above Harrelson decries the speed of life and the technological bondages, yet it is precisely these characteristics of modern living that create the dazed confusion of over-stimulation, the “mad collective dream” that inspires him. Harrelson cringes at the simulacra of food, yet it is an icon of this simulation, the Big Mac, that provides the punch for his indictment. Harrelson is a run-on sentence, but speaks in pithy language to make his point. The modification of a national slogan is a clear statement because what is removed remains. “God” resonates in our minds, not because of a subtle invocation, but because every coin and bill we’ve ever seen displays

it. It is the money that Harrelson mocks that provides the stage from which he performs. It is the resonance of our memories and experiences in a discourse-driven culture that allows for such a clear and poignant indictment. I am not searching out the futile irony of such dissenting rhetoric, however, but possibility. Harrelson's poem is no less activist because of its dependence on the prevailing culture than a Declaration of Independence is impotent because it names the Monarch.

The celebrity expert is a familiar form of authority in a world often remiss of clear authority. Harrelson's status as celebrity is combined with the

voice of expertise to create a stylistic structure recognizable to the contemporary audience. Highlighting this style is the soundbyte, a pervasive form nearing ubiquity as we move from electronic to digital age. Soundbytes are easily dismissed as counter to reasoned public discussion and manipulative of public opinion, but they are also the norm of public discussion and the basis for much public opinion. With pervasive use, however, comes the capacity for subtle implementation. Harrelson's poetic style functions by calling upon the discursive experiences of viewers to generate potential moments of rhetorical force.

Endnotes

- ¹ President Bush was actually born in New Haven Connecticut, but spent his childhood in Midland, the town he most frequently refers to as his hometown.
- ² NBC aired 273 episodes of *Cheers* between 1982 and 1993. Harrelson joined the cast in the fourth season and was awarded an Emmy in 1989 for “Outstanding Supporting Actor in a Comedy Series.”
- ³ Ted Danson was born in 1947 in San Diego and has never played professional baseball (though he is rumored to have taken part in monkeywrenching in his youth).
- ⁴ (Gamson 1994)
- ⁵ (Marshall 1997)
- ⁶ (Gamson 1994)
- ⁷ (Marshall 1997)
- ⁸ See (Jones 2005)
- ⁹ *Go Further*, DVD, Directed by Ron Mann (2003; Home Vision Entertainment, 2005)
- ¹⁰ (Condron 2005)
- ¹¹ (D'Agostino 2001)
- ¹² (Howell 2003)
- ¹³ Fraser and Brown find that “celebrity identification” can lead to “role modeling” the values of a celebrity and changes in lifestyle. (Fraser and Brown 2002)
- ¹⁴ Wark specifically calls upon using the celebrity culture to generate social change. (Wark 1999)
- ¹⁵ For an historical reading of this phenomenon see (Gamson 1992)
- ¹⁶ (Fischer 2005)
- ¹⁷ (D'Agostino 2001)
- ¹⁸ (Associated Press 2001)
- ¹⁹ (Associated Press 2003)
- ²⁰ Lambert 2001)
- ²¹ (Gilman 2004)
- ²² O'Reilly, Bill. “The O'Reilly Factor,” Fox News Network. August 9, 2002.
- ²³ (Higgins 2002)
- ²⁴ (Fischer 2005)
- ²⁵ (Ouzounian 2004)
- ²⁶ (Dicum 2005)
- ²⁷ (Ouzounian 2004)
- ²⁸ (Dicum 2005)
- ²⁹ (Harrelson 2001; Associated Press 2001)
- ³⁰ See also (Lewis 2001)
- ³¹ Gamson refers to the discourse of celebrities as presenting “instructions” for their interpretation. (Gamson 1992)
- ³² (Mickelson 1989)
- ³³ (Stephens 1998)
- ³⁴ (Slayden and Whillock 1999)
- ³⁵ (D'Agostino 2001)
- ³⁶ (Apple Matters 2005)
- ³⁷ (D'Agostino 2001)
- ³⁸ (Hollett 2003; Lambert 2001)
- ³⁹ (Wackernagel and Rees 1996; Chambers, Simmons, and Wackernagel 2000)
- ⁴⁰ (Woody Harrelson, *Furthering the Cause* 2004; Hollett 2003; Dicum 2005)
- ⁴¹ (Fischer 2005)
- ⁴² (Marshall 1997)
- ⁴³ (VoiceYourself.org)
- ⁴⁴ (Tree Media Group)
- ⁴⁵ (VoiceYourself.org)
- ⁴⁶ As of February 15, 2006
- ⁴⁷ The online database, Internet Archive, has saved versions of VoiceYoirself.com dating back to May 1, 2001 and Voicemyourself.org from October 20, 2001. (VoiceYourself.org 2001)
- ⁴⁷ (VoiceYourself.org)
- ⁴⁹ (Roddick 2005)

⁵⁰ (MetaFilter 2004)

⁵¹ (JimBlog 2005)

⁵² (Jacobie 2006)

⁵³ (jasonjl 2006)

⁵⁵ (Tree Media Group)

⁵⁶ Rudy Zallinger's image showing a progression of figures from "proto apes" to "modern man" was originally published in the Time Life Series' *Early Man*. (Howell 1965) It has since been reproduced and parodied in countless ways, almost always without attribution.

⁵⁷ TFW lines 3-4

⁵⁸ TFW lines 6-8

⁵⁹ TFW line 9

⁶⁰ TFW lines 10-12, section 5

⁶¹ TFW lines 23 and 24, sections 12 and 13.

⁶² TFW lines 60-62, section 31

⁶³ I do not mean to suggest a clear bifurcation of form and content here. I see form *as* content, with no clear distinction between the two.

⁶⁴ Simonson similarly argues the effectiveness of celebrity campaigns by PETA. (Simonson 2001)

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Win, Lose, or Draw: Media Framing of Conservation Easements

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Abstract

This study examines framing of conservation easements, using qualitative textual analysis to discover how three different media sources framed the issue. The three media sources used were major newspapers, an interest-based publication, and an interest-based webpage. Although few framing differences emerged between media sources, significant differences emerged between frames held by different stakeholder groups. In an attempt to suggest useful approaches to managing conflicts over conservation easements, I review the frames found in the analysis and discuss some possibilities for reframing the issue in ways that may lead to a more productive policy regarding conservation easements.

Introduction

Environmental conflicts often involve multiple parties who hold different value sets, and have different interests in how decisions are made and in their outcomes (Cox, 2006; Killingsworth & Palmer, 1992). Communication plays a critical role in how the public receives information and in how they develop and negotiate their responses to conflicts (Cox, 2006). Moreover, communication is an element of conflict that can change and thus, is an important tool for the field of conflict management (Cox, 2006; Pearce, 1989).

The conflict surrounding conservation easements involves many different stakeholders and interests (Fairfax, Gwin, King, Raymond, & Watt, 2005; Merenlender, Huntsinger, Guthey, & Fairfax, 2004; Pidot, 2005; Rissman et al., 2006; Stephens, 2004, March 31; 2006, June 4; Stephens & Ottaway, 2003, December 21; 2003, May 6; Stephenson & Chaves, 2006). Conservation easements are the most popular tool used in private land conservation practices today (Land Trust Alliance, 2006). Easements are popular because they are incentive-based—landowners sell land use rights (such as development rights) now, so the public can benefit from conservation later. Landowners also receive tax breaks for their donation. Easements are subsidized by state and federal governments and provide the public with less expensive ways to conserve land for future use, as opposed to purchasing land outright. Since 70% of land in the United States is privately owned, it makes sense, to some, to include these lands in conservation practices (Groves, Beck, Higgins, & Saxon, 2003).

Mainstream and interest-based media are popular ways information regarding environmental conflicts is communicated to the public (Simon & Xenos,

2000). The way stories are told, or framed, can affect management of the conflict over time (Nelson, Oxley, & Clawson, 1997). Understanding how different parties frame conflict (Tannen, 1993) can encourage the development of informed communication strategies that better facilitate problem solving (Gray, 2003; Smith 2006). This point is especially important in the case of conservation easements. Conservation easements share support from highly diverse interest groups. As flaws with this increasingly popular conservation¹ tool began to surface in the media a few years ago, political, interest-based, and value-laden differences among stakeholder groups have hindered the conflict management process.

This analysis attempts to provide a better understanding of how different media have framed the issue of conservation easements. It provides a rich description of how media have framed conservation easements in recent years, and does not attempt to provide a generalizable claim regarding frames held by easement conflict participants, media sources, or media audiences. I hope to provide a better understanding of how easements are framed in the media, and then offer suggestions that help improve public policy related to conservation easements.

I focus on three categories of frames suggested by Gray (2003) as especially important to environmental conflicts: identity, conflict management, and social construct (see also Gray, Peterson, Putnam, & Bryan, 2003; Peterson, 2003; Putnam & Peterson, 2003). I use qualitative content analysis to discover and describe how these frames were presented in print and web-based media, between January 1, 2004 and December 1, 2006. Media sources used in the analysis are (1) nationwide major newspapers including *USA Today*, *The New*

York Times, *The Washington Post*, *The Denver Post*, *The San Francisco Chronicle*, and *The Plain Dealer*; (2) an interest-based publication, *High Country News*; and (3) the interest-based website of the Land Trust Alliance, <http://www.lta.org>.

Conservation Easements

Conservation easements are typically voluntary agreements that are negotiated by land trusts or governmental agencies (LTA, 2006; Pidot, 2005; TNC, 2004; 2006). These agencies hold easements in trust for perpetuity, and if land ownership changes, the easement stays with the land. Drafted with the original landowner's interests in mind, easement documents vary considerably (Merenlander et al. 2004; Pidot, 2005; TNC 2004) making them difficult to enforce or police (Pidot, 2005). Some members of the public feel if easements are paid for through taxpayer dollars, the public should have a say in major decisions made regarding them. On the other hand, some easement holders and private property rights activists feel it is about time that the public finally pays for environmental goods produced through private land management practices.

Since incentives for donating easements are large, people have begun to wonder (and the IRS and Congress have argued) whether all easements conserve what they claim to conserve—some deals bring a large profit to landowners while leaving the question of what was conserved open. For example, easements on small, fenced-in backyards look suspicious (Stephens and Ottaway, 2003a). Some deals are known to have paid for development rights on undevelopable land (Stephens, 2006). Strong feelings on both sides of this issue continue as uncertainty about who is really benefiting from easements (the public or landowners) remains a question. In light of a new federal tax incentive, this issue has become increasingly salient. Land trusts, however, feel that easements are sound conservation tools and that a few rogue land trusts have given easements a bad name.

Easements came into the limelight in May 2003 when *The Washington Post* ran a series of front page articles titled *Big Green*. The *Post* authors charged large land trusts with purchasing land and homes at a high price, placing conservation easements on them, and reselling them at a significantly lower price to board members and affiliates. The *Post* series prompted inside Congressional Finance Committee and IRS investigations on The Nature Conservancy (TNC) and other large land trusts. Following a year

of investigation, the Joint Committee on Taxation (2005) moved to ban incentives for easements, but that never came to fruition. TNC and the Land Trust Alliance (LTA- the alliance of land trusts who act as a resource for trusts and who lobby for land trust interests at the national (Congressional) level) moved to renew public confidence in land conservation and began placing ads in the mainstream media about the benefits of land conservation (TNC, 2004). They lobbied Congress to increase tax incentives for parties that conserved land. They also called for an accreditation system for land trust organizations to weed out rogue trusts (TNC, 2006). In October 2006, lobby efforts of the LTA and TNC paid off when Congress passed the Pension Protection Act of 2006, which increased incentives for easements on working lands (farms and ranches).

Documentation of problems surrounding conservation easements are covered in depth by Pidot (2005). Pidot lays out the following eight issues: document variability, lack of public accessibility, lack of transparency in dealings, problems with land stewardship, lack of standards in place to address document changes, lack of clear valuation standards, failure to consider implications of easements on land acquisition and regulation, and failure to consider issues of equity and environmental justice. Suggested solutions to these problems often involve the federal government due to scope and scale. While government intervention is welcome by some, land trusts and landowners support a free-market economy and prefer to keep control of easements in the hands of individuals.

Conflict Framing

The concept of framing was described by Goffman (1974) as a “schemata of interpretation” (p. 21) that allows individuals to organize and package information and life experiences to classify, order, and make sense of them. Research conducted on framing and media framing is vast (Cappella & Jamieson, 1996; Kellstedt, 2000; Kruse, 2001; Gamson & Magdilliani, 1989; Gan, Teo, & Detender, 2005; Gray, 1989; Gray 2003; Elliott, Gray, & Lewicki, 2003; Noakes & Wilkins 2002; Nelson et al. 1997; Peterson, 2003; Peterson & Franks, 2006; Putnam & Peterson, 2003; Scheufele, 1999; Simon & Xenos, 2000; and many others).

The definitions of media framing are varied, emphasizing different aspects of this process. For example, Cox (2006) focuses on structure and organization of news article elements (headline, lead paragraphs, visuals, etc.); Nelson et al. (1997) define

media framing as “the process by which a communication source...defines and constructs a political issue or public controversy” (p. 567); and Gamson and Modigliani (1989) take a constructionist approach to media framing—describing interpretive packages used to characterize discourse that develops from a central frame. The primary goal of this analysis of media frames is to discover what frames exist for conservation easements, for the purpose of improving future conflict management practices. Therefore, I followed Gray’s (2003) definition of frames as central underlying themes or processes used by people or organizations to describe, organize, categorize, and understand the world in which they live. I focused the analysis on structural elements suggested by Cox (2006).

Issue framing plays an important role in the management of environmental conflict. Killingsworth and Palmer (1992) coined the term *ecospeak*, defining it as “a way of framing argument that stops thinking and inhibits social cooperation” (p. 9). Further, they argued that rigid frames often prevent parties from perceiving existing commonalities. Focus on incompatibility among conflict participants is powerful and can hinder communication and conflict management progress (Daniels & Walker, 2001; Fisher & Ury, 1981; Gray, 1989). All of these factors can shape the public’s willingness to participate in conflict management activities. Awareness of participant frames can lead to identification of both potential compatibilities and incompatibilities, which may help managers develop more effective conflict management strategies (Peterson, 2003; Smith, 2006).

Framing Environmental Conflict

Gray (2003) describes framing as an interpretive process that helps individuals locate where they are and interpret what is around them. She explains that frames “reflect...our interpretation of what is going on and how we see ourselves and others implicated in what is happening” (Gray, 2003, p. 12). Framing of environmental issues involves an interpretation of whether or not a conflict exists, and if so, what the conflict is about, how it may resolve, and what the conflict outcome might be. Frames are used by conflict participants to “(1) define issues, (2) shape what action should be taken and by whom, (3) protect oneself, (4) justify a stance, and (5) mobilize people to take or refrain from action on issues” (Gray, 2003, p. 15).

In order to capture the different ways individuals use framing in environmental conflicts, Gray (2003)

developed a much needed (Scheufele, 1999) method for using discourse analysis to identify and describe frames. The taxonomy she developed includes seven basic frames. *Identity frames* describe how individuals define themselves within social categories (usually by affiliating themselves with a demographic, location, institution, or interest). *Characterization frames* provide the means for describing other parties in the dispute, and characterizing what or who is to blame for the conflict. *Conflict management frames* identify how participants feel this and other conflicts could or should be resolved. *Whole story frames* provide a summary of what participants feel is at the heart of an issue. *Social control frames* describe how conflict participants prefer policy decisions to be made, generally based on an integration of their preferred degree of independence/interdependence with others, and their attitudes toward authority. *Power frames* describe how individuals identify who has power in a situation and why they believe those people are powerful. *Gain versus loss frames* identify whether an individual believes actions by other participants (individuals and groups) have led to gains or losses for the speaker/writer.

Although nearly all of the frames summarized above pertain to the conservation easement issue to some degree, this analysis focuses on three frames: identity, conflict management, and social control. These frames were chosen for their relevance to the conservation easement issue. The conservation easement issue involves interest groups that have strong senses of identity for place and as members of interest groups. Conflict participants represent both public and private property rights. Understanding how these participants see pathways to appropriate management of environmental conflict—whether through incorporation of government or among themselves—is important for the problem solving process, making the conflict management frame crucial. Social control frames build from identity and conflict management frames as they help to further explain an individual’s worldview of who should have say in decisions made and whether or not participants need direct ownership of decisions. Incorporating an awareness of these frames in the conflict management process will help gain legitimacy for conservation easement policy. Together, identity, conflict management, and social control frames help paint a picture that describes the conflict management and decision-making strategy needs of many participants in the conservation easement issue.

Identity Frames

As explained above, identity frames describe how conflict participants view themselves and how they identify with a locale, demographic, interest, or institution. In the easement issue, participants identify themselves as ranchers, farmers, conservationists, members of land trusts, developers, government officials, and taxpayers, to name just a few. In many cases, people identified with place. One man described his valley: “This is my church, my cathedral.” Another person exclaimed “...our identity is still informed by the West’s mythology.” People generally have more than one identity frame because people are complex and conflicts exist in a real world. For example, some people see and use the identities rancher and conservationist together, whereas others describe them as separate groups.

Research on identity frames in environmental conflicts provides more insight into the importance of using this frame when faced with sensitive issues. Putnam and Peterson (2003) found that three identity frames—interest-based, place-based, and institution-based affiliations—played important roles in a water management conflict over the Edwards Aquifer in south-central Texas. Identities in this conflict were revealed in discourse as the conflict evolved. For example, when farmers pulled out of a water management program, opponents defended their positions by voicing their interest-based claims. Identity frames are important to identify in conflicts because identity challenges call into question an individual or group’s beliefs, values, and legitimacy making people defensive and angry; when these sort of threats occur, they are difficult to iron out (Gray, 2003).

Conflict Management Frames

Conflict management frames describe how individuals or groups feel a conflict can or should be resolved (Gray, 2003; Gray et al., 2003). Gray (2003) identifies nine frame types derived from Pinkley (1990) and Pinkley and Northcraft (1994) to describe where a position falls on the conflict management continuum. In essence, the frames for conflict management range from no action/avoidance/passivity to aggression/struggle, sabotage, and violence. Gray (2003) describes these conflict management frames as follows:

1. Avoidance/passivity: Statements that give a preference for doing nothing, letting the matter rest, inertia, no action.

2. Fact-finding: Recommendations for investigation, collecting more information, getting scientific facts, conducting research on a problem.

3. Joint problem solving: Statements that prefer community or joint action, common ground, mediation, collaboration, conciliation, and collective processes. This category has two sub-categories: (a) consensus and (b) authority decides after consultation (p. 25).

4. Authority decides based on expertise: Local authorities, agencies, or institutions or boards make the decision because they have the knowledge and technical expertise.

5. Adjudication: Statements that imply a third party should decide, such as an arbitrator, the courts, etc.

6. Appeal to political action: Recommendation to handle the problem through enacting or abolishing laws or regulations, lobbying, support candidates, legislative actions.

7. Appeal to market economy: Negotiation of water rights, market solutions, economic and system changes.

8. Struggle, sabotage, and violence: Statements that refer to continued fighting, civil disobedience, force (p. 26).

9. Other: Statements that recommend decisions based on “common sense” (p. 27).

Category Adjustments

The frame types described above guided my analyses, and I made adjustments in response to frames that emerged from the media I examined. For instance, I found no instance where people suggested making a decision after consultation. Since the word *consensus* is strong and has underlying implications

(Peterson et al., 2004), I stuck with the category label “joint problem solving” to indicate that the party showed interest in solving the conflict through a collaborative effort. For example, one editorial questioned:

Do we need to divide the West into two parts based on philosophical ideals—such as whether we have a public or private “right” to something on the land or do we talk about crossing boundaries and working collaboratively?

I added a subcategory to the “authority decides” frame because a reoccurring theme in the easement conflict articles was that people held strong beliefs that they were the sole authority on the issue and that no one (especially outsiders) had the right to tell them what to do. This conflict resolution frame links directly with the individualist social control frame described later in this report. I also expanded the category “other” to include a conflict management frame that suggests leaving the problem for future people because they feel future people will have a better likelihood of solving the problem with greater efficiency.

Gray et al. (2003) used conflict management frames to analyze three environmental cases. They found that conflicts involving more extreme measures of management, such as litigation or sabotage, experienced an escalation. They also found that conflict management frames changed depending on events or life experiences, such as change in economic status or shifts in influence or power. Overall, measures that included political action reduced the chances of using collaboration in the problem solving process.

Social Control Frames

Social control frames refer to different worldviews held by conflict participants (Dake, 1992; Peterson, 2003). These worldviews are based on two factors (1) the degree of dependence people seek when solving problems and (2) the degree of ownership people seek in decisions made (Gray, 2003). Gray spells out four types of social control frames as originally delineated by Dake (1991, 1992). The four types include fatalists (low interdependence, low ownership), individualists (low interdependence, high ownership), egalitarians (high interdependence, high ownership), and hierarchists (high interdependence, low ownership).

Fatalists are described as people who play little to no role in how conflicts are managed (Gray, 2003; Peterson, 2003). Fatalists think they have no power over the decision. Individualists feel strongly about keeping the decision-making process limited to those involved. People that hold this belief often have negative views about government intervention into private negotiations. **Egalitarians** value community input in decision-making processes and feel decisions that affect an entire community should not be in the hands of individuals. Hierarchists believe government or technical authority are best suited for decision-making processes and may stray away from public participation. For the analysis in this report, I followed Gray (2003) and Peterson (2003) by further separating egalitarian and hierarchist frame types into local and nonlocal groups.

Peterson (2003) uses three different natural resource conflict cases to illustrate how social control frames function in environmental disputes. She found a common theme of local people versus the federal government and that, in general, intervention by the federal government was viewed in a negative light. The conservation easement conflict definitely has one side that supports this negative view of government intervention. There is another side equally as large, however, that feels government intervention is the only way to control activities of powerful organizations that are partially funded by, but receive little regulation from, federal and state governments.

Methods

This analysis focuses on framing in the discourse surrounding conservation easements. I conducted a qualitative content analysis of three media sources: major newspapers, an interest-based print and web-based publication, and an interest-based webpage, in order to determine frames used by conflict participants. The topic of conservation easements was chosen because of its recent controversial history² in the media and for its diverse combination of stakeholder groups. Different media sources were chosen to provide a comparative study between mass media (major newspapers (Cox, 2006)) and alternative media (independent, interest-based, or web-based media (Cox, 2006)). Mass media is the number one way people get political information (Nelson et al., 1997). The ever-increasing use of the World Wide Web as a supply of information makes this source an interesting and important (Mautner, 2005) addition; however, logistical problems do exist when attempting to use the web for discourse analysis, but these considerations were accounted for, as described below.

Qualitative Content Analysis

Based on the Audit Bureau of Circulations Top 200 newspaper reader profile (2006), seven nationally distributed newspapers were chosen for this study along with an interest-based publication, *High Country News*, and an interest-based website, <http://www.lta.org>. Newspapers were chosen for their circulation and for their coverage of conservation easements. Using Lexis Nexis, a guided news search was performed for nearly all major newspapers listed in the Audit Bureau of Circulation's Top 20 newspapers using the following search criteria: Category-general news, News Source- major papers, Search Term- conservation easement, In- headlines, lead paragraph(s), and terms, From- January 01, 2004 to December 01, 2006. Search dates were chosen to begin after the conclusion of the *Washington Post's*, *Big Green* series. The Lexis Nexis search found that *USA Today*, the national newspaper with the largest circulation (2,549,252), had no articles that listed conservation easement in their headline, lead paragraphs, or terms.

According to International Information Programs *Handbook of Independent Journalism* (2006), a headline refers to the title of the article and lead paragraphs refer to paragraphs one, two, and possibly three depending on the article. The function of lead paragraphs is to explain who, what, where, when, why, and how about the news. If the article begins with a soft lead (story or description), the article has 1-3 lead paragraphs. If the article is purely informative, it typically has one lead paragraph. According to McCargar (2006), a "term" in Lexis Nexis refers to search terms added to documents when they enter Lexis Nexis to help provide better ways to search.

Using the same search criteria as *USA Today*, other major newspapers got better results. From the Top 20 newspapers (Audit Bureau of Circulations, 2006), six were chosen based on circulation and number of articles returned. They were the *New York Times* (circulation: 1,623,697, articles returned: 8), *Denver Post* (circulation: 1,039,340, article returned: 13), *Washington Post* (circulation: 930,619, articles returned: 29), *Houston Chronicle* (circulation: 692,585, articles returned: 2), *Plain Dealer* (circulation: 446,487, articles returned: 3), and *San Francisco Chronicle* (circulation: 432,957, articles returned: 7). *Los Angeles Times* (circulation: 1,172,005) and *Chicago Tribune* (circulation: 937,907) returned no articles. Since *USA Today* is such a major paper, the search was expanded to include all text, three articles

were returned. All articles were included in the study to complete the newspaper document collection. A total of 65 newspaper articles were collected, ten were omitted due to irrelevant content (5-article repeats, 2- irrelevant topics, 2-daily calendars, and 1-obituary). In total, 55 major newspaper articles were analyzed.

High Country News was chosen because they are a nonprofit, independent, interest-based publication whose mission is "to inform and inspire people to act on behalf of the West's land, air, water, and inhabitants...to create what Wallace Stegner called a society to match the scenery" (HCN, 2006, para. 1). High Country News is a bi-weekly publication with 23,000 subscriptions worldwide and is available on the web at <http://www.hcn.org/>. Documents were collected from High Country News archive advanced search website:

<http://www.hcn.org/servlets/hcn.SearchPage?type=advanced>

Search criteria for High Country News were as follows: Keywords- "conservation easements," Category- All, Author- blank, State- All, Year- 2006, 2005, 2005, Sections- Main Archives and Writer's on the Range Archive, Sort by- Date, Search Depth- Summaries and headlines. The term "conservation easement" was searched first, but returned only three articles. When the "s" was added to the end, the search returned 50 documents. Two articles were corrections only and ten were irrelevant to the conservation easement topic. In all, 38 High Country News articles were analyzed.

In response to recent calls for qualitative discourse analyses of web-based media (Mautner, 2005), the website for LTA, <http://www.lta.org>, was used in this study. This source is pertinent to this research as LTA is the biggest resource of information available about land trusts, and for land trusts. Websites are dynamic, interactive, vast, and they have many layers. In order to account for some of this variability, the search of this website was basic. In the future, other, more complex, methods might prove to obtain more detailed results.

The search of the LTA website entailed going to the LTA website, <http://www.lta.org>, and clicking on "Search" on the top bar. This leads to the website <http://www.lta.org/search.htm>. The search term "conservation easement" was entered into the search box. Results of the search returned over 300 articles. After scrolling to the bottom and clicking on "Sort by Date," the search was narrowed to only 26 articles (articles were collected in order—beginning with

most current—until article dates went beyond January 1, 2004). To collect articles, each search listing was clicked on once and data was collected directly from that link. The search was limited to one layer deep, so no other links were hit beyond original search results. One article that was retrieved was irrelevant to the study. In all, a total of 25 documents were retrieved from the LTA website.

Analysis of the documents involved reading all documents and noting when and where an identity, conflict management, or social construct frame was found in the discourse. Discourse analyzed included headlines, body, captions, and visuals. Documents were then reviewed a second time to check frames recorded on the first round. On the second round, two frames were added and none were omitted or changed. Frames were recorded by frame category and subcategory, news source type, and for major newspapers, by newspaper as well. Trends in frames were recorded separately. Trends included identification of one voice in the article that identified more than one frame (ex. One voice disclosed two identity frames, two conflict management frames, and one social control frame). Trends in frames were recorded and tallied to get a sense of how different people use frame types. Other data collected on each newspaper or HCN document included publication, year published, article length (when printed on 8 ½ X 11 inch paper), and article type (front page, general, editorial/commentary, or news brief). The LTA website did not identify article types that applied to this study, so only year published and article length were recorded.

Results

In all, 118 articles between the three media source type were analyzed. Of those articles, 46.6 % were major newspapers, 32.2% were from HCN, and 21.1% were from LTA (percents may not equal 100% due to rounding error). A majority (41.8%) of the major newspaper articles came from the *Washington Post*. Of the remaining newspapers, 20.0% were from the *Denver Post*, 12.7% from the *San Francisco Chronicle*, 10.9% from the *New York Times*, 5.5% each from *USA Today* and the *Plain Dealer*, and 3.6% from the *Houston Chronicle*. Major newspaper articles included in this study were typically between 2-3 pages long, with the longest being 8-pages and the shortest being less than 1 page, and the articles' dates were spread relatively evenly across the years (2004- 27.3%, 2005- 36.4%, 2006- 36.4%). Most articles analyzed were considered general news (70.9%) or editorials (16.4%); three articles (5.5%)

ran as front-page news, and four were news briefs (7.3%).

Of the 55 *High Country News* articles analyzed, most were between 1-2 pages in length with the longest being 11-pages and the shortest being less than 1-page. HCN articles were reasonably spread across the dates as well (2004- 34.2%, 2005- 42.1%, 2006- 23.6%). Most HCN articles were considered general news (34.2%) or editorials (31.6%). The remainder articles were front-page (feature) articles (15.8%), Writer's on the Range (15.8%), or news briefs (0.03%).

Data collected on LTA articles was much more skewed. Most articles were from 2006 (96%), with only one article (4%) from 2005, and none from 2004. This seems reasonable considering the dynamics of the World Wide Web. Most articles were 2-pages in length with the longest being 28-pages and the shortest being less than 1-page.

Identity Frames

Identify frames found in the major newspaper articles were similar across newspapers with a few exceptions. The most common identity frames found were people self-identifying as conservationists (25.2%), affiliated with land trusts (20.5%), rancher/farmers (11.3%), private-property rights advocates (10.0%), government officials (14.6%), and place-based (8.6%). Other identity frames included developer, local, easement critic, and scientist/academic. The *Washington Post* had a larger percent of people identifying themselves as government officials (21.4%) than other newspapers, and, of the newspapers, the *Washington Post* and the *San Francisco Chronicle* had the most accounts of people who affiliated themselves with land trust organizations. The *Denver Post* had the most accounts of people identifying themselves as ranchers.

Identity frames were different across different media. HCN identity frames were divided almost evenly between conservationists, private property rights advocates, and rancher/farmer. These findings suggest that interest-based media may report the same issue differently than the mass media. While mass media showed 10 % private property advocate frames, this identity frame encompassed nearly 20% of all HCN identity frames. HCN also had a higher percent of place-based frames than the mass media papers. On the other hand, HCN had little to no input from people that identified themselves as government officials or as land trusts affiliates. LTA was even

more skewed. Their identity frames were dominated by conservationists and land trust affiliates (respectively 32% and 28%).

Conflict Management Frames

The three most common conflict management frames found in all articles collected were market-based economy, political action, and authority decides (the subcategory of that frame that suggests the individual speaking is the sole authority on the issue), with market-based economy winning by a landslide on all media sources (51% newspapers, 35% HCN, 46% LTA, and 45% of all sources combined). A call for political action was popular in all sources (14% major newspapers, 17% HCN, and 15% LTA); however, the self-identifying authority was popular in LTA sources but not major newspapers or HCN, with 21%, 2%, and 0% of characterization frames noted, respectively. The joint problem solving frame was popular throughout HCN (19%), but had little interest from the other sources. These findings further suggest that interest-based media reports differently from mainstream media. Even though frames were common, additional voices were heard in interest-based that were not heard in the mainstream papers.

Social control frames

The results from the analysis of social control frames suggest one reason this conflict persists. Dominant social control frames in all sources were split between local egalitarian (37%) and individualist (35%) frames. In other words, a large portion of those involved in this issue want to work together as a community to solve the problem at the same table. An equally large group of people prefers to handle it privately. For example, a supporter of individualism is quoted as follows:

Wentworth says the accreditation program should convince Congress that it does not need to impose severe restrictions because, ultimately, the private sector should regulate itself.

To contrast, an egalitarian sarcastically offered:

The most heart-wrenching losses happen one piece of land at a time, one family at a time...People move on. Others move in. And something goes out of the place, never to return....And every time, it's a

heart-wrenching loss for some, a boon for others. We all feel some sense of loss. But who's to judge? Things change. Besides, it doesn't really matter what we think. It's a family decision. It's private property.

Discussion

In summary, this study found that both mainstream and interest-based media report this issue as one where interest groups with dramatically differing worldviews are thoroughly entrenched. One group is made up of private property owners who may or may not identify themselves as conservationists, who choose to donate easements because the market-based incentives are too good to be true. They feel easements are a great conservation tool and enjoy their incentives—they claim it is about time the public pays for environmental goods. Others, who do not own property, but who see themselves as footing the bill for these easements, are concerned about whether or not the financial investment is a worthwhile use of public money. They are especially concerned that lack of regulation and standardization leaves doubts regarding whether the easement tool actually provides significant conservation benefits within a meaningful span of time. Then there are land trusts who seem to have control over how the business of conservation easements is currently proceeding, and want to maintain that control. They spend their time and effort obtaining more money for incentives and legitimacy for private land conservation, and little time on easing public woes.

The content analysis indicated that different types of media tended to frame conservation easements similarly. Even though the differences between media sources were not large, important differences within sources emerged when identifying frames. These differing frames have direct implications for possibilities of managing this conflict. Most views expressed in all three types of media are categorized within a relatively small number of frames. Common identity frames included conservationist, rancher, and land trust affiliate. Conflict management frames for articles that expressed all of these identity frames focused on market economy and political action. Similarly, social control frames for all groups tended to be either egalitarian or individualism. The issue here is that, other than identity frames (which intertwine greatly—most land trusts and most ranchers consider themselves conservationists—of one thing or another), the other frames express clear oppositions.

Market economy and political action involved in this dispute do not play well together. Currently, the land trust community relies on government subsidies to provide market incentives, and as shown above, they prefer to conduct business without government intervention. This appears as a great, unjust paradox to those who prefer political action as a conflict management frame. Getting these two groups (one that prefers to handle what they consider private business, privately and another that believes political action must provide the basis for conflict management) together is a difficult task, at least with the way they currently frame the issue. Similarly, when combining egalitarian with individualistic worldviews, the same problem occurs. If one group feels they should solve the problem themselves, they are less likely to want to discuss the matters with their community members. While individualists may bring ideas to the table that solve the problem among a few parties, egalitarians would want the community's say on the issue before all is said and done.

So how should conflict management proceed in this case? Knowing these frames exist and understanding their roots is a first step toward developing a management strategy. Understanding that certain people will hesitate to involve themselves in the process or that some will feel more comfortable with one process rather than another may prove helpful when creating venues for conflict communication (Smith, 2006). A review of how other similar conflicts were resolved, provides clues on how to proceed even further. When considering the Edward's Aquifer case again (not exactly the same type of conflict, but similar stakeholder groups), Elliott, Gray, and Lewicki (2003) say that conflict was partially resolved through adjudication, changes in public policy and market conditions, and creation of new institutions. The partial resolution of this conflict reflects similar dynamics as found in coverage of conservation easements. Similar to the Edward's Aquifer case, the conservation easement issue frames centered around identity and a fear of losing one's identity—losing their land, their ranch,

their rural, rustic life, or their right to pass that identity on to future generations. Communication strategies that can support deeply held identities may help manage this conflict.

One way to support identities while trying to bring disputants together is by reframing the conflict. For issues that are long-term and sensitive, Elliott et al. (2003) suggest beginning by making conflict management frames more flexible. Considering the narrow frames presented in the conservation easement case, slowly offering different conflict management frames (frames that allow for good communication, such as joint problem solving) to an established set of frames may provide unforeseen options to conflict participants. Another thing that stands out with this conflict is the overwhelming support for market-based incentives as a conflict resolution strategy. Reframing the entire issue to demonstrate how incentives can work for a variety of different identity frames may help move this conflict toward positive exchange among disputants. When presented with conflicting worldviews, Peterson (2003) suggests "social control frames are complex and dynamic" (p. 237). She continues "in most cases, stakeholders display a remarkable ability to make strategic use of multiple...frames" (p. 237). Peterson refers to this flexibility when she offers "Managers should be prepared to both influence and be influenced by social control frames" (p. 237). This suggests that reframing the conservation easement issue can succeed by way of keen managers that identify and encourage framing within discussions whereby members allow themselves to explore different pathways to managing one problem. Allowing participants to develop their own conflict management paths improves legitimacy for decisions made as well. No one wants to lose their subsidies, but by focusing on a different incentive, such as the political and social benefits of participating in conflict management and truly having ownership over decisions made, stakeholders may eventually agree to come together to manage this issue.

Notes

1. In this report, the term *conservation* is used, as opposed to *preservation*. Preservation in many cases refers to unmanaged land. Since private land is typically managed land, the term conservation is used.
2. The conflict went seemingly unnoticed by the public or government for several years until 2003 when *The Washington Post* ran a series of articles titled *Big Green* (Ottaway and Stephens, 2003, May 4; Stephens and Ottaway, 2003, December 21; 2003, May 5; 2003, May 6) *Big Green* not only exposed the controversy, it resulted in Internal Revenue Service (IRS) and Congressional investigations of land trusts.
3. There were slight differences in frames by frame type between mass media and alternative sources that may be due to regional, political, and interest/non-interest-based differences.

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The Whirling Media Coverage of Seasonal Hurricane Forecasts: A Closer Look at Media Framing of Scientific Uncertainty and Preparedness

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Abstract

This study examines media coverage of seasonal hurricane forecasts for the Atlantic basin in American, Canadian, and British newspapers from April through November of 2006. The study explores how the different channels framed scientific uncertainty and hurricane preparedness, and how this may or may not translate into public understanding of scientific uncertainty and preparedness. Additionally, the paper examines how frames from the forecast institution compare to the frames used in the media. With the destruction from the 2004 and 2005 hurricane seasons, as well as possible climate change effects on hurricane strength and intensity, communicating a philosophy of preparedness has never been so important. This paper demonstrates that the media can play a large role in cultivating a culture where hazard preparedness is a social philosophy.

Introduction

The hurricane season of 2006 could be known as the season that never was, and the forecast that was never true. The 2006 seasonal hurricane forecast predicted by the National Oceanic and Atmospheric Administration (NOAA) (2006a) said the season would be “very active,” but “not a repeat of last year’s season.” Similarly, Colorado State University (CSU) researchers also predicted a very active season with 9 out of 17 storms becoming hurricanes with 5 of those storms being a major hurricane defined as a category 3, 4, or 5 (2006a).

Although the forecasters’ predictions were off track, the forecasts given included great detail on factors that contribute to the formation of hurricanes. Forecasters understand the complexity and uncertainty of their forecasts, which is evident by the probabilities and explanations given in their press releases and full reports. How, then, does this uncertainty translate to public understanding and preparedness? And, how do the media play a role in this translation?

With active 2004 and 2005 hurricane seasons, media attention to seasonal hurricane forecasts is very high. The increased coverage allows the media an opportunity to raise awareness to the public for the upcoming season and emphasize the uncertainty of

such forecasts as well as the need for preparedness. The coverage of the 2006 seasonal hurricane forecast allows a review of which issues the forecast institutions emphasize in their press releases and, subsequently, how the media frames these issues in relation to seasonal hurricane forecasts.

This paper compares seasonal hurricane forecasts to how American, Canadian, and British newspapers covered the 2006 hurricane season for the Atlantic basin from April through November of 2006. The intent is to examine how the different channels framed scientific uncertainty and hurricane preparedness.

Background on Seasonal Hurricane Forecasts

Seasonal hurricane forecasts are predictions of the anticipated tropical storm activity for the upcoming hurricane season (Climate Prediction Center, 2004). The predictions contain complex models measuring the synergy between ocean and atmospheric processes, neither of which remain consistent from month to month or year to year. (Klotzbach & Gray, 2006). The complicated nature of the models increases the complexity of the uncertainty involved. Colorado State University hurricane researchers stated in their September 2006 report that “It is important that the reader appreciate that these seasonal forecasts are based on statistical

schemes which, owing to their intrinsically probabilistic nature, will fail in some years” (Klotzbach & Gray, 16, 2006b).

In 1984, Dr. William Gray, affiliated with Colorado State University, began issuing seasonal hurricane forecasts (CSU, 2006b). Since then, additional public and private weather institutions also issue seasonal hurricane forecasts. Most notably, NOAA’s Climate Prediction Center began their forecasts in August of 1998 (Climate Prediction Center, 2004) and continues to make predictions today. Other sources include Tropical Storm Risk and the Cuban Institute of Meteorology (CSU, 2006b). Private sector weather companies, for example, AccuWeather, Inc., may also give forecasts (AccuWeather, 2006).

None of the institutions above state a main purpose for issuing a press release regarding seasonal hurricane forecasts, excluding, of course, acknowledging the contribution to scientific literature. The following is the NOAA’s mission statement: “To understand and predict changes in the Earth’s environment and conserve and manage coastal and marine resources to meet our nation’s economic, social and environmental needs” (NOAA, 2006c); accordingly, the inherent purpose of issuing forecasts is to give the public and private sectors advanced time to assess their personal risk and prepare for the upcoming hurricane season. Preparations may include preparing a home or business property, creating or reviewing a family or business emergency plan, or buying insurance. Businesses, such as the insurance and energy industries, may assess their financial risks by increasing insurance rates or energy prices, respectively.

Challenges of Communicating Hurricane Forecasts Media’s (Mis)Communication of Forecasts

In a year resembling the hurricane season of 2006, seasonal hurricane forecasts function as more than just a forecast. With an average of five hurricanes making landfall every three years (Jarrell, Mayfield, Rappaport, & Landsea, 2001), a typical season will have some tropical activity for media to cover. These events are opportunities to remind viewing or reading audiences to be prepared. However, in a year with minimal tropical storm activity, seasonal hurricane forecasts and their associated updates are the primary, and sometimes only, hook for media coverage to emphasize the central theme of preparedness.

Whether a hurricane season is as active as 2004 and 2005 or as quiet as 2006, media can play a critical role in cultivating a culture where society is in harmony with hazards through preparing and mitigating for impacts rather than allowing hazards to create disasters. Hazards are not disasters unless society creates the potential for disaster through poor choices and decisions (Hooke, 2000; Cutter et. al, 2003). Media can play an important role in communicating this distinction.

However, with multiple institutions issuing forecasts, various themes may emerge. It is common for institutions to frame their research in light of their expertise as well as their institutional purpose (i.e., an academic research institution versus a public agency providing for public health and safety). As Miller & Riechert explain, “different population segments will have specific and competing concerns at stake. The selective nature of framing suggests that in their discussion of the complex issues stakeholders will discuss those policy implications more salient to them, while ignoring other implications” (2000, p.46). The press releases written by the forecast institutions may then frame the issues most salient to them. It seems reasonable that a public agency such as NOAA will emphasize preparedness, where as other institutions such as AccuWeather or CSU may choose to emphasize their research or forecasting track records.

The competing frames in the press releases thus allow the media to emphasize the frames that fit their journalistic purpose. In this way, journalists have a great deal of power to set the public agenda. As Bernard Cohen states, “The press may not be successful much of the time in telling people what to think, but is stunningly successful in telling its readers what to think about” (as cited in Wykes, 2000, p.82). Hurricane preparedness is not the only theme associated with seasonal hurricane forecasts. Due to the above average amount of hurricanes in 2004 through 2005, discussions regarding the role of climate change in increasing hurricane activity have escalated creating much media interest. In addition, media interest may have increased due to the physical destruction and political implications from Hurricane Katrina and Rita. Media, then, play a critical role in determining what the public will hear depending upon the story lines they decide to tell.

Media understanding of environmental issues in combination with their power to set agendas may have profound effects on public understanding of the issue. In a study regarding climate change reporting,

“many reporters were confused about the basic science of climate change and the scientific debate about predicted effects – confusion that could be passed on to the public” (Wilson, 2000, p.10). Although it may be difficult to measure this confusion, media messages, whether accurate or not, may still influence the public. “Media coverage of scientific controversies may do more than define and amplify an event; it may have profound effects on public attitudes, the precise nature of which is difficult to specify” (Mazur, 1981, p.109). In the case of seasonal hurricane forecasts, the decision to emphasize preparedness or not may influence public attitudes on the consideration to take tangible action.

A survey taken in May 2006 of residents living in the Gulf Coast and Atlantic states shows that a large portion of the coastal population is still unprepared for a hurricane. The survey states that 56% of the sample does not feel vulnerable to a hurricane and its related weather risks (i.e., flooding, tornados, etc.) (The National Hurricane Survival Initiative, 2006). The population surveyed is in fact extremely vulnerable to hurricane risks with an average of five hurricanes every three years making landfall (Jarrell, Mayfield, Rappaport, & Landsea, 2001), with years such as 2004 and 2005 being far above average. Because of this vulnerability, it seems logical that hurricane media coverage is high in these areas. Is it possible that the frames presented by the media in vulnerable areas are creating misperceptions of the risks involved with hurricanes? Is this a possible explanation for why the coastal populations are unprepared?

Meteorologists’ Role in (Mis)Communicating Forecasts

Media coverage and agenda setting are not the sole attributes causing misperceptions. “Laboratory research on basic perceptions and cognitions has shown that difficulties in understanding probabilistic processes, biased media coverage, misleading personal experiences, and the anxieties generated by life’s gambles cause uncertainty to be denied, risks to be misjudged, and judgments of fact to be held with unwarranted confidence” (Slovic, 1987, p.281). Public understanding of the uncertainties involved with hurricane forecasts, personal experience with hurricanes or poor hurricane forecasts may all have a function in the public’s perception of risk.

In addition, scientific controversy and debate may augment these misperceptions. Weather forecasting is fraught with uncertainty. Aware of this, meteorologists record verification statistics to

measure their accuracy, which have proven to be quite reliable (Willoughby, Rappaport & Mark, 2005). However, the public hears more about uncertainty versus verification statistics allowing them to form perceptions regarding uncertainty. The public forms perceptions based on their personal experiences whether it is an impact of a weather event or hearing scientific discourse. For example, a snowstorm that leaves two feet instead of two inches of snow may leave a lasting impression on their trust in the next forecast. More notably, the coverage of uncertainty discourse around the climate change debate leads to confusion and may influence how people include science in their decisions.

Seasonal hurricane forecasts from each scientific source vary in the number of predicted storms. Institutions may give probabilities of hurricane landfall for specific geographic regions or give factors that may inhibit or enhance hurricane production. However, some researchers suggest that giving uncertainty may reduce the source authority. “Since science is generally perceived as an authoritative, truth-producing profession, acknowledgement of uncertainty might reduce this authority [or source] and open access to the production of knowledge to other groups and activities” (Zehr, 2000, p.88). However, other researchers have found that knowledge and expertise, and honesty and openness are key determinants in perception of trust and credibility (Peters, Covello, & McCallum, 1997, p.54). Thus, in a field fraught with uncertainty, it may be critical for hurricane forecasters to give uncertainty factors to maintain their credibility and trust with the public.

Current Study

This study investigated how newspaper journalists covered seasonal hurricane forecasts with two main goals.

- 1.) To identify which frames dominated press releases from seasonal hurricane forecast institutions, with special attention given to frames that cover scientific uncertainty and preparedness.
- 2.) To determine which frames dominated media coverage of hurricane forecasts.

Methods

This study used a content analysis of 88 newspaper articles between the dates of April 2006 through December 2006 collected through the Lexis-Nexis database. To maximize the number of articles, the sample includes American, Canadian, and British newspaper articles. Considering that hurricanes in the Atlantic basin can potentially affect the U.S. and Canada (though disproportionately), both regions were included in the sample. In addition, the U.K. is home to many of the reinsurance companies that insure American insurance companies. Reinsurance companies have an economic stake in the seasonal hurricane forecast. For this additional reason, U.K. newspapers were included.

In addition to the newspaper articles, the content analysis included 11 press releases from NOAA, CSU, and Tropical Storm Risk (TSR), each of which issues seasonal hurricane forecasts. The archived press releases are available on each of the institution's websites. The Cuba Institute of Meteorology's press releases were not accessible at the time of the study. To be included, the press releases had to reference their seasonal hurricane forecast, although the forecast did not have to be the focus. For example, a press release that focused on an El Niño advisory may include reference to a seasonal hurricane forecast and would therefore be included in the study. The press releases set the tone for how each institution framed their forecast potentially influencing the frame of the newspaper articles.

The newspaper articles had to include a reference to seasonal hurricane forecasts. The search terms included *seasonal hurricane forecast*, *seasonal hurricane prediction*, *hurricane forecasts*, *hurricane predictions*, the *number of predicted hurricanes*, or reference to *an above average season*, which also includes *an active season* or other similar references. The original sample included over 150 articles, but after review, only 88 met the required definitions. The difficulty with the search term *hurricane forecasts* is that some journalists will write, "Researchers forecast high hurricane activity." Thus, searching for the nested phrase *hurricane forecast*, proves inadequate, and will miss some of the articles that reference seasonal hurricane forecasts. In response to this, the Lexis-Nexis search I used, searched for hurricane *and* forecast versus 'hurricane forecast.' Many articles included both words, but the focus was not on seasonal hurricane forecasts.

The main goal of the content analysis was to gather information on the framing of uncertainty and preparedness in both the press releases and the newspaper articles. The coding scheme included nine questions (see Appendix A). The press releases were coded using the same coding scheme for the newspaper articles, but they also reshaped the coding scheme before being used with the newspaper articles. For example, if a majority of the press releases identified a new frame (for example, El Niño impacts), then this theme was added to the coding scheme.

To conduct the comparison with the 11 press releases, it was critical to review the sources used in the articles. The source search included the four main institutions issuing seasonal hurricane forecasts: NOAA, CSU, Tropical Storm Risk, and the Cuba Institute for Meteorology. In addition, the data collected includes sources outside of this list, as it is possible for another private sector weather company or academic institution to be influential.

To assess whether the articles mention uncertainty, I coded for a specific set of uncertainty definitions. The definition of scientific uncertainty includes the phrase *scientific uncertainty*, *uncertainty*, *probabilities* or *percentages of chance*, *likelihood of occurrence*, possible affects of *El Niño* or *La Niña*, or other factors that *may inhibit or feed* hurricane activity.

In addition to uncertainty, I also coded the articles specifically for references to *El Niño*, a warming of the Pacific Ocean, and *La Niña*, a cooling of the Pacific Ocean (Geer, 1996). A late developing El Niño is one of a few factors contributing to low hurricane activity for 2006. Coding for this may show how uncertainty develops in the articles over the entire season.

Climate change was also included in the coding scheme. The definition of climate change includes *climate change* or *global warming*. Coding for climate change has two purposes. First, the climate change debate fosters uncertainty considerations of hurricane activity. Second, it allows a review of seasonal hurricane forecast framing. Climate change is a possible theme, with preparedness being another.

The coding for preparedness includes two distinguishing levels: general versus specific. General preparedness includes the concept of *being prepared* or *ready* when the next hurricane hits. Specific preparedness includes *detailed actions* that individuals, businesses, or cities are taking or may

take. For example, specific preparedness may include emergency plans, evacuation routes, batteries, food for 3-5 days, etc.

Lastly, articles referring to the *end* of the hurricane season, and subsequently remarking on the poor hurricane forecast, were coded for three additional parts. The first part focused on the tone of the article in reference to low hurricane activity. In essence, did the article see the low activity as a sigh of relief? The definition of *sigh of relief* includes *being thankful, celebrating, relieved, etc.* The second part focused on the possible framing of hurricane forecasters. In effect, did the article blame the forecasters for a poor forecast? The definition of *blame* includes phrases such as *blame, way off track, failed to deliver, etc.* Both part one and two are dependent on the tone of the article, which is difficult to capture. The last part focused again on uncertainty, but from the ‘what happened’ to the forecast point of view. Many definitions satisfy this question. The article had to reference one of many factors that attributed to the inactive season. These could include *El Niño, wind shear, Saharan dust, dry atmospheric conditions, Bermuda high, ocean temperatures, etc.*

Results and Discussion

Press Releases

In total, the study includes 11 press releases, four from NOAA, six from CSU, and one from TSR. All of the press releases include some discussion about the scientific uncertainty of the forecast. Some of the descriptions include El Niño or La Nina effects, probabilities of hurricane landfalls, factors of month-to-month prediction variation, and Saharan dust. Nine out of the 11 press releases specifically mention El Niño and its possible effects. Regarding preparedness, 4 out of the 11 press releases cover this theme.

In addition to uncertainty and preparedness, climate change emerged as a theme in two of the press releases with both of them from CSU. This is not entirely surprising as Dr. Gray calls attention to the uncertainty of attributing climate change to hurricane activity in his full reports regarding seasonal hurricane forecasts (Klotzbach & Gray, 2006a). What is surprising is the fact that the same two press releases do not emphasize preparedness showing that CSU is presenting frames that are more salient to them.

With multiple institutions issuing forecasts, various themes will emerge, but more interestingly, the order of the themes and the themes chosen may reflect the different institutional purposes. For example, NOAA’s first press release for the 2006 seasonal hurricane forecast emphasizes preparedness before mentioning the actual prediction (2006a). In contrast, the CSU press release emphasizes the prediction, does not mention preparedness, and does mention climate change (2006a). This may reflect the difference in purpose between a public agency and an academic institution. NOAA’s mission is in part to provide for public health and safety giving good reason to emphasize preparedness over the scientific results of the forecast. CSU, as an academic institution, is focusing primarily on their research, which not only includes seasonal hurricane forecasts, but the connection between hurricanes and global warming as well.

The issue of concern is that although the institutions have different missions, their varying themes may translate into media coverage that may confuse the public. How can the media help cultivate a culture where society is prepared for hazards with many competing frames? Before trying to answer that question though, an understanding of the translation from press release frames to media coverage must be uncovered. Comparing the press releases to the 88 newspaper articles, the results show a sharp increase in news coverage where press releases were issued (See Appendix B, Figure 1). This does not prove that the increased media coverage is entirely due to the press releases. However, the fact that many of the articles mention a forecast source reflects a high possibility that the coverage is in response to that source’s press release. For example, eight out of the nine articles following NOAA-1 mention NOAA as a source.

Tropical Storm Risk did not foster any visible news coverage. TSR is based in the U.K. sponsored by Benfield, a reinsurance company (Tropical Storm Risk, 2006), which may explain why American newspapers are less likely to use them as a source. This also proved true in the source analysis of the newspaper articles with only 2 out of the 88 articles using them as an official seasonal hurricane forecast source. The two newspapers include the Financial Times, a British paper, and the Christian Science Monitor.

NOAA’s third press release (See Appendix B, Figure 1., NOAA-3) also did not generate any noticeable news coverage. The focus of NOAA-3 is on an El Niño advisory. However, it also highlights

that El Niño “helps to explain why this Atlantic hurricane season has been less active than we previously expected” (NOAA, 1, 2006d). Although the article is pertinent to hurricane season, the framing, and the title, focus on El Niño, not on hurricanes, which may have prevented some newspapers from covering it.

Newspaper Coverage

As noted earlier, the sample included 88 newspaper articles from American, Canadian, and British newspapers. Figure 2 (See Appendix B) shows the distribution of news coverage by each individual newspaper in the sample. The results of the newspaper distribution show major newspapers missing from the sample. For example, missing from the sample include the Boston Globe, Providence Journal, Philadelphia Inquirer, etc. This may be due to a faulty search term when looking in Lexis-Nexis.

The geographical distribution of the newspaper coverage shows a slight trend toward newspapers in hurricane prone areas having higher coverage. Newspapers are categorized as in a “hurricane prone area” if they serve a population that is directly vulnerable to hurricanes such as Gulf Coast or East Coast states. If the paper represents one such state, but there is another paper in the state that more closely serves the vulnerable population, then that paper is not included in the calculations.

With 29 different newspapers in the sample, *USA Today* and the *Times-Picayune* have the highest coverage (See Appendix B, Figure 2). With the wounds still fresh from Hurricane Katrina and Rita, it is not surprising that the *Times-Picayune* has high coverage. What is surprising is that the *Los Angeles Times* ties for third for most coverage with the *St. Petersburg Times* and the *Houston Chronicle*. The Pacific basin seasonal hurricane activity is not included in this study, which further mystifies this high coverage. This finding may be due in large part to the small sample size.

The results of the overall geographic spread of the newspapers have similar findings (See Appendix B, Figure 3). Including Canada, 62.6% of the articles are from hurricane prone areas. With out Canada, it is only 50.1% of the articles. Canada is also tied for first having the highest coverage of seasonal hurricane forecasts. Canada represents 12.5% of the sample tying with National news papers (*USA Today* and the *Christian Science Monitor*). Though not as vulnerable as Florida, Canada can still feel the wrath of hurricanes. In 1954, Hurricane Hazel left 81

people dead and many more people homeless due to inland flooding (Canadian Hurricane Centre, 2004). This is a powerful example of how inland impacts from hurricanes can still be destructive.

Although Florida ties for second with 11.4%, this only includes one of many major newspapers from the state of Florida. With active 2004 and 2005 hurricane seasons, it seems likely that Florida may have higher coverage than is appearing with these results. Again, this may be due to the small sample size and gaps with major newspapers.

All of the articles by nature of the coding scheme include a reference to seasonal hurricane forecasts. However, many of the articles emphasize another focus area in addition to the hurricane forecast. Most notably, 11 out of the 88 articles emphasize insurance, 7 out of 88 emphasize energy interests, and 7 out of 88 emphasize preparedness efforts. Additional focus topics include El Niño, global warming, travel, tropical storm forecasts, Hurricane Katrina, and business.

Uncertainty Coverage

The results from this sample show high coverage of scientific uncertainty. Sixty-six percent of the newspaper articles cover one of the definitions of uncertainty. Out of the 30 articles that do not reference uncertainty, about half are from April through June. Since this period marks the beginning of hurricane season, these articles may focus primarily on the seasonal hurricane forecast versus the factors that may contribute to the forecast’s potential failure. As the season progresses with minimal hurricane activity, scientific uncertainty becomes a larger focus and a critical part of the story.

Another possible reason for not covering uncertainty is that the article references the forecast within a different focus. This only holds true for 5 articles, which focus on insurance and/or reinsurance industries. In reviewing the articles mentioning insurance, some refer to economic uncertainty around the hurricane forecast, but do not reference scientific uncertainty specifically.

Reviewing El Niño/La Niña coverage, compared to the overall coverage of scientific uncertainty, the results are not as high. Only 26.1% of the articles reference El Niño/La Niña. These results are surprising as 9 of the 11 press releases include El Niño/La Niña as part of their uncertainty discussion throughout the entire hurricane season. The science of El Niño may fall into journalists’ category of

“difficult to understand” similar to the early days of climate change science (Wilson, 2000). Out of the 23 articles that do reference El Niño/La Niña, 19 of these articles have dates after September 2. This may correspond to CSU’s press release issued on September 1 (See Appendix B, Figure 1, CSU-4), which contributes a late onset El Niño as a factor in slightly below average hurricane activity (CSU, 2006c).

Assessing climate change coverage, 25% of the articles cover climate change with two thirds of those referencing CSU as a primary source. CSU is the only institution that mentions climate change in two of their press releases. It is therefore not surprising that those articles mentioning climate change have a reference to CSU. Additionally, the active 2004 and 2005 hurricane seasons bolstered discussion of climate change impacts on hurricane strength and intensity making climate change a salient theme to cover in the 2006 season.

In the end, the 2006 season was perplexingly quiet, prompting responses as to why. From this, it seems logical that uncertainty coverage is higher towards the end of the season versus the beginning allowing for an explanation for this unpredicted deviation. Reviewing the 27 articles referencing the end of hurricane season, 19 of the articles include an explanation for the low hurricane activity. Applying a contingency analysis Pearson chi squared test, the proportion of uncertainty coverage from the beginning of the season versus the proportion of uncertainty coverage at the end of the season is not statistically significant ($\chi^2 = .55$, $p\text{-value} = .46$) (See Appendix B, Figure 4). This insignificance may be due to the sample size, but it also may indicate that uncertainty coverage is homogeneous throughout the season, as overall coverage of scientific uncertainty was high.

Communicating uncertainty throughout the season creates an open and honest line of communication possibly leading to higher levels of trust and credibility in the public view. With publicity of seasonal hurricane forecasts being very high, the public is fully aware that the forecast for 2006 was “off track.” It may only take one visible event, a poor forecast, to break the public’s trust. This shattering of trust is evident in 26% of the 27 end-of-season articles that hold scientists accountable for their mediocre forecasts. As Slovic (1993) wrote in relation to risk perception, “When events are invisible or poorly defined, they carry little or no weight in shaping our attitudes and opinions” (p.677). However, with visible events such as seasonal hurricane forecasts, the public’s trust is in jeopardy.

Communicating uncertainty throughout the season may explain the reason why NOAA and CSU are trusted institutions. With 56% of the end of season articles referring to hurricane season as a ‘sigh of relief,’ this may be another indication of the understanding of uncertainty and respect for scientific institutions.

Preparedness

After reviewing the articles, only 26 out of the 88 articles mention general or specific preparedness. This finding is surprising in light of the interpreted purpose of seasonal hurricane forecasts to give advanced time to assess personal (or business) risks, and prepare for the upcoming season. However, these findings closely reflect the preparedness coverage in the press releases. Close to 30% of the articles covered preparedness compared to 36% of the press releases.

Although the total amount of preparedness coverage is low, the data shows a potential relationship between preparedness coverage in hurricane prone areas compared to areas that are not hurricane prone. Because of the active 2004 and 2005 seasons, many hurricane prone states are more vulnerable with many citizens living in FEMA trailers, which are not structurally safe during a hurricane. These factors may lead to increased preparedness coverage. Applying a contingency analysis Pearson chi squared test, the proportion of preparedness coverage in hurricane prone areas compared to coverage in non-hurricane prone areas is statistically significant ($\chi^2 = 6.36$, $p\text{-value} = .01$) (See Appendix B, Figure 5).

Despite this finding, a recent survey shows hurricane prone populations to be considerably unprepared for the next hurricane. The survey shows that 60% of the sample does not have a family disaster plan, 68% do not have a hurricane survival kit, and 83% have taken no steps to strengthen their homes (The National Hurricane Survival Initiative, 2006).

One reason for the disparity between media coverage and public preparedness is that people’s perceptions of risks vary for societal versus personal levels. Although a person’s perception of the societal risk may increase, their perception of personal risks will not increase (Wahlberg & Sjöberg, 2000). Thus, a person may be aware of the increased potential for hurricane activity and the increased vulnerability of the region, but may not perceive this as a personal risk or vulnerability. Emergency officials should not

depend exclusively on media coverage to change behavior. Learning from public health campaigns, preparedness campaigns will be most effective when they combine mass media with additional communication techniques (Scherer & Juanillo, 1992).

Conclusion

The results of this study suggest that there is a potential relationship between the frame of the forecast institution's press releases and the chosen frame of newspaper articles regarding seasonal hurricane forecasts. As such, the framing of press releases plays a critically important role for how journalists may cover explanations of scientific uncertainty as well as the emphasis on hurricane preparedness. The study shows, though, that press releases stress those issues most salient to their institutional purpose, in turn creating competing frames. Subsequently, these competing frames receive disproportionate media attention leading to potential public confusion regarding scientific uncertainty and hurricane preparedness.

A larger study involving many hurricane seasons may increase the strength of evidence of how the media frame seasonal hurricane forecasts. Additionally, another study could potentially examine journalists' understanding of seasonal hurricane forecasts (See Wilson, 2000). Due to the complicated nature of seasonal hurricane forecasts, journalists may find themselves depending upon the press releases to explain scientific uncertainty, such as the effects of an El Niño event. Journalists may not want to extrapolate beyond the information available due to their concern of misconstruing the message.

This concern may explain why journalists fail to cover preparedness as often as other frames. When press releases do not make a deliberate connection between the seasonal hurricane forecast and preparedness, journalists may be hesitant to draw these implications. Moreover, since only 36% of the press releases stress preparedness, journalists may perceive a disconnect between what constitutes a "seasonal hurricane forecast story" versus a "preparedness story." Unlike a hurricane track forecast, seasonal hurricane forecasts predict the projected amount of hurricanes for the entire season. In following, journalists may not see the need to stress preparedness, as the forecast does not represent a timely threat or risk to their readers. Why raise fear with the public if it is not necessary?

Journalists' confusion stems from the need to define a clear objective for communicating seasonal hurricane forecasts to the public. Defining a clear objective within the hurricane forecasting community potentially allows the media to communicate a consistent message to the public possibly increasing levels of preparedness. Because of the potential high impact of these forecasts on society, all press releases, regardless of institutional purpose, should emphasize one clear objective (i.e., to promote preparedness); however, this does not prevent institutions from promoting additional research, such as effects of climate change on hurricane intensity, or company successes, such as previous forecast track records.

Recent hurricane seasons not only demonstrate the vulnerability of the U.S. to natural hazards such as hurricanes, but also show the repercussions of the increasing divide between society and the natural world. Although this study does not prove that framing of seasonal hurricane forecasts has a direct impact on public preparedness, it does suggest the possibility of a relationship between how we communicate these forecasts and how society should respond. Seasonal hurricane forecasts provide an opportunity for forecast institutions to encourage a philosophy of public preparedness, and for the media to cultivate that culture.

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Appendix A

Coding Scheme

The Whirling Media Coverage of Seasonal Hurricane Forecasts: A Closer Look at Media Framing and Scientific Uncertainty

Project Background/Objectives

This project examines how American, Canadian, and England newspapers covered the 2006 seasonal hurricane forecasts for the Atlantic Basin from April through November 2006. The articles collected are from a general newspaper search from Lexis-Nexis. The intent of this project is to act as a pilot study for a more thorough analysis with a larger sample of articles.

Seasonal hurricane forecasts have been issued since 1984 by Dr. William Gray and have since been issued by additional institutions. The forecasts are complex models measuring the synergy between ocean and atmospheric processes neither of which remain consistent from month to month nor year to year. The main purpose of issuing forecasts is to give the public and private sectors time to prepare for the upcoming hurricane season.

With active 2004 and 2005 hurricane seasons, media attention to seasonal hurricane forecasts is very high. The increased coverage allows the media an opportunity to raise awareness to the public for the upcoming season and emphasize preparedness. The coverage of the 2006 seasonal hurricane forecast gives an opportunity to research how the media frames seasonal hurricane forecasts, how they present uncertainty about the forecast, and how they discuss preparedness efforts.

Research Questions

- 1.) To identify which frames dominated press releases from seasonal hurricane forecast institutions, with special attention given to frames that cover scientific uncertainty and preparedness.
- 2.) To determine which frames dominated media coverage of hurricane forecasts.

Unit of Analysis

Newspaper articles referencing Seasonal Hurricane Forecasts

DEFINITION: SHF includes seasonal hurricane forecast, seasonal hurricane prediction, hurricane forecasts, hurricane predictions, the number of predicted hurricanes, or reference to “an above average season,” which also includes “an active season” or other similar references

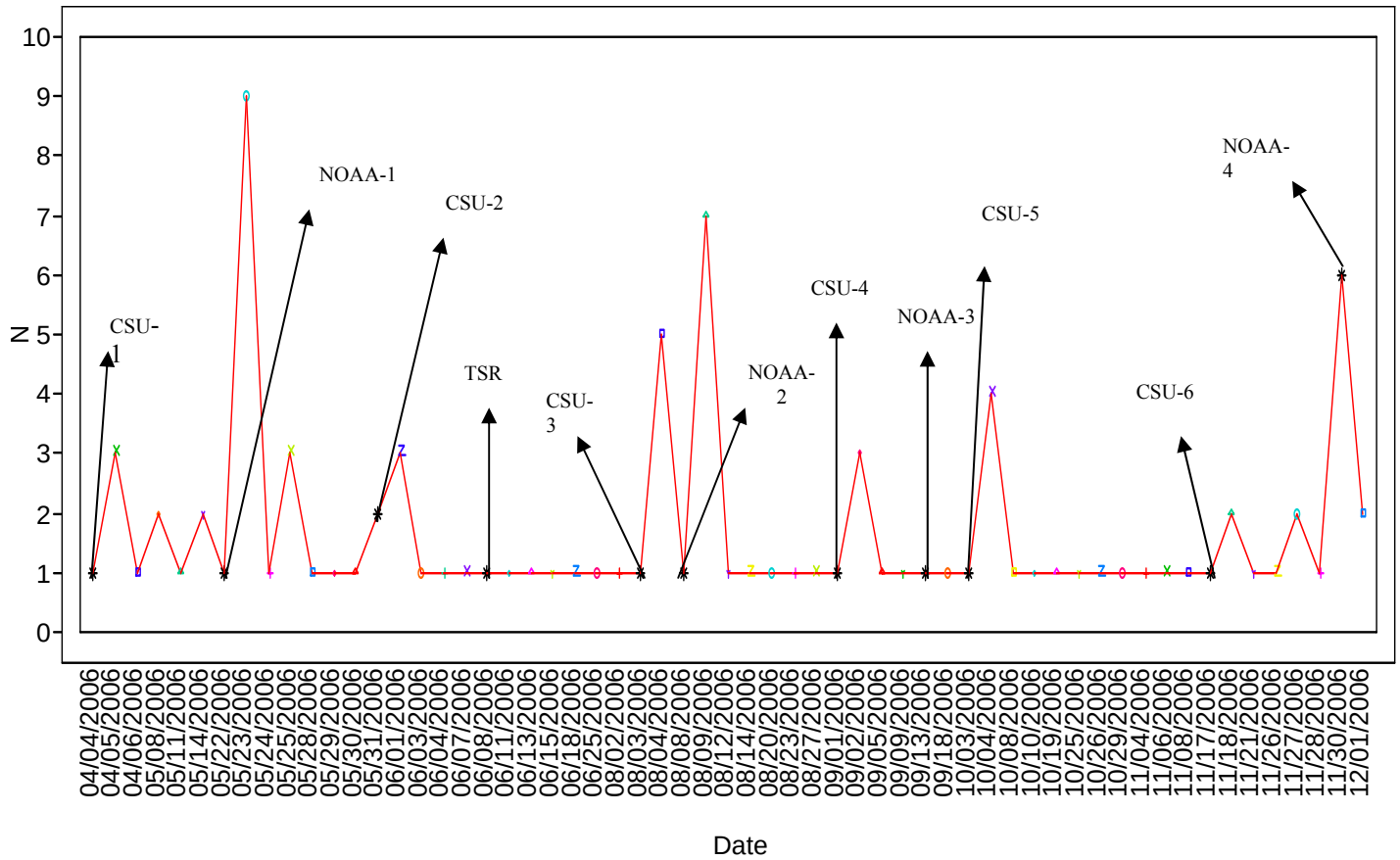
Coding Scheme

- 1) What type of story is it?
 - a) Press Release - 1
 - b) News/feature - 2
 - c) Editorial - 3
 - d) Other - 5
- 2) What geographic area does the article reach?
 - a) Please mark down the city and/or state the newspaper is primarily writing for
- 3) What is the main focus around seasonal hurricane forecasts?
 - a) The general forecast - 1
 - b) Insurance industry - 2
 - c) Energy sector - 3
 - d) Travel section - 4
 - e) Other - 5
 - i) If other, please mark down the issue the article is referring to

- 4) Who are the main sources?
 - a) NOAA -1
 - b) Colorado State University – 2
 - c) Tropical Storm Risk – 3
 - d) Institute of Meteorology of Cuba – 4
 - e) No source mentioned, just a forecast -5
 - f) Other -6
- 5) How much attention is given to the discussion of scientific uncertainty?
 - a) Does the article discuss or reference scientific uncertainty?
 - (1) Yes – 1
 - (2) No – 2
 - ii) DEFINITION: Scientific uncertainty will be defined by mentioning the phrase scientific uncertainty, probabilities or percentages of chance, likelihood of occurrence, possible affects of El Niño or La Niña (or neutral chances of El Niño or La Niña)
 - iii) If the article is coded yes, please mark how the uncertainty is defined.
- 6) Does the article discuss El Niño or La Niña effects?
 - (1) Yes -1
 - (2) No – 2
- 7) Does the article mention recent discussion regarding hurricanes and climate change?
 - (1) Yes – 1
 - (2) No -2
- 8) Does the article emphasize or mention preparedness?
 - (1) Yes -1
 - (2) No -2
 - b) If yes, is it general or specific?
 - (1) General - 1
 - (2) Specific - 2
 - c) If its specific, write down any of the examples in the articles
 - i) Examples - insurance, board up windows, family emergency plans, emergency kits, batteries, flashlights, canned goods, etc.
 - d) DEFINITION: General Preparedness will be defined as mentioning individual, family, or city level hurricane preparedness. The article could mention not focusing on the number of hurricanes, but the idea of being “reading” if one does hit. Specific preparedness will outline actions that people can take.
- 9) For articles referencing the close or end of the hurricane season, what is the main message?
 - a) Does the article reference the abnormally low hurricanes this season as a sigh of relief?
 - (1) Yes – 1
 - (2) No – 2
 - (3) Definition: The definition includes being thankful, celebrating, relieved, etc.
 - b) Does the article blame hurricane researchers for a poor forecast?
 - (1) Yes – 1
 - (2) No -2
 - c) Does the article explain the reasons for the abnormally below average hurricane seasons?
 - (1) Yes – 1
 - (2) No -2
 - (3) DEFINITION: Any reference to El Niño, warming of ocean temperatures, moisture levels, saharan dust, wind shear, Bermuda low will satisfy the question.

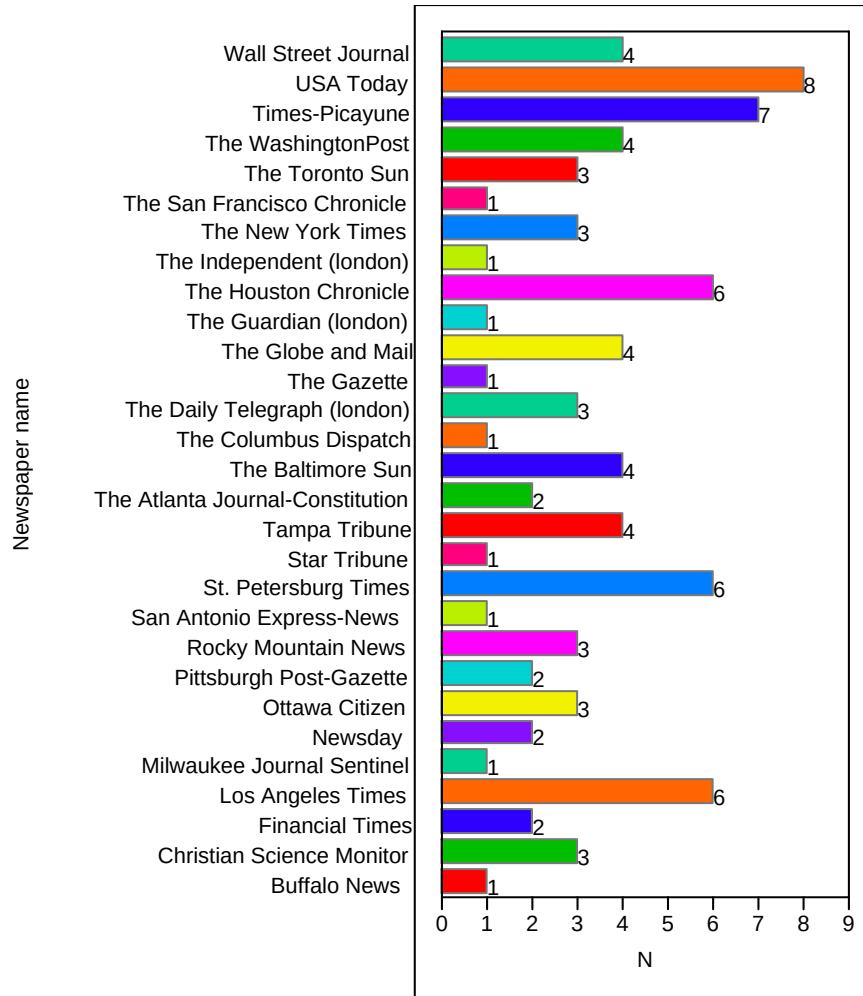
Appendix B

Figure 1. Time series plot of the number of articles covering seasonal hurricane forecasts. The black stars indicate issue dates for press releases.



Appendix C

Figure 2. Distribution of seasonal hurricane forecast coverage by newspaper.



Appendix D

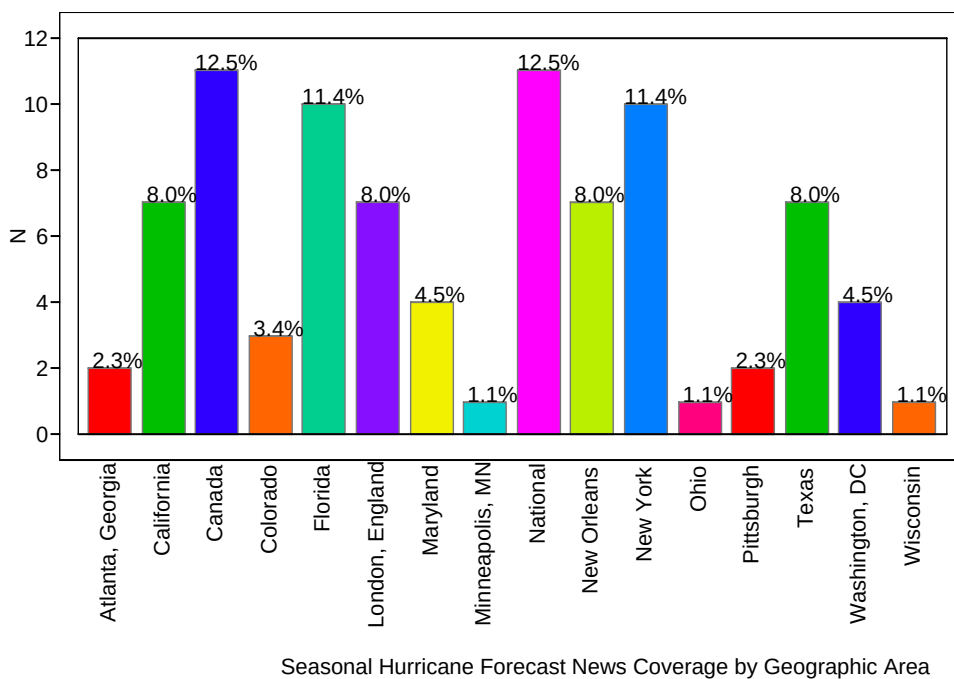
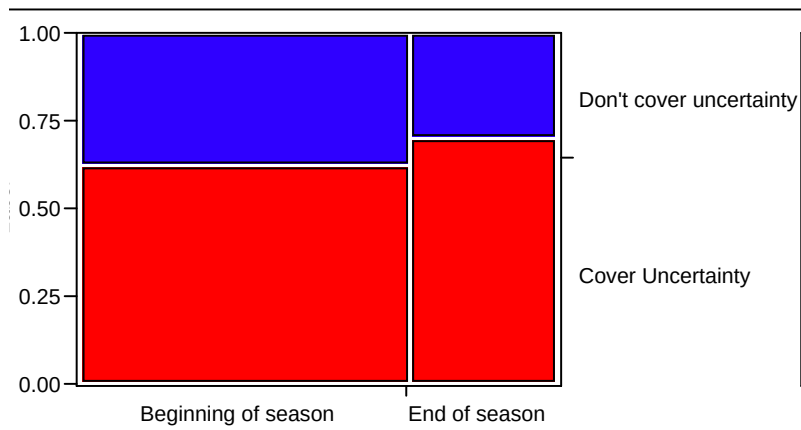


Figure 3. Distribution of seasonal hurricane forecast coverage by geographic region.

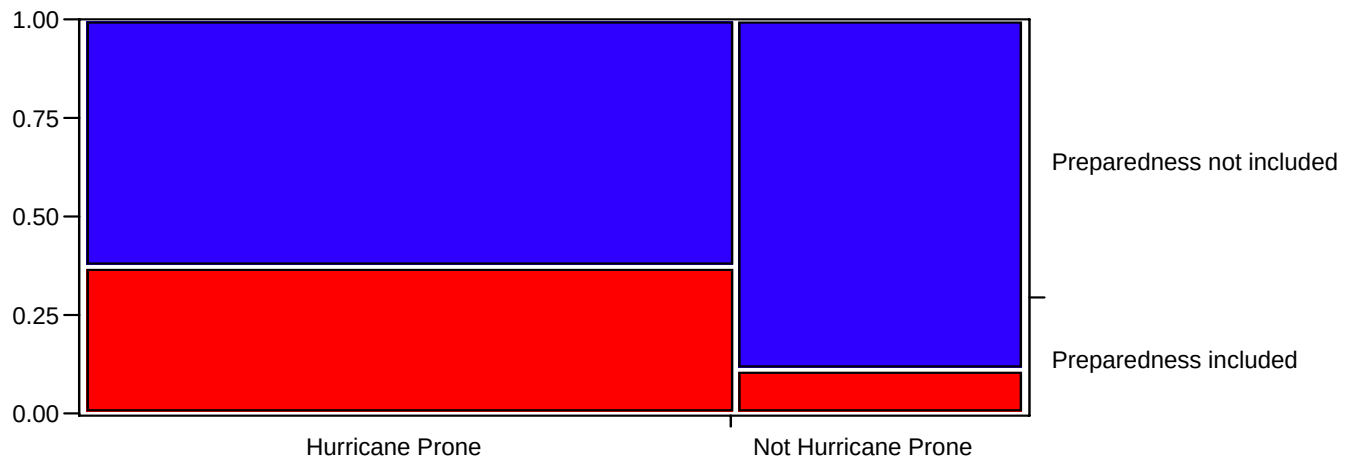
Appendix E

Figure 4. Mosaic plot showing the proportion of uncertainty coverage for the beginning of the season compared to the end of the season.



Appendix F

Figure 5. Mosaic plot showing the proportion of preparedness coverage for hurricane prone areas versus areas that are not hurricane prone.



The Impact of Religion, Media, and Science on the Perception of Environmental Issues in the U.S.

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Abstract

This research examines how media, science, and religion shape the environmental views of American evangelical Christians. This project was designed to assess the ways in which information provided by religious sources – such as church leaders – intersects with information from mainstream secular media, and the impact this has on evangelicals' perceptions of environmental issues. Through a multi-methodological approach – including media diaries from a National Science Foundation study, focus groups, and observations in evangelical churches – the interconnection between religion, mainstream media, and perceptions about environmental issues is explored in detail. The results indicate that there are several factors that shape the way evangelicals think about the environment, including political affiliation, beliefs about media bias, commercialism, and religious conviction. American evangelicals are important to study for several reasons, including that they are an increasingly influential group in U.S. society and thus are an integral part of the changing face of U.S. politics. As a result, elucidating the relationship between media and religion is especially important, both to understand political shifts in the U.S. as well as to understand what shapes religious individuals' perceptions in a crucial time of heightened media coverage of environmental issues.

Introduction

This research examines how media, science, and religion shape the environmental views of American evangelical Christians. This project was designed to assess the ways in which information provided by religious sources – such as church leaders – intersects with information from mainstream secular media, and the impact this has on evangelicals' perceptions of political issues, especially the environment. American evangelicals are important to study for several reasons, including that they are an increasingly influential group in U.S. society and thus are an integral part of the changing face of U.S. politics¹. Many have commented on the prominent role American churches played in the 2004 presidential election, attributing President Bush's election victory to the role evangelical churches played in mobilizing support for the Republican party (Frank, 2005; Phillips, 2005; Jelen, 1993). In terms of political affiliation, the overwhelming majority of evangelicals tend to be conservative (Phillips, 2006; Bacevich, 2005; Martin, 1997; Page, 2004; Pew Internet Project, 2004), and "moral issues" – including abortion, the right to die, and homosexuality – are usually high on evangelicals' political and social agendas. The fact that these issues were prominent in the last presidential election campaign indicates the

increasingly influential role that religion has in contemporary American politics. In addition, evangelicals also are a highly mobilized group, providing a stable and consistent voting population (Pew Internet Project, 2004). At the same time, the partisan affiliation of evangelicals may be more fluid than generally assumed as, in the wake of well-publicized sex scandals involving prominent Republican politicians, 3 out of 10 self-identified evangelicals voted for Democrats in the 2006 mid-term elections (Blumenthal, 2006).

As evangelical groups move into the political arena, they are simultaneously bringing secular media – and mainstream culture – into the space of the church. Hendershot (2004), in particular, notes that producing their own religious-inspired media (in the form of church-produced videotapes, music, and books) became an important tool for evangelicalism as a political movement during the 1980s. From the late 1980s onward, however, evangelical churches changed their strategy and began to incorporate mainstream media – including television shows, blockbuster movies, and commercials – into church sermons, a move that carries with it a distinctly secular and consumerist aspect (Press et al., 2005; Roof, 1999). Cimino and Lattin (1998) note that churches now consider their relationship

with their congregations as that of a business and its clients, and the function of churches is to provide specific services – whether consumer or spiritual – for the “customer.” Roof (1999) refers to this phenomenon as the new “spiritual marketplace,” in which churches are seen to compete with each other for church members in a manner that more closely approximates that of a business vying for customers.

Integral to this new strategy is a reliance on secular media and an accompanying, closely connected focus on consumer culture. As a result, it is not uncommon during sermons to see skits about Wal-Mart, hear a discussion of new telecommunication systems such as “On Star” or watch an episode of MTV’s “The Real World” (Moore, 2006). Although it is possible to argue that evangelicals have always maintained a close connection with mainstream culture, the fact that secular media now permeates the evangelical church experience suggests a new, even closer connection between evangelicalism and the American culture of consumption². As Frank (2004, p. 6) notes, conservative leaders “may talk Christ, but they walk corporate.” This explicit shift to embrace consumerism has direct relevance for understanding evangelicals’ perceptions of a political issue such as global warming. Imbuing consumerism with a religious aura makes it even harder for individuals to question the degree to which consumption in developed countries may itself be a prime cause of global environmental crises.

As crucial to understanding how evangelicals view environmental issues are the ways in which the experience of the church frames their evaluation of the scientific information provided through any number of sources, but especially mainstream media. This research examines the strategies used by evangelicals to square the increasing dire reports of global environmental crisis with their religious beliefs, which include an embracing of material consumption.

Methodology

The data for this research are drawn from several sources, including a series of focus groups, media diaries, and ethnographic observations of multiple churches in south central Illinois. The focus groups posed specific questions to evangelical participants, including what the perceived environmental problems are in the U.S. (and internationally), what potential

solutions to these problems are, who is responsible for resolving the problems, how morality plays a role in environmental concerns, and how Christians perceive of scientific issues (and science in general). These questions ultimately led into discussions that revealed how perceptions of mainstream media were shaped, in particular, by religious faith and political leaning and the impact this had on opinions about a variety of political issues.

The focus group participants were chosen from subjects in an earlier, larger study on media and public life funded by a National Science Foundation grant (Press et al., 2005; Williams et al., 2006, 2005)³. The research, which examined citizens’ media use in their public and private lives in the months surrounding the 2004 U.S. presidential election, included detailed “media diaries” of 32 individuals – both religious and secular – in east central Illinois. In addition to chronicling media use, the diaries also included participants’ observations about politics, religion, and social issues, as well as myriad other details about their lives. The patterns that emerged from these diaries (especially the diaries of evangelicals in the study) – including a focus on objectivity, media bias, and religion as it related to politics – led to an interest in the current research.

Finally, this study draws from ethnographic observations in numerous evangelical churches in Illinois (Moore, 2005; Moore and Press, forthcoming), which included a focus on the content of the sermons, how secular media were treated in the space of the church, interviews with church leaders, and interactions between parishioners and pastors. Supplementing these observations was an examination of the media (including websites and online sermons) produced by these churches. This multi-method approach provides a glimpse into not only the political messages being sent by the leadership of evangelical churches but also allows us an opportunity to understand how these messages are received by religious individuals and what impact this has on their reception of messages from mainstream media. In addition, the focus groups and diaries permit an exploration of the role that religion, politics, perceptions of science, and beliefs about media have on individual understanding of a political issue like the environment. Together, they provide insight into what shapes perceptions of environmental issues in the U.S.

Perceptions of Media Bias

Unsurprisingly, it appears that several factors influence how religious Americans make sense of environmental issues. The first factor involves trust in the media and ideas about the importance of objectivity, and affects most Americans, not just evangelicals. The media diary study – which included both religious and secular individuals – revealed that confidence in the media was incredibly low: only three out of the 32 participants (about 9%) stated unequivocally that they trusted the information (for accuracy and objectivity) that they received from the news media. This suspicion of media by the majority of participants, both secular and religious, was reflected in their diaries:

They (the media) just reflect what the oil industry passes along, rather than an independent investigation as to the (gas) price increase.
–John, schoolteacher

I was especially disturbed with Dan Rather and the military report on [President] Bush. That was very biased and not something a reporter of his stature should be doing. I have changed the channel when his news program is on.
–Brad, insurance adjuster

It was interesting to hear how badly the media interpreted their exit polls... Perhaps this is something good that can come from this whole mess – a deep mistrust of the media.
–Mark, law student

In the focus groups and media diaries, religious individuals in particular were very vocal about specific bias they perceived in the media:

Yeah. I'm not a big fan of the news media... in my worldview, being a Christian, I find that 98% of the news media is... biased the other way, so I have trouble with that.
– Roy, factory worker

For one thing... the third government I always thought was

the press. I just totally disbelieve what they print. I think they print their opinion and not the news.
– Larry, retired

The media is attacking moral issues all the time: anything that has to do with Christian values gets attacked.
– Gary, university employee

This criticism of the media had a definite political dimension to it as well, as several evangelicals indicated:

I think one thing that is bothering me now, that ever sense Bush was elected, was that the political media is making a great deal of emphasis on the fact that he is a so called lame duck president... I think the most of the media doesn't care for Bush.
– Bart, insurance adjuster

Tonight I skimmed an article about the movie/documentary 9/11 which bashes Bush and his administration. I thought, "well here is the rebuttal for the Kerry article."
– Patsy, church secretary

Anything to do with George Bush, the media seems to be against. It's like, I don't think they're Republicans.
– Roy, factory worker

I can read an article and tell you exactly whether he's a Democrat or Republic or conservative or, uh, a liberal. It's just so obvious.
– Baird, university employee

When the topic of the environment came up in the focus groups with evangelicals, this strong lack of trust in mainstream media translated into a rejection of media coverage on global warming:

It's hard to know what to believe. I just heard a report last week... on the radio... that the ice caps in the north were... melting again, and, you know, what would that do to coastal cities and New York... when you hear things like that you

tend to say, well, it's possible, but how will you ever know ... it's very hard to know what's real and what's not.

- Nina, school teacher

Given their skepticism about the news media, reports about global warming were not enough to convince these evangelicals that global warming was real. The focus group subjects often relied upon their own personal experience to overcome a distrust of a biased media. For most of the evangelicals we interviewed, bias in the media meant that news reports on global warming were seen as suspect, and therefore could be discounted if it conflicted with their own personal experience about the environment.

One of the things that bothers me about global warming that we keep talking about is that, when I was a kid, I went with my parents to Florida. There were oranges and peach groves and grapefruit growing in Georgia. You cannot grow that same fruit in... northern Florida now, so, you know, they [the media] keep telling you about it, and yet... I been to Alaska, I seen the glaciers are melting. But in turn I see this area down here's that's so cold that we can't grow fruit anymore. So it sounds to me like maybe somebody's in charge of it, that, other people don't know about and it's that guy upstairs.

- Larry, retired

I don't know if there's a global warming issue. I do know that I've lived long enough I seen the change in our climate, uh, but again I don't know who's the expert to tell me that this is what's causing it?

-Baird, university employee

A Faith in Science

Interestingly, belief in the bias of the media and a reliance on personal experience, did not lead to a suspicion or rejection of science. In fact, the majority of evangelicals I have observed framed their arguments in a kind of scientific language, using terms such as "proof," "objectivity," and "truth."⁴ Thus, The second finding is that the subjects were unconvinced

about global climate change because of their skepticism about the abilities of a biased media to accurately pass on scientific information. Combining a distrust of media with a faith in science and a reliance upon personal experience, one subject sees his responsibility to bypass an unreliable media by going directly to experts himself.

I guess if I was really as concerned about global warming as perhaps I should be, I would be approaching environmental scientists, uh, environmental engineers, people with... backgrounds that study the issue from a, uh, logical standpoint and even a scientific standpoint, rather than just the [media's] opinion.

- Gary, university employee

The belief that personal experience revealed a consonance between evangelical faith and scientific beliefs was indicated in multiple instances. This consonance depended upon both a rejection of the media as the conduit of scientific information and what, to my ears, was an exceptionally narrow definition of science: findings that conflicted with their faith were defined as not being part of science. This was most apparent when the focus group discussion veered toward a discussion of evolution.

One man in particular had a set of fossils that he had collected in a nearby town. He emphasized that he did not doubt the 43 million year old age of the fossils (which was provided through analysis by a local scientist), indicating that an older age for the earth did not pose a threat to his religious beliefs. While evolution was clearly seen as challenging their religious beliefs, the subjects were adamant that evolution was not a proven fact but a theory only, and therefore not a legitimate component of science, as indicated by the following quotes in the focus groups:

Jane: My uncle was a Christian and he taught biology, and he didn't teach evolution.

Gordon: You said evolution is at the core of biology. Are you saying that evolution is a science?... [to interviewer] Are you telling me that evolution is a science, Sir?

Thus, what became clear through discussions was that the subjects blamed the media for a distorted presentation of science. They believed that science, if understood properly, was entirely consistent with religious belief. In turn, the need to define “science” narrowly enough to exclude evolutionary principles influenced which scientific sources evangelicals could consider trustworthy. One response was to invoke their belief in personal experience and some evangelicals indicated that they would prefer to contact scientists that they knew personally to answer their scientific questions. A troubled relationship with the media and with certain aspects of science, however, cannot account completely for evangelicals’ ambivalence regarding environmental issues. To get a complete picture, we must turn to the role that political affiliation plays in perceptions of environmental issues.

The Conservative Politics of Evangelical Churches

Data on the politics of evangelical churches come from the observations of churches as well as focus group discussions. The churches we visited were very conservative politically, as indicated by the explicit content and the framing of a wide variety of issues. For example, two churches held sermons indicating that war (specifically, the Iraq War) was acceptable (“God does allow for death in battle,” stated one pastor), whereas abortion was a sin, a distinction that fits well with the observation by Bacevich (2005) on the close connection between war and conservative evangelical organizations in the U.S. In addition, the churches provided literature and made statements in sermons against homosexuality and gay rights. In the focus groups, several evangelicals noted that they welcomed the addressing of what they called “life” issues by the pastor, which almost always meant issues that were being debated in the political world:

Diane: [Our pastor] did a series called “Tackling the Tough Issues” ...It was a very good series, where they addressed abortion, war, the right to die, and gay marriage... How as a Methodist you [could] put this into a framework for yourself.⁵

The politically conservative nature of American evangelical churches will probably not surprise many, and there is a great deal of research that demonstrates the connection between religion and politics in the U.S. What was unusual, however, was how often the news media was mentioned in conjunction with politics during church sermons. For politically conservative issues – such as abortion, war, and gay rights – some pastors were quite clearly attempting to influence churchgoers’ perceptions about current political events in the news, as indicated by the following exchange about church sermons in one focus group:

Diane: [Our pastor] definitely includes headlines, I’m sure.

Shirley: Polls, he definitely talks about polls.

Shalawn: And he does reading and research and all that survey...

Shirley: Right, that’s how he builds the message.

Sandy: And then he’ll say, “This percent, you know, agrees... but the Bible says...”

This exchange, echoed in entries in the media diary study indicating broad mistrust of the media, begins to shed some light on why evangelicals in particular are so critical of the “liberal” or “anti-Christian” bias they perceive in mainstream media. If church leaders constantly depict the information broadcast in mainstream media as being in direct conflict with Christian beliefs, it is understandable that churchgoers themselves would be critical of the media. In addition, the incorporation of the latest political news into religious sermons appears to indicate a perceived need by some pastors to “inoculate” churchgoers against the effects of the mass media when they are outside the space of the church. Buddenbaum (2000) notes that “political messages that churchgoers receive from their pastors have an effect on their use of mass media and on their political opinions” (p. 27). Specifically, she theorizes that “specialized sources” – such as religious leaders – influence how people interpret and use the mass media, in part by supplying alternate resources for making sense of new information and for forming opinions. One evangelical woman sounded

almost relieved that her pastor would frame the political issues she encountered in mainstream culture:

... I thought, “oh, this is going to be a great series because it’s gonna answer [the question of] gay marriage”... that was on the news because they showed the couples getting married.
–Sandy, homemaker

For the evangelical participants in the focus groups, then, framing political issues in terms of personal faith appeared to be effective. In addition to framing, however, were the issues that consistently came to the forefront in the churches, namely the “moral” or “family” values that are most closely associated with a conservative political philosophy. As we explore in the next section, the emphasis on these particular political issues at the expense of others means that the environment was not a pressing concern for the majority of evangelicals we studied.

The Environment as a (Liberal) Political Issue

At this juncture it is important to mention that there was a notable absence of talk about environmental issues in both the evangelical focus groups and the churches. When asked what issues they were most concerned with, certain topics were consistently at the forefront, including “family values,” bias in the media, the sanctity of life, and so forth. When the environment was mentioned, individuals were usually either reticent to talk about it or became defensive, especially in the older, more conservative, mixed-gender group.

When we mentioned that the National Association of Evangelicals (NAE), an influential national Christian organization founded in the U.S. in the 1940s (Marsden, 1991), published the results of a November 2005 survey indicating that many evangelicals professed to care about the environment and wanted to do something about it, focus group participants had neither heard of the organization nor the survey.⁶ One possible reason for this is that, although political issues such as abortion and gay marriage frequently surfaced in church sermons, the evangelicals we spoke with stated that their pastors had never brought up the environment in church. Indeed, despite the fact that two of the churches in the ethnographic study were members of the NAE, their pastors were

silent on the groups’ environmental statement. Another reason, however, may be that the NAE was formed by evangelicals who considered themselves to be more socially and politically liberal than the more fundamentalist groups they broke from (Marsden, 1991); as a result, the politically conservative nature of the evangelical churches we studied may contribute to their parishioners not being exposed to information from the NAE.⁷

Thus, one reason that environmental issues were never mentioned by these churches – or willingly discussed by churchgoers – is that conservative politics and Christianity have become so intertwined in American life, making it difficult to separate political inclination from religious beliefs (Phillips, 2006). Since concern for the environment has not been a primary talking point of conservative politicians in the U.S. and has been associated with liberal Democratic politicians, this discourages it from being discussed by evangelical churches. An indication of the deep connection between evangelical churches, conservative political issues, and a lack of attention to environmental issues surfaced in November 2006 when the Christian Coalition announced the appointment of Joel Hunter as their new leader. Hunter, pastor of a megachurch in Florida, was committed to moving beyond the Christian Coalition’s primary focus on opposition to gay marriage and abortion to a commitment to addressing poverty and global warming. Yet, Hunter’s positions made him unpopular with the existing leaders of the Coalition, who feared his positions would alienate the organization’s base, and he withdrew before assuming his new post (*Washington Post*, November 29, 2006).

The silence of the pastors at the churches is significant, since it means that environmental issues are not placed in a religious context. What this means for those evangelicals who pay attention to the “life issues” discussed in their churches is that certain political issues are considered to be pressing, due to their theological implications, and the environment, morally speaking, isn’t even on the menu. Yet, the focus groups indicated that there was an untapped potential for churches to cast the environment in a theological context. So, for example, when pressed, the focus group participants were able to discuss the distinction between stewardship and dominion, with the former indicating a concern for environmental protection based on the

religious obligation of Christians to preserve God's creations and the latter, in contrast, seeing the environment as a resource for indiscriminant human use. The evangelicals in focus groups indicated that they would largely place themselves in the former group, namely as "stewards" of the earth, as represented by several exchanges:

Barry: I think as a Christian I have the responsibility to be a good steward...because the Bible exhorts us to be stewards of what God has put us in charge of, or in care of. In fact... we're here on Earth to, to care for it, and I think Christians have an even greater responsibility knowing the word of God, that we don't have a way out by ignorance. We know what God's word says and we need to be responsible, as stewards, with what God has given us.

Donna: I think when I hear people say we have dominion over everything, that, they're kind of putting themselves on a higher pedestal than they belong. Because I think God put us here to take care of things, not just to, you know, rule.

Stephanie: You know, it's more to say, you know, I'm here and God put me in charge and that means I need to take care, versus control.

Although these statements indicate a certain view regarding care for the environment, they were not supported with clear conceptions of what it would mean to be good stewards of the earth. For many, stewardship meant simply picking up litter or trash on the side of the road, while not addressing broader environmental problems, such as pollution or climate change. This failure to address the environment as a theological issue means that, as the churches engage mainstream media and the material consumption it celebrates, evangelicals do not confront the connections between material consumption and the notion of dominion, and its conflict with the stewardship that they claim to embrace. It is this focus on consumption that brings us to the last factor affecting evangelicals' perceptions of environmental issues.

Consumer Culture, Churches, and Perceptions of Global Warming

In addition to beliefs about media and science, the incorporation of mainstream media into the space of evangelical churches, with its concomitant emphasis on consumer culture, also has implications for how evangelicals think about environmental issues. In a recent study, Moore (2006) found that secular, commercial media saturates the modern evangelical church experience in both the sermons as well as on religious websites. The constant mention in sermons of major U.S. corporations – such as Wal-Mart, Nike, Panera Company, Orkin Pest Control, Victoria's Secret, and the like – as well as mainstream movies and primetime television shows, illustrates how evangelical churches have embraced consumer culture. Of course, evangelicals are not an outlier group, but rather the opposite: they are moving closer to the generally uncritical embrace of consumer culture by most Americans. This focus on consumption can directly affect how evangelicals – and Americans in general – respond to an issue like global warming.

Data from the focus groups indicated that evangelicals are immersed (as are most Americans) in consumer culture, although at the same time express some ambivalence about it.

I would just be the first to say I'll cut back. But that's not America. But who's going to take the first step? We're used to what [oil] provides... we need the oil, because we want to drive the nice car.

–Baird, university employee

You have the right to buy the car you want to, you want to, drive, you can also take a small car and drive 100 miles an hour and burn up just as much gas as you can in an RV, OK? I own [an RV]

– Larry, retired

But now who's gonna refuse to pay the price [of gas]? We're gonna continue to [drive], you know, and pay the price.

– Wilma, homemaker

In one focus group, a mixed-gender group of elderly individuals, the majority drove sport utility vehicles. When questioned about the

moral implications – and the environmental impact – of driving cars with inefficient gas mileage, some replied that they felt “safer,” while others indicated that it was their “right” to own and drive the vehicle of their choice. In this sense, even though some individuals voiced the need to consume less and recycle more, it was clear that the needs of the individual (for safety, for recreation) came first before concern for the environment. As well, despite overt talk about embracing a stewardship vision of the relationship between humans and the earth, comments about actual behavior suggest an almost default dominion perspective.

This is consistent with other focus group comments that emphasized evangelicals’ focus on the needs of the individual in a consumer culture. One woman, in discussing her choice to change churches from a more traditional church to an evangelical one stated, “There’s plenty of... churches for people to choose from.” This relatively new conception of choosing the church that provides the best “fit” is recognized by Roof (1999, pp. 85-86), who states, “The traditional religious script prescribes loyalty to a religious community. But how well does this hold in a consumer culture that emphasizes the personal rewards that should go with religious attachment?” Seen from this perspective, the primary benefit of going to church is to achieve personal goals of happiness and satisfaction (Roof, 1999; Lichterman, 1991; Lears, 1983). If a church does not provide this, an individual can “shop” around for a better one. As a result, churches try to make services more relevant, if not more entertaining, to their constituents who are immersed in mainstream, consumerist culture outside of the church (Roof, 1999; Cimino and Lattin, 1998). Thus, it is not just churchgoers that have changed their attitudes about religion: evangelical churches have actively redefined the relationship between religious institutions and congregation members to that of a business and client. According to Cimino and Lattin (1998 p. 57):

Megachurch leaders unashamedly admit the influence of business and management theory... ‘What is our business?’ ‘Who is our customer?’ ‘What does the customer consider value?’

The connection between religious institutions and American corporations clearly has the

potential to affect how evangelicals perceive of environmental issues, especially global warming. Acceptance of American individualism so thoroughly described by Bellah et al. (1985) is reflected in evangelicals’ statements about their “right” to own the car of their choice, with the only perceived problem being that oil might run out at some point in the future. So, not only do the leaders of the churches we studied avoid an explicit discussion of the religious dimensions to environmental protection (despite the attempts by a few national organizations to reverse this trend), the churches also encourage – perhaps unwittingly – the messages inherent in individualistic consumer culture that connects happiness with the acquisition of material goods.

The Interrelationship between Consumption, Religion, Media, and Politics

What becomes clear is that there are myriad factors that contribute to evangelicals’ beliefs and perceptions about environmental issues. The broad mistrust of media – evident in the media diaries as well as the focus groups – leads to a reliance on personal experience: if media is always biased, then what is knowable is limited largely to that which can be seen or individually experienced. Perceptions of global warming are also influenced by evangelical beliefs about science. A narrow definition of science resulting from a rejection of evolutionary principles, coupled with a broad distrust of media, enables a skepticism about the veracity of global warming by many evangelicals. Ultimately, this skepticism fits into a politically conservative framework, in which cynicism regarding scientific experts – and their reports – serves to not only prolong the debate about the veracity of global warming, but to delay it from becoming a prominent political issue (Gelbspan, 1997). This skepticism also helps to take attention away from the damaging effect of human actions on the environment, especially in a consumer society. Related to this, then, is that perceptions about environmental issues are complicated by evangelicals’ immersion in American consumer culture, which consistently emphasizes the needs of the individual over that of the common good. Evangelicals’ perception of global warming, however, is influenced by one last major factor, one that clearly separates them from secular Americans and which appears to be unrelated to beliefs about science, media, or politics.

Religious Conviction: the Fifth Factor

End-of-times beliefs as a part of evangelical theology also clearly played a role in the lack of attention given to global warming. So, for example, one woman, when pressed as to whether or not global warming was a valid concern said:

We're told ... there's a... time and a season, and when you hear... these things, you know, like the floods in all the national [news]... that's a sign of the times and we as believers need to be aware of that, and that's why I think that we as believers need to... bring other people to the Lord, because I think that this is the time.

- Vanessa, homemaker, 62

Seen from this perspective, a concern with environmental problems is not only incompatible with a politically conservative outlook, but also appears to fit into an “end of the world” dispensationalist religious framework (a belief in the return of Christ being signaled by widespread calamities and the events that occur as a consequence) adhered to by many of the evangelicals in the study. This belief is at the center of the incredibly popular “Left Behind” series of books written by prominent evangelists Tim LeHaye and Jeremy Jenkins.⁸ The book series has even been called “required reading” for evangelist by many prominent clergy. In several of the churches I observed, dispensationalism was discussed and vigilance urged. Seen from this perspective, events like Hurricane Katrina and the Iraq War are seen as events that precipitate Christ’s return. In this framework, then, environmental issues such as global warming, mass extinctions, and increased hurricanes can be read as positive occurrences since they signal the return of Jesus.⁹

Conclusion

Clearly, American evangelicals do not stand outside of the broader American social and political systems. They share with many other Americans a broad mistrust of media, a belief in individualism, and a firm embrace of consumerism, all of which help shape views about environmental issues. All three factors shape the ways in which mainstream media presents environmental issues. Although major commercial media outlets have recently begun to pay even more attention to global warming, it is

clear that media producers feel that the information needs to be presented to Americans in a way that does not threaten consumer lifestyles.¹⁰

It is beyond the scope of this work to address the question of whether or not Americans have enough information about a political issue such as global warming and whether this information must be framed in superficial, consumerist terms in order for the “message” to reach them on a meaningful level. However, it is important to make a potential connection between the skepticism that evangelicals (and secular individuals) exhibit toward the media, the ambivalence that evangelicals have about science, and the trouble that Americans in general have understanding – and responding effectively to – global warming. The skepticism regarding environmental issues exhibited by many of the evangelicals in the study may be due to beliefs about science and media, as well as political affiliation and a love of consumption, but this cynicism is actively fostered by external sources as well, including multiple scientific reports funded by major U.S. energy corporations that claim that global warming either does not exist or is not as serious as more mainstream scientists assert (Gelbspan, 1997). This, in conjunction with commercial shows like “Earth to America” (which was largely funded by advertisements for new, low-mileage trucks from General Motors), means that, regardless of political affiliation or religious belief, commercial media is not likely to provide substantive information about global warming, or to offer practical solutions (drive less, consume less) to mitigate environmental impact. As McChesney (2004) notes, “The crucial tension lies between the role of the media as profit-maximizing commercial organizations and the need for the media to provide the basis for informed self-government” (p. 17). In this sense, consumer society and the accompanying belief of the primacy of the individual affect what role individuals perceive themselves as playing in environmental problems. In addition, this is complicated by the fact that American evangelical churches are increasingly beginning to resemble profit-driven corporations themselves, and so may be even less likely to put environmental problems – or their causes – on the agenda¹¹.

There are obviously other reasons for the lack of commitment by many Americans to address environmental issues, including America’s long history of oil production and consumption

(Phillips, 2006). In addition, the fact that Americans have had inexpensive oil for the last few decades leads to the perception that the oil is never ending¹². Combined with the individualistic focus that has long been documented in America, the perception – by evangelicals and by Americans as a whole – continues to be that individuals have an innate right to drive what they like and can afford to do so.

It is perhaps for all of these reasons that none of the individuals or church leaders we observed, and very few of the media diarists, brought up environmental issues voluntarily. In the focus groups, when asked the opening question of what issues were facing Americans or humans in general, not one person brought up the environment. Even in the “mixed” group (with non-evangelical Christians and secular individuals), other issues – bias in the media, class, education, and beliefs about corruption in American politics – took center stage. Just as in the evangelical churches, the environment isn’t

even on the menu for any of the individuals we encountered through our various research methods. For the participants in the study, the environment was not considered to be important enough to mention.

At the same time, evangelicals represent an interesting, important, and in many ways distinct group of Americans. When it comes to global climate change, it seems clear that many church leaders – reflected in the NAE and the conflict over leadership of the Christian Coalition – have recognized the particular obligation of evangelicals to become active and aware. As well, most of the respondents, when pressed, embraced a stewardship view of the environment that would support taking action. If this perspective is to be given a full hearing in the church, it must be presented in a manner that recognizes both the general factors affecting the environmental attitudes of the majority of Americans as well as the specific factors influencing evangelicals.

Endnotes

¹Hendershot (2004) notes that events in the 1970s and 1980s paved the way for the increasing role that religion plays in American politics: in the 1970s, born-again President Jimmy Carter was elected, the “Moral Majority” was founded by Jerry Falwell, and in the 1980s Ronald Reagan – also a Christian – became president, although it is argued that he did not press actively for a Christian agenda (Frank, 2004; Lasch, 1991). The current Bush administration, however, is arguably different in this regard (Phillips, 2006; Martin, 1997).

²Arguably, Protestants have always had a close connection with mainstream, secular culture for the purposes of evangelism (Hendershot, 2004; Buddenbaum, 2001; Schultze, 2001), which fits well with Weber’s (1958) chronicling of the interconnection between the Protestant tradition and capitalism. However, the incorporation of explicitly secular media, and the intensity with which it is done, is a new phenomenon. Thus, what is distinctly new is the degree to which secular media and mainstream culture pervades these churches.

³National Science Foundation Grant DST IIS-04838803 awarded to Drs. Bruce Williams and Andrea Press at the University of Illinois.

⁴A finding reported by Press and Cole (1999) in their study of American fundamentalists, in which they found that discussions on abortion were often couched in scientific language and an empirical framework. In addition, a study by Moore (forthcoming) on evangelicals’ reaction to the *Da Vinci Code* movie often use the language of science and indicate a need for scientific “proof.”

⁵Although not Methodists in general are not considered to be evangelical, this group indicated that they had left more traditional United Methodist, Catholic, and Synod Lutheran churches for more “contemporary” Methodist, evangelical church.

⁶We suspect that the NAE would have had more name recognition if we had held the focus groups after the extensive coverage of the sex scandal which led to the resignation of its leader Ted Haggard.

⁷Yet one should not overestimate the liberalism of the NAE which remains vigorously opposed to abortion and gay marriage.

⁸Interestingly, this book series and its spin-offs, illustrates the ways in which mainstream media is not simply absorbed into the church, but also how evangelical beliefs can influence wildly popular forms of mass

culture. The series has had its own movies, video games, and all the other accoutrements of a typical media "brand."

⁹Anecdotally, one of the authors (Moore) was told that some of the evangelicals give out Christmas cards that center on the Iraq War as a sign of the end of times.

¹⁰Indeed, there is evidence that attention to environmental issues is cyclical. During each cycle of attention, the discourse which is employed by television is inevitably limited by the commercial context of network broadcasting (Delli Carpini and Williams, 1994).

¹¹There are, of course, environmental movements within evangelical organizations, such as "What Would Jesus Drive?" but so far these efforts are outweighed by the silence of the majority of evangelicals on environmental issues.

¹²While writing this article, the large oil reserve in Mexico has been discovered, and estimates are that it would increase U.S. reserves by 50 percent, thereby continuing to foster the perception of never-ending oil .

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Crisis Redux: September 11, and the Asbestos Hazard

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Abstract

This essay uses the post-September 11 controversy over environmental contamination in New York as an occasion to discuss how the field of environmental communication might figure itself as a crisis discipline. The essay contrasts the definition of crisis as “risk manifested” offered in Heath and colleagues’ response to Cox with Frederick Buell’s notion of crisis as dwelling place. The essay then examines the public controversy over EPA’s initial responses and public statements after September 11, focusing on how those statements perpetuate belief in a safe level of asbestos exposure. The essay concludes by arguing that Buell’s perspective on crisis helps us understand how the post-September 11 asbestos controversy may work to discursively contain recognition of the broader asbestos crisis.

In this essay I want to use the post-September 11 controversy over environmental contamination in New York as an occasion to discuss how environmental communication (EC) might figure itself as a crisis discipline. My own position is that EC might consider crisis itself as a primary object of inquiry in order to fashion itself as a distinctive crisis discipline. In other words, rather than taking crisis for granted and considering environmental communication as a response to crisis, “attention to crisis foregrounds the material conditions of ecological degradation as well as the social/symbolic efforts to shape the meaning of those conditions as a primary subject matter of the discipline” (Schwarze 94). How environmental crisis is constructed, then, becomes a central question for EC inquiry. In the first part of this essay, I elaborate this argument in relation to two alternative perspectives on crisis, one articulated by Robert Heath and colleagues in their response to Cox, and the other articulated by cultural critic Frederick Buell. In the body of the essay, I discuss a small portion of the controversy over EPA’s statements in the immediate aftermath of the WTC catastrophe, focusing on how those statements perpetuate belief in a safe level of asbestos exposure. In the conclusion of the essay, I suggest that Buell’s perspective helps us understand how the post-September 11 asbestos controversy may work to contain recognition of the broader asbestos crisis.

Crisis as Catastrophe, Crisis as Dwelling Place

Heath and colleagues define crisis as “risk manifested” (Heath 37). This is an apt and pithy way of capturing the fact that crises have symbolic and political dimensions that influence how and when certain risks come to manifest themselves. How risks come to manifest themselves and how they are defined and dealt with once manifest are questions

that environmental communication scholars are well-positioned to answer.

But there are several potential problems with the definition. If we think about crisis as risk manifested, we commit ourselves to an untenable dualism of manifest versus latent risk. As Heath and his colleagues elaborate, “Whether in business practices, government decisions, or the daily lives of ordinary citizens, risks manifest themselves; once they do, we have a crisis” (37). The manifest/latent distinction here serves to carve out a sharp dividing line for determining the onset of crisis. According to this model, the manifestation of risk distinguishes the precrisis timeframe (“as an understanding exists regarding the risk and its manifestation) from the crisis timeframe (“which occurs during the specific period of crisis once the risks [sic] manifests itself and deserves public attention”) (38). However, it is difficult to sustain the idea that risk is manifest only during the crisis timeframe, when there is at least some understanding of the risk during the precrisis time frame as well. During the precrisis phase, the risk as a *social construct* is not latent at all; it is an object of knowledge that facilitates scientific research about the risk, the development of regulations to manage the risk, and emergency planning to deal with potential “manifestations” of risk in the future.

In other words, if risk is a socially constructed category, an object of knowledge and locus of controversy—then the manifest/latent dualism starts to break down and becomes a questionable basis for determining the occurrence of crisis. The argument by Heath and colleagues, however, does not pursue this deconstructive move. While on the one hand the essay argues that communication constructs our understanding of risk, on the other hand the manifest/latent distinction at work in their essay

appears to reinforce the idea of a purely physical, nondiscursive notion of risk. My purpose here is not to discard the dualism entirely nor to dispute that physical attributes can affect risk status; rather, I want to show how the dualism functions to generate a rigid definition of “crisis” that may not serve environmental communication well.

In fact, while the essay by Heath and colleagues appears to owe much to Beck’s thinking on risk society, it does not follow through with Beck’s logic to trouble the taken-for-granted categories prevalent in crisis communication research. For example, the timeframes of pre-crisis, crisis, and post-crisis may provide a useful heuristic for understanding acute, discrete manifestations of risk, but they deflect attention from the argument that many societies (if not global society as a whole) are fundamentally organized around the production and management of risks. If risks are pervasive, endemic features of modern societies that cannot be eliminated but must inevitably be managed, then we no longer have the possibility of returning to a pre-crisis time or reaching a post-crisis moment. From a broader perspective, then, the three-part timeframe advanced by Heath and colleagues obscures the fact of endemic risks and perpetual crisis.

Frederick Buell pursues this logic in his work on environmental crisis in the 20th century. For Buell, Beck’s notion of a risk society figures prominently in his characterization of crisis discourse. To the extent that the risk society’s production of hazards outstrips its ability to control and manage those hazards, risk can no longer be limited. “Risk society thus emerges when modernity, for a host of reasons, proves structurally unable to contain the hazards it produces” (193). As a result, Buell argues, there is a growing recognition that risks are no longer future or distant hazards, but rather are part and parcel of contemporary life. People must live within perpetual crisis. Tracking this shift in the history of crisis discourse, Buell argues, “crisis thought has moved from describing an environmental apocalypse ahead to exploring crisis as a place in which people presently dwell” (177).

While both Buell and Heath and colleagues ground their work in Beck’s notion of risk society, Buell’s trope of dwelling within crisis provides a significantly different version of crisis than the stages of crisis model articulated by Heath. Rather than view crisis as a particular stage, phase, or timeframe, crisis is the very scene in which people live and deal with ever-present risks. Crisis is perpetual in risk society because of the physical characteristics of risks

and the inevitable conflicts that arise in addressing those risks. “The new undelimitable risks are impossible to prevent, hard to accommodate, and difficult to assign blame for. Unable to manage these risks adequately, society thus has to shift more and more of its attention from the production of goods to the management of these dangers and the social controversies they create” (193). Indeed, the overabundance of risk creates “an almost equally stressful overabundance of information, expertise, disagreement, confusion, and conflict. Perversely, then, the very attempt to deal with risks multiplies their effect, producing further conflict, not resolution (194). Consequently, the mode of dwelling in crisis entails not only living in an ecologically degraded world, but also living with perpetual, ongoing conflict. “Dwelling in crisis means dwelling in a time of crisis debunking, of increased controversy, of politicization of environmental knowledge” (199).

Thus, where Heath defines crisis as a discrete event instigated by the physical manifestation of risk, Buell’s argument depicts crisis as a constitutive feature of risk society. This difference is important for our purposes because it suggests alternative ways of theorizing the relationship between risk and crisis and articulating environmental communication to those terms. Where Heath and colleagues advise that “the crisis nature of environmental communication” is best understood “in the tradition of risk assessment, management, and communication,” the possibilities of environmental communication as a crisis-oriented discipline stretch well beyond the usual concerns of risk communication (36). To take just a few examples, scholarly research that explores representations of nature and environment, or examines constraints on public participation, or probes the political economy of public discourse are all identified within Cox’s keynote address as relevant to understanding how environmental communication is implicated in crises of biological systems and social institutions. Research in these areas may or may not touch on risk *per se*, yet our engagement with them can help us understand the various ways in which we are dwelling in, coping with, and responding to crisis. Again, this is not to reject the insights of the literature on risk, which I find extremely useful for thinking about environmental communication. But the narrow view of crisis as an acute manifestation of risk may be too limited to help us conceptualize the broader patterns of communication and controversy in contemporary society.

Crisis, in other words, should be considered the more all-encompassing concept that facilitates scholarly conversation across methods, levels, and

topics of inquiry. Crisis can serve that conceptual role, I believe, to the extent that it focuses our attention on the configuration of judgment in various contexts. Orienting environmental communication around the notion of crisis need not limit our inquiries to high-profile, discrete manifestations of risk that fit Heath's definition of crisis, nor does it limit "our communicative practices and research to an adversarial dynamic," as Senecah claims (27). Indeed, attention to the configuration of judgment need not mean that scholars must embrace "the activist and advocacy roles of environmentalism." Instead, crisis would provide a perspective through which a whole range of communicative practices might be understood, to discern how those practices constitute the grounds, the assumptions, the constraints, and the processes of judgment. This broader perspective on crisis can alleviate Killingsworth's concern that the concept may not sustain the field "during times of falling public interest or business as usual" (59).

For the purposes of this essay, I want to illustrate this perspective on crisis by interpreting the post-9/11 controversy about air quality in lower Manhattan. This may seem an odd choice, given that I have just argued for the importance of looking beyond high-profile crisis events. However, it is precisely such events that are useful for illuminating the difference between different versions of crisis-oriented research. From one angle, the controversy over EPA's handling of 9/11 might be viewed as an extended case of crisis communication, in which the agency along with OSHA, the New York City Department of Health and other official entities attempted to communicate effectively with residents about manifest risks. Such a perspective would identify lessons learned that might help the agency do a better job of clearly communicating risks related to disasters in the future. As important as this work is, it is not the only way of understanding crisis. From another angle, the controversy represents an episode in the ongoing story of how we dwell in a world that is filled with asbestos. Although critics of official policy are clearly responding to a discrete manifestation of risk, the controversy can be read as revealing the pervasive, embedded character of the asbestos hazard. From a Buell-inspired perspective on crisis, the controversy suggests the impossibility of containing the asbestos hazard, and considers EPA's response in light of this broader asbestos crisis.

In the rest of this essay, then, I turn to a reading of the controversy surrounding the initial statements by EPA and the data that ostensibly was used to support those statements. I reveal some of the flaws

in these statements by examining public criticisms, including those of an EPA scientist and the EPA's own Inspector General report of August 2003. It is important to note that this essay focuses only on the arguments surrounding asbestos contamination and exposure, which garnered significant attention but were hardly the only arguments regarding the content of the air and dust. I conclude by briefly discussing how the continuing controversy over testing and cleanup in Lower Manhattan reveals what Kinsella would call a "discursive rupture." Yet this rupture is limited to the extent that the controversy contains the asbestos crisis within the parameters of cleanup. Ultimately, the controversy perpetuates the notion of "safe" levels of asbestos exposure and normalizes the fact that we dwell within crisis.

The 9/11 Contamination Controversy

The controversy took shape in response to claims made by EPA and New York City officials in the week after the attacks. These claims were explicitly intended to reassure citizens and encourage re-entry in to urban spaces. As early as September 13, EPA Administrator Christine Todd Whitman reported that "there appear to be no significant levels of asbestos dust in the air in New York City" (US EPA 87) and by September 18 she pronounced the air safe in lower Manhattan: "I am glad to reassure the people of New York and Washington, D.C. that their air is safe to breath [sic] . . ." (US EPA 77)

Over time, Whitman's statements came under increasing scrutiny as a range of voices publicly criticized the inadequacy of the data, the testing methods, and the assumptions that ostensibly supported those statements. In particular, advocates raised concerns about indoor air quality and pushed EPA to initiate a voluntary testing and cleaning program in private residences in Lower Manhattan in 2002. Criticisms of this program as well as EPA's overall handling of 9/11 came to a head in the EPA Inspector General's report issued in August 2003. Critics of the Bush administration seized on the report's findings that the White House Council on Environmental Quality "influenced EPA press releases" in the days following 9/11 "when it convinced EPA to add reassuring statements and delete cautionary ones" (7). These press releases are at the heart of a class action lawsuit against Whitman and other EPA officials alleging that the claims violated residents' due process rights.

While the allegations of CEQ manipulation made for splashy headlines, the report's explanation of the shaky scientific underpinning of official claims also were disturbing. As the 2003 EPA OIG report put it,

“However, when EPA made a September 18 announcement that the air was ‘safe’ to breathe, the Agency did not have sufficient data and analyses to make the statement” (7). The report goes on to state that Region 2 officials admitted qualifications to the statement—that it was only safe in relation to long-term health effects (not short-term), the general public (not firefighters or other rescue workers), outdoor air (not indoor air or settled dust), healthy adults (not those with pre-existing conditions) and asbestos (not the hundreds of other substances in the dust and ignoring the potential synergistic effects between these substances). Yet just a few pages later, they reveal the following “limitations” which dispel the notion that the “safe” claim even applies to asbestos:

- A lack of data results for many pollutants
- An absence of health benchmarks for asbestos and other pollutants,
- Imprecise optical asbestos sampling methodologies, and
- Over 25 percent of the bulk dust samples collected before September 18 showed the presence of asbestos above the 1 percent benchmark.

The rest of this section explains these and other limitations in relation to air and dust testing in the immediate aftermath of 9/11.

“The Air”

EPA’s claim that the “air is safe to breathe” was distorting on several levels. First, the data from EPA’s outdoor air sampling available prior to Whitman’s September 18 statement showed that 24 of 69 samples for asbestos were overloads—meaning that the total amount of particulate matter overwhelmed the filter (US EPA 13). It is fair to assume that this means extremely high levels of asbestos and other contaminants. With more than one in three samples measuring overload, even the relatively limited data generated during the week following September 11 should have given officials pause about the quality of outdoor air in relation to asbestos contamination.

Second, even samples showing low levels of airborne asbestos could not be fairly characterized as safe. The fundamental issue here is what standard or

threshold should be used to evaluate the samples. In this instance, EPA misrepresented a technical limitation of the sampling technique as a “very stringent standard” and implied that this so-called standard was keyed to public health. This argument was advanced by Cate Jenkins, a chemist in EPA’s Hazardous Waste Division who has been a persistent internal critic of agency decisions. In memos from January and March 2002, Jenkins explains that the so-called “standard” of 70 asbestos structures per square millimeter was taken from the Asbestos Hazard Emergency Response Act that addressed asbestos in schools. The number, however, is not a health-based standard for “safe” air. It is the detection limit for the measurement technology available at that time. In fact, EPA and others are now able to measure asbestos levels well below 70 s/mm², but even those lower levels do not translate into exposure levels that are below EPA’s triggers for declaring an imminent and substantial endangerment to public health. Jenkins notes that at the AHERA 70 s/mm² level, the air actually contains 10 to 50 times the concentration that will result in an increased cancer risk of 1 in 10,000 (Jenkins, “Preliminary Assessment,” p. 5).

In other words, EPA invoked a false standard that could be used to shape public judgment about the data found in their sampling. With this false standard circulating as a threshold, EPA contributed to the asbestos crisis in two significant ways. In the short-term, they dramatically increased the amount of asbestos that could be declared safe, thus making it easier to advance claims that there was no crisis related to WTC asbestos exposure. The seemingly low numbers in the raw data and the firm threshold gave the appearance of reasonable judgment by the agency. In the long-term, though, the repetition of a numerical threshold—regardless of the number associated with that threshold—reinforces the notion that there is a numerical threshold below which asbestos exposure can be considered safe. This notion is further underscored by the thresholds in place in occupational settings, which have been set at the lowest levels that can be detected through available technology (Smith and Schneider). As a result, the invocation of the false threshold in the aftermath of September 11 perpetuates the belief in a safe level of asbestos exposure: an amount that can be measured, and a risk that can be managed.

Third, EPA’s claims about safe air also encouraged an extremely misleading picture of the environment, one that was quickly exposed by local residents and practicing scientists. The declaration of “safe” air seemed to apply to the air in general without regard for significant difference between

indoor and outdoor environments On September 13, EPA and OSHA took 14 indoor air samples from just three government buildings in lower Manhattan, so any claims about the safety of indoor air would have been extremely premature (US EPA 93). But the September 16 press release disregards the paucity of data and the significant differences between indoor and outdoor environments when John L. Henshaw, Assistant Secretary of Labor for OSHA, claims that, “Our tests show that it is safe for New Yorkers to go back to work in New York’s financial district” (US EPA 85). The September 18 EPA press release similarly casts a broad net of assurance by stating that “the public in these areas [NYC and near the Pentagon] is not being exposed to excessive levels of asbestos or other harmful substances” (US EPA 77). Rooted primarily in the faulty interpretation of outdoor air samples described above, the blanket assertion of safe air in the space of Lower Manhattan and the EPA’s delegation of responsibility for indoor environments to New York City came back to haunt EPA. Residents and elected officials pressed for further testing of residences and businesses, initiating a protracted struggle about the cleanup of the indoor environment of Lower Manhattan.

Fourth, EPA’s claims about safe air also promoted a misleading understanding of the complicated relationship between air and settled dusts. In particular, the claims of “safe” air overshadowed the extremely troubling claims about asbestos levels in dust. The next section of the essay will address the myriad problems with the dust data, but at this point it is critical to point out that the “air is safe” claim downplays the significance of the fact that asbestos concentrations in debris near the WTC site measured 2.1 to 3.3 %—a huge amount of asbestos—and obscures the relationship between asbestos in building materials, asbestos in the dust from those materials, and asbestos in the air resulting from the dust. The claim of safe air encourages the perception that asbestos from dust, even at these high levels, is not a significant problem because it is having no impact on air quality or public health.

These distortions should lead us to question the effectiveness and the ethics of EPA’s response to 9/11 as a form of crisis communication. The agency downplayed significant pieces of data, invoked false standards to evaluate data, and constructed the environment of Lower Manhattan in a way that initially displaced indoor environments as an object of concern. But in doing so, the agency also influenced the broader asbestos crisis that has plagued the US for decades. It did so not by setting official policy or advocating formal changes to

regulations—the agency did recognize their ad hoc application of existing regulations to the disaster—but by sustaining the perception of a “safe” level of asbestos exposure that is both measurable and manageable.

“The Dust”

EPA’s discussion of dust closely follows the patterns of distortion described above with regard to air. For starters, data from initial samples revealed significant levels of asbestos in a large proportion of those samples. The OIG report foregrounds the fact that “over 25 percent of the bulk dust samples collected before September 18 showed the presence of asbestos above the 1 percent benchmark” (US EPA 10). Yet the September 18 press release emphasizes that “most dust samples fall below EPA’s definition of asbestos-containing material (one percent asbestos),” and goes on to describe how the agency is using HEPA vacuums in areas where results are above 1% (US EPA 77). The press release, then, admits that some samples exceed the benchmark but depicts the agency as taking protective measures to address those exceedences.

Unfortunately, the 1% standard in these statements functions similarly to the 70 s/mm² false standard for air. Once again, the 1% standard is a detection limit (borrowed from the Clean Air Act’s NESHAP standard for asbestos emissions) rather than a health-based standard. The 1% figure represents the lowest level of asbestos that can be detected in a bulk dust sample by Polarized Light Microscopy (PLM). Thus, the fact that a majority of samples measured less than 1% does not mean that the sample does not contain asbestos nor that someone is safe were they exposed to that dust. As Jenkins points out in the January 11, 2002 memo, “The PLM method is unreliable at concentrations of 1% and less. In other investigations, EPA found that soil samples below the level of detection of PLM did in fact have high levels of asbestos when analyzed with SEM (scanning electron microscopy) methods. Thus, many of the outdoor dust samples in Manhattan probably were actually contaminated with asbestos” (9). Jenkins’ claim is supported by the fact that the Ground Zero Elected Officials Task Force used electron microscopy and found samples as high as 2.25% (Jenkins, “Preliminary Assessment,” 17).

The seriousness of this misrepresentation is exacerbated by the fact that the 1% figure was never meant to apply to dust. Here, I return to the idea mentioned earlier about the complicated relationship between building materials, dust, and air. EPA misapplied the 1% figure when they evaluated dust

samples against the 1% standard. Instead, both NESHAP and AHERA regulations use the 1% figure to define building materials and products as ACM (asbestos-containing material). It is these original, intact materials—e.g, insulation in a standing World Trade Center tower—that are the object of regulation, not the dust resulting from their destruction. If the original materials contain more than 1% asbestos, then they are considered ACM and any demolition or renovation requires professional abatement in order to minimize the emissions from that material. The presumption of this regulation is that far less than 1% in dust could be hazardous. Again, Jenkins' comments clarify the rationale. "EPA assumed that the dusts resulting from the presence of these ACM somewhere in the building would have much lower levels of asbestos than 1%. And it is these dusts themselves that are considered to be the ultimate hazard by EPA, even though they have levels lower than 1%" ("Subject: Wipe Sampling," 2-3).

As with the false standard for air, EPA's claims can be used to confuse public judgment about the asbestos hazard. Here, EPA confuses the issue by shifting the reference of the regulatory term asbestos-containing material and carrying the 1% figure along in that shift. Referring to WTC dust as an asbestos-containing material seems unremarkable on the face of it. But this reference dislodges the term from its specific regulatory reference, facilitating the application of the 1% figure to a substance that was never intended to be regulated. While it is understandable that officials and local residents were concerned about the dust in the aftermath of September 11, historically the broader concern in the regulation of ACM has been to minimize the use of asbestos in building materials. The attention to dust obscures this dimension of the asbestos crisis.

In tandem with misapplying the 1% figure to dusts, the focus on dust percentages also deflects attention from how human interaction with environments affects exposure levels. That is, the focus on dust levels themselves oversimplifies the hazard because the crucial factor is how human activity might stir up dust to create an exposure pathway. For example, a dust sample taken on the roof of one of the buildings tests by the Ground Zero Elected Officials Task Force had a concentration of 1.05% asbestos. Even under passive conditions, airborne dust levels inside the building were more than four times higher than the false standard of 70 s/mm² (Gonzalez 109). It is likely that normal cleaning activities would have increased the concentrations hundreds of times higher than that, based on other studies of dust resuspension (Jenkins,

"Subject: Wipe Sampling," 6). Such results are not surprising, since test results from the Libby, Montana Superfund site showed that soils with .001% asbestos concentrations (1/1000th of that found in a 1% sample) created hazardous air levels when disturbed (Jenkins, "Subject: World Trade Center Asbestos," 9-10). Unfortunately, the limited indoor data and the easy-to-comprehend 1% figure conspired to mask the complexities of indoor air hazards.

To summarize, EPA's discussion of dust followed patterns of distortion that were similar to their discussion of air quality. The agency downplayed significant pieces of data and invoked false standards to evaluate that data. Perhaps more significantly, their public discourse misapplied those standards in a way that diverts attention from the original source of the hazard and contributes to the belief that we do not dwell within an asbestos crisis. To conclude, I want to unpack this latter point to further explain how the agency's "crisis response" to the WTC catastrophe can be interpreted from a broader crisis perspective.

Conclusion

Kinsella's metaphors of discursive containment and rupture are productive for explaining how EPA's claims and the subsequent controversy can be articulated to the ongoing debate about asbestos in the United States. Since the hazard could not be physically contained, public statements functioned as a form of containment that, as shown above, limited the scope and magnitude of the problem. EPA's initial discourse—both their words and their practices—constituted the WTC contamination problem as a hazard that could be measured against existing standards and ultimately managed by cleaning small pockets of contamination that exceeded those standards. In addition, EPA discourse functioned as a form of containment by directing attention to outdoor air and dust, and deflecting attention from (and responsibility for) indoor environments.

However, it did not take long for this form of containment to rupture as indoor environments increasingly came under public scrutiny. Within weeks, indoor testing initiated by the Ground Zero Task Force showed high levels of asbestos, and these and other voices criticized the NYC Department of Health's advice that residents could clean contaminated spaces with wet rags and mops and HEPA vacuum cleaners (US EPA 23). Over time, the questionable advice of NYC officials, reports that few residents were following even these inadequate cleaning

guidelines, and the growing skepticism about the safety of indoor air led the EPA to reclaim authority over indoor spaces and launch a voluntary residential cleanup program in May 2002. Even this program fell far short of expectations and was criticized for several reasons. First, the programs tested only for asbestos and not the many other toxins that were known to be present in the dust. Second, only 20 % of the 20,000 eligible residences in lower Manhattan were cleaned (Lustgarten), and the program did not require cleaning of HVAC systems. Consequently, there was significant potential for recontamination. Third, the program only covered residential dwellings and not workspaces, and the geographical coverage of the program arguably did not match the extent of contamination (US EPA). These criticisms led to the establishment of an Expert Technical Review Panel that met in 2004 and 2005 to advise EPA about ongoing exposure, testing and clean-up protocols, and unmet health needs in the community. EPA disbanded the panel in acrimony in December 2005 after the agency proposed a second Test and Clean program that addressed few of the criticisms raised by panel participants and the OIG report. A year later, EPA launched the program and as of May 2007, only 295 residents have signed up (Stephenson 3).

The ongoing controversy about WTC dust contamination, then, provides evidence of a significant rupture of EPA's persistently reassuring discourse that attempted to contain the crisis. That rupture effectively revealed the impossibility of containment, as advocates first broke the boundary between outdoor and indoor environments, and later broke boundaries between tested and untested residences, between residences and workplaces, and between contaminated and allegedly uncontaminated neighborhoods.

Yet even this rupture is limited, for it continues to articulate the "asbestos crisis" within the parameters of a cleanup, of getting the dust down to safe levels, giving HEPA vacuum cleaners to residents as EPA has done in Libby, Montana. In other words, even as the residents' movement emerged to challenge federal and local actions every step of the way, the ongoing controversy over air and dust levels barely addresses a more fundamental, lingering, unobtrusive crisis. Indeed, EPA's initial hand-off of indoor environments to NYC and their grudging efforts to clean interior spaces in Lower Manhattan need to be read not simply as hard-headed decisions based in cost, though they certainly are

that. EPA's response also reflects an ongoing containment effort with regard to the pervasiveness of asbestos in buildings in the United States. EPA estimates that more than 700,000 buildings have friable asbestos-containing material, and twice that many have asbestos-containing floor tiles. On top of that, potentially tens of millions contain Zonolite attic insulation made from Libby's asbestos-containing vermiculite. Every time EPA authorizes residential asbestos removal, the precedent builds for subsequent removals that could overwhelm the agency's resources.

I am not arguing intent here. I cannot defend the claim that EPA is deliberately downplaying the hazard or performing a limited cleanup in order to weaken precedent for subsequent action. What I am arguing is that no matter how appropriate or flawed EPA's response has been, the attention to asbestos levels in WTC dust should not be allowed to distract from the fact that the sources of asbestos are all around us, even still in Lower Manhattan. Recognition of this condition requires taking Buell's broader perspective on crisis as "a place in which people presently dwell," rather than thinking of crisis in terms of a future threat or a discrete catastrophe. The fact that we dwell within a built environment that is filled with asbestos forces us to confront the hazard on a routine basis—when a residence catches on fire, when a university building is renovated, or when government workers labor in the utility tunnels underneath Capitol Hill. From this perspective, responding to the asbestos crisis is not just a matter of cleaning up after catastrophic events, but an ongoing, routine activity in contemporary US life. Thus, Buell's perspective helps us to look beyond the catastrophe, beyond just the response to the event, to how communication shapes our ability to address and engage the crises that we dwell within.

EPA's response resists the articulation of 9/11 to the broader asbestos crisis. As flawed as they were, EPA's claims regarding air and dust performed the productive work of reinforcing the logic of "safe" levels of asbestos exposure. Under this logic, dwelling within asbestos under certain levels is normalized and not the sign of a crisis, either acute or systemic. Fortunately, many people were unpersuaded by EPA's claims that NYC residents were not dwelling within hazardous conditions. But it remains to be seen whether the public responses to 9/11 will lead to a more forthright recognition of the broader asbestos crisis.

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Opening and shutting the door: Technology amplifies the public's voice surrounding a Superfund site's final days of production

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Abstract

The communication practices of a specialty chemical manufacturing company and Superfund site in central Pennsylvania were analyzed during a crisis situation. The plant management and Community Advisory Council (CAC) demonstrated collaboration and an ethic of futurity when under the guidance of its facilitator, they designed a survey that was administered to key stakeholder groups to ascertain concerns about the plant's closure and the status of the remediation effort. It was determined that community residents were most concerned about the company's commitment to complete clean up activities. Plant management through the Environmental Protection Agency communicated their understanding of the situation and agreed to leave a remediation expert in the area until the site is cleared by the EPA. Best Practices to promote public participation during crisis are provided.

Introduction

Cox (2006) defines public participation as [T]he ability of individual citizens and groups to influence environmental decisions through (1) access to relevant information, (2) public comments to the agency that is responsible for a decision, and, (3) the right, through the courts, to hold public agencies and businesses accountable for their environmental decisions and behaviors (p. 84).

The democratic principles of transparency, direct participation, and accountability defined in Cox's definition have been formalized and utilized by many through right to know, right to comment, and right of standing legislation. The process to access information may have been cumbersome, and the interpretation of such information debatable, but access was inevitable. In most instances, community residents could understand the impact of local business operations through the acquisition, analysis, and comprehension of various government required reports made available upon request. However, as a result of the terrorists' attacks, the timeliness of, access to, and amount of information available to interested community members has become controversial (Jabro, 2007).

The government still requires businesses to report environmental, health and safety data, but accessing such information is often time consuming and tedious. In some instances, the information that was once available to interested parties has been sanitized; rendering the effort a waste of time. But

what happens to the public's right to participate in environmental decisions when the owners of a chemical manufacturing site listed on the National Priority List decide to cease operations? What access to information do citizens have and what opportunities for on-going interaction exist? Does the government require public participation regarding a plant closure? The simple response is no. The company can close its doors and follow government specified processes to shut down the facility. Plant owners can also sell the plant property or dismantle the plant and sell the real estate that is deemed acceptable for sale. The only public comment focuses on dialogue associated with inspections and progress reports regarding the clean up effort.

Some citizens are aware that cradle to grave legislation mandates that all parties involved with a Superfund site are responsible for its clean up. However, the amount and quality of public participation is controlled by the Environmental Protection Agency (USEPA). Does a company that has made great strides in being socially responsible feel obligated to maintain its relationship with a community with whom it will no longer interact?

This case study explores Haas (2003) plea to strategize about the "other" when devising corporate strategy and long-term impact and demonstrates several of Walker's (2004) attributes of collaboration. I begin with a discussion about an ethic of futurity and progress to Walker's tenets of collaboration and demonstrate how they were utilized in this situation. I then provide an overview of the Superfund site and strategies and efforts a community advisory group and plant management utilized to identify and address community concerns about the

manufacturing plant's closure before the Superfund remediation efforts had been completed. The survey results, community advisory council members' input, and corporate responses support organizations that practice an ethic of futurity and collaboration maintain more meaningful relationships with their stakeholders. The results of the analysis serve as the foundation for a "Best Practices" for promoting public participation public during crisis.

Review of the Literature

Corporate Communicator

Deetz's (1995) multiple stakeholder model, Grunig & Hunt's (1984) two-way symmetric model, and Habermas (1984, 1987) "proceduralist" view of communication espouse a common theme: corporate behavior is judged by the interactions it shares with stakeholders in face-to-face forums that promote relationship building. Haas (2003) suggests the "form of corporation-stakeholder interaction should be commensurate with the anticipated effects of the corporation's actions on stakeholders" (p. 612). In short, his work was influenced by Beck (1992, 1999), who suggests that the industrial society of late has created current and future effects on humans and nature. He cautions us to be more concerned with the future rather than co-present circumstances; to comprehend a "duality of risk" (p. 33) where risk can be identified as short-term and long-term. The negative impacts are labeled distributional conflict over risk, or "bads" that correlate to chemical waste, nuclear contaminants, toxicity, air, water, and food contamination. This paper deals with "bads" generated from the manufacturing of Kepone and Mirex in the late 1960's.

Beck (1992) suggests that corporate social responsibility should be rethought to address the juxtaposition between scientific and social modes of rationality. He promotes face-to-face conversations with stakeholders who reveal their concerns, but also the values on which the concerns are addressed. Beck disdained linear models of causality and instead suggested that synergistic effects of actions be analyzed for accountability or understanding what systems theorists promote as internal and external subsystem considerations that impact a systems ability to function. Beck promotes that social distribution of effects should be analyzed for long-term significance and simulated conversations with "others" should be conducted to understand the diverse stakeholders' perspective. In essence, Beck promotes that someone should empathize with

different "other" stakeholder groups and articulate their concerns during long-term strategy meetings.

Haas (2003) enhanced Beck's work and devised an "ethic" of futurity, which suggests that

[A]lthough actual conversations with stakeholders might be adequate when the effects of actions are predicted to be of limited spatiotemporal reach, the corporation should engage stakeholders in simulated conversations when the effects of actions are predicted to be far removed in space or time and/or include the nonhuman world of nature (p. 617)

Here Haas attempts to shift the focus of corporate social responsibility strategy planning from short-term to long-term. He also stresses the importance of understanding the "others'" perspectives in devising strategy when the other is human and/or nature. Haas embraces Beck's disdain for linear models of causality and additive rather than synergistic effects of actions. His "ethic of futurity" promotes a broadened view that requires the corporation to understand and identify risk in more complex ways but also that the time frame of corporate actions be significantly adjusted from a preoccupation with short-term profit to a concern with long-term impact (p. 617).

Mutuality and Collaboration

Communication is a two-way symmetrical process that involves both a receiver and a sender who attempt to understand the perspective of the other when decoding and encoding information. The ultimate goal is to reach a state of mutuality or mutual understanding of the symbols and goals of the communication interaction. However, if there has been limited communication in general between the two participants or publics, it is difficult for either the sender or receiver to find a common place or to foster trust. Unfortunately, the participants seldom understand why their communication is dysfunctional or unsuccessful; they merely attribute the differences to philosophical orientation or intellectual shortcomings. Often, they share a common ground, but lack the skills to reach the common point. Chemical company management and community members are at odds regarding the benefits of chemicals to society and/or safe manufacturing processes. Through the implementation of

community advisory councils, some chemical plant management has come to understand why community residents are fearful of their operation. Thus, collaboration has provided a context for both parties to continue conversing. Walker (2004) suggests that collaborative learning can be mutually beneficial to all parties involved in an environmental conflict because the parties learn and in doing so, reach a mutual understanding of the similarities and differences they share. Walker suggests that public participation is different from collaboration. There are eight attributes Walker (2004) identifies as collaboration:

1. Collaboration is less competitive.
2. Collaboration features mutual learning and fact-finding.
3. Collaboration allows underlying value differences to be explored.
4. Collaboration resembles principled negotiation, focusing on interests rather than positions.
5. Collaboration allocates the responsibility for implementation across many parties.
6. Collaboration's conclusions are generated by participants through an interactive, iterative, and reflective process.
7. Collaboration is often an ongoing process.
8. Collaboration has the potential to build individual and community capacity in such areas as conflict management, leadership, decision making and communications (p. 124).

In the next section, I will provide a context for understanding the company that made great strides towards being socially responsible during its plant operations and implemented collaborative learning strategies and utilized collaboration during its final days of business.

Plant Background

In 1977, RÜTGERS AG, a privately held company headquartered in Germany, operated manufacturing sites in the United States, Italy, and Canada, and purchased a manufacturing operation from Aubrey Nease in State College, PA for \$5.5 million. It employed over 100 townspeople and was situated on the outskirts of a borough in which a Research 1 university was centered. The Borough boasted a population of approximately 30,000 full-time residents; the number swelled to more than 70,000 during the academic year (<http://www.city-data.com/city/State-College-Pennsylvania.html>).

In 1993, the company commissioned a study to ascertain the community's perceptions of its business practices. Jabro (1993) reported that the 830 respondents indicated they knew little to nothing about the company but perceived it as polluting, killing fish and dangerous. The results of the study were distributed to the community in the company's annual newsletter, *Neighbors*. The newsletter was published annually thereafter. (Collaboration as mutual learning and fact-finding and underlying value differences to be explored example.)

Further, the community perception study illuminated the company's need to establish on-going and meaningful dialogue with the community. As a result, plant management decided to establish a community advisory council and advertised for members in the local newspaper. Members of the CAC were considered the company's liaisons to the community. The company announced the members of the CAC through the distribution of its annual newsletter, *Neighbors* and the local press. (Collaboration as an on-going process example.)

RÜTGERS launched the CAC in 1994 in an effort to better understand how and what to communicate to townspeople and to address community members' concerns in a face-to-face forum. The CAC was composed of 12 community residents from diverse sectors of the community who served 3-year terms. After the initial group was seated, the company continued to invite all community members to serve on the CAC by placing ads in the local newspaper. Another recruitment strategy featured members of the CAC nominating community members for service. (Collaboration as mutual learning and fact-finding example.)

An additional fact-finding effort was an annual survey of CAC members. In the nine years the CAC operated, more than 100 members responded to the surveys designed to identify CAC members' perceptions of the quality of information and value of the CAC experience. The results of the survey were used to enhance meeting content and create more effective interaction with community residents (Collaboration as an on-going process example). The respondents consistently evaluated the experience as informative, educational and exemplary (Jabro 2004). The results were shared with the management and the CAC and suggestions for improvement were immediately implemented. (An example of an improvement was more detailed handouts and larger type).

Known for custom synthesis and chlorination in the chemical industry, the company's reputation was dwarfed by a series of reorganizations, union debacles, environmental issues, and urban sprawl. The company found itself in the center of a housing and retail district and experiencing difficulty adapting to the volatile changes in the chemical marketplace. Simply stated, customers were taking business out of the country where products were produced for less. When profit margins were slipping and domestic sales continued to decline, a decision to consolidate the US sites was reached. An August 30, 2003 *Center Daily Times* article foreshadowed the fate of the plant when it announced a consolidation study was underway.

As a socially responsible company, plant management made strong efforts to communicate every move it was making to employees first and then the community. Ultimately, the State College plant was shutdown in May of 2004. ROC addressed employee career transition issues and offered incentives to select employees to defer unemployment and work until the plant was dismantled. Corporate management strongly urged the plant management to disband the CAC to save costs, but the plant manager was adamant. "I need this group now more than ever. Their insights and advice are extremely valuable to me as I determine how to relinquish ties with this community" (Plant manager comments to the Community Advisory Council). (This is an example of collaboration's outcomes generated by participants through an interactive, iterative, and reflective processes). The Community Advisory Council was maintained to aid management with problem-solving, decision making and crafting communication about the status of the Superfund remediation process and plant closure procedures at the insistence of the plant manager.

Remediation Activities - Center County Kepone Site

According to Scorecard (www.scorecard.org), and the Environmental Protection Agency (www.epa.gov), the site earned a National Priority Listing on September 13, 1988 and was dubbed "'The Centre County KEPONE Site". The batch chemical manufacturing plant manufactured MIREX in 1973 and 1974, and KEPONE in 1958, 1959, and 1963. According to Scorecard:

Progress wastes were originally disposed of on-site in a spray irrigation field and lagoon and stored in drums. The company later removed the drums and contaminated soil, treated the material in the lagoon to harden it, and buried it on-site. The material from

the lagoon failed to harden properly, and contaminants were leaching to ground water and surface water. In 1982, the company excavated and removed the material and started to treat contaminated ground water.

Various volatile organic compounds (VOCS) and the pesticides KEPONE and MIREX have been detected in on-site and off-site ground water, soil, sediments, and surface water. Polycyclic aromatic hydrocarbons (PAHS) have been detected in on-site sediments and soils, and petrochemicals have been detected in off-site drainage ditch sediment. Threats to human health include accidental ingestion of or direct contact with contaminated surface water, soil, ground water, and sediment, as well as eating contaminated fish.

More than 20 years and over \$22 million dollars later, the site is still in the process of remediation, with the actual effort divided into two distinct locations: OU1 and OU2. The need for this division stemmed from a process called soil vapor extraction, which will take a number of years to complete. With the announcement of the plant's closure, the company's plant manager approached the CAC to determine the next step in the process. There were no available funds for external studies or communication, but the CAC determined that a survey should be designed and distributed to the community to better understand their concerns about the plant's closure. They also recommended that the results be shared with the community and the company's response to their concerns be communicated. In essence, the company was demonstrating an effort to embrace an ethic of futurity by attempting to understand the long-term concerns of the CAC and the community regarding the plant closure. Further, Walker's collaboration as mutual learning and fact-finding, values difference exploration, implementation across many parties, and building individual and community capacity in leadership, decision making and communication are demonstrated with this meaningful interaction.

The research questions formulated for this study were based on the literature and the concerns articulated by the CAC.

R₁: What are the community's fears when a plant identified as a Superfund site ceases operations?

R₂: Can an organization demonstrate an "ethic of futurity" during crisis?

R₃: What community/company practices can be identified from the experience?

Method

The group determined they would progress with creating and distributing a survey despite the limitations of the results. Costs would be reduced by using electronic mail and billboards to post the survey. The facilitator guided the CAC to consensus on the identification and prioritization of the issues to be addressed on the survey as well as crafting questions. The survey featured 20 questions using three question types: Likert, open-ended and forced response. Using the Likert-scale question formulation described in Stacks (2002), respondents were provided with ten statements to which they had seven attitude options. There were three open-ended questions and seven forced response questions. CAC members reviewed several draft questions and draft surveys before agreeing on the final instrument.

The questions focused on four areas: 1) community perceptions of the company and its environmental performance, 2) perceived environmental impact of manufacturing operations, 3) perceived health impact, and 4) respondents' demographic profile and level of environmental activism. A cover letter was devised that explained the purpose of the survey and a request for completion by one member of a household.

Survey Distribution

Of the 12 CAC members, six were males, three of whom worked in higher education (two held Ph.D. degrees in environmental science and one held a Ph.D. in adult learning), one was employed in Public Defense, one worked with Local Emergency Planning and was an Environmental Consultant, and one was a University Safety officer. The six females represented the following stakeholders: a Conservancy group, the medical profession, community health, financial planning, an environmental recreational group, and a history center.

While other sampling techniques were discussed to best identify a suitable population for this study, due to lack of funds and time restrictions, the convenience sampling method was used. The survey was distributed both electronically and manually. Each CAC member distributed the survey via electronic communication to 25 colleagues from the

State College vicinity. Additionally, each CAC member received ten printed copies of the survey with stamped self-addressed return envelopes at the May CAC meeting for distribution to those without e-mail. All involved in the process agreed that the results were more likely to represent environmentally active residents because of the members' personal and professional interests. CAC members agreed to attempt to send the survey to colleagues outside their peer group to compensate for the perceived bias.

Respondents were given three options for returning the survey: 1) provided with a mailing address in the event they didn't wish to have their e-mail identity disclosed; 2) return the survey to the sender who would print the survey and return it to the facilitator; or 3) send the survey to the facilitator via e-mail. All members reported via electronic mail that they sent the survey to a minimum of 25 community residents. Thus, the total number of *potential* respondents was approximately 300 or more.

Responses were acquired within an 18-day timeframe because the results had to be input to the computer, analyzed and interpreted for the next CAC meeting just six weeks after the surveys were distributed. The facilitator, who is also the author of this article, received no compensation for this research and analysis.

Results

Assuming a minimum population of 300 potential responders, 84 surveys were returned, of which 79 were complete which accounted for a 26% response rate. Data were analyzed using the Statistical Package for the Social Sciences, version 13. The frequency distribution revealed that the respondents' average time spent living in the community was 29.1 years. The most senior respondent lived in the area 49 years and the newest resident lived in the community for 2 years. More than 50% of respondents resided in the community in which the plant operated and were male (62%), while 38% were female. Of the 79 respondents, 51% graduated college, 26% completed graduate degrees and 33% graduated high school. The majority of respondents had never attended a public hearing on the Superfund site's remediation efforts while 39% had done so in the past.

The majority (62%) of respondents described their level of environmental activism as "concerned about the environment and involved with recycling" while 38% described their environmental activism as "concerned about the environment and actively

engaged in activities to protect the environment, such as being a member of an interest group, providing financial support, or a member of an environmental organization.

The demographic profile is skewed in favor of environmental awareness, but as identified earlier, many of the CAC members were involved with preservation, conservation, and recreational efforts in the community. Another interpretation of the data is that the results suggest that less than 50% of the respondents were truly “active” environmentalists; but the majority focused on recycling efforts and minimal preservation of the environment. All of the respondents expressed concern about the demise of the manufacturing sector in America. A respondent stated, “These are good paying jobs that are moving out of the country. What will happen to our middle class?” One respondent commented that “due to the demise of manufacturing, environmental laws and regulations take the back seat.” Others were concerned about unemployment and unfair business practices.

In addition to the 84 returned surveys, approximately 65 potential respondents expressed no interest in completing the survey. They chose to express their concerns about the closure of the plant using electronic communication. After a thorough review of their comments, it appeared they were most concerned with issues of trust. The key theme that emerged when the responses were content analyzed was “how will we know that the site is being cleaned up”? In essence, community residents were concerned that the remediation efforts would be abandoned.

In response to R₁: What are the community’s fears when a plant identified as a Superfund site ceases operations? Table 1 provides the distribution of responses for the Likert-scaled questions designed to identify such fears. The majority of respondents never supported a chemical company operating in the community. Further, the closing of the plant didn’t appear to bring comfort to more than 40% of the respondents who indicated their environmental concerns hadn’t been lessened. A similar amount of respondents also indicated they would harbor health concerns.

There had been a number of plant closures in the neighboring communities and even in the Borough, so it was no surprise that the majority of respondents were concerned about the welfare of the workers and their families, loss of good paying skilled jobs in the region and the fate of the community.

The results also suggest that although the plant’s closure lessens the environmental and health concerns of some community residents, many are still worried that the remediation work won’t be completed. This quote summarizes the general mood of the respondents regarding the plant’s closure: “*I am saddened and worried about local workers, but I also won’t miss potentially dangerous chemicals in our town.*” Another respondent captured the common theme with respect to the remediation situation, “*I wonder who will manage the clean up of their site now that they are closing. They can’t leave their work as unfinished business. This community needs to know that they have restored our community to its original environmental health and vitality.*”

Table 1: Identification of Community Fears (N = 79)

Statement	Strongly - Disagree	Neutral	Agree - Strongly
1. Environmental impact concerns lessened	37.9	12.6	49.3
2. Rutgers complies with government regulations and runs a safe plant.	22.7	6.3	65.8
3. Plant’s closing is a loss for the region.	11.3	37.9	39.2
4. Concerned w/completion of remediation.	39.2	26.5	46.8
5. CAC members share information with me.	26.5	25.3	39.8
6. Never supported a chemical co. in this area.		67.0	45.3
7. I won’t miss Rutgers.	42.9	34.1	22.6
8. As a result of plant’s closure, I won’t be concerned about health issues from chemicals.	42.0	10.1	36.7
9. The plant’s closure will have an impact on the community.		40.5	59.5

Respondents were asked to discuss what the first thought or image that came to mind when Rutgers Organics was mentioned. The open-ended responses were content analyzed and fell into four major categories:

- 1) *Pollution* of Spring Creek;
- 2) *Fear* regarding clean up;
- 3) *Superfund* site; and
- 4) *Failed business* on the outskirts of town.

Interestingly, many of the comments acknowledged and praised the company management's time and efforts to garner community input and send periodic newsletters. The management at this site continually demonstrated a commitment to work to establish and maintain a two-way mutually beneficial communication flow, in essence to promote collaborative learning. Many of the plant's managers became involved in diverse community groups, accepted invitations to speak at engagements or serve as guest lecturers for the University. Through these affiliations, tours of the plant, and a direct "in" at the site, the community began to associate people with the plant; not just products.

In response to R₂: Can an organization demonstrate an "ethic of futurity" during crisis? The actions of the organization during the plant's closure and immediately following the presentation of the survey results suggest the organization demonstrated an "ethic of futurity" and learned much about the "other" as a result of this study.

RÜTGERS management maintained the CAC for more than one year after the announcement that the plant was closing. Plant management met with representatives of local government to explain the plant's shut-down process and seek counsel. Management also granted extended interviews with members of the media to explain plant closing procedures. The CAC was kept abreast of all the plant closing details in order to facilitate communication about the event with community members.

After the results of the closure study were presented to the CAC and RÜTGERS' management team, resources to strategically plan communication and identify personnel to respond to the community's concerns were identified. To avoid the costs associated with design and distribution of another *Neighbors Newsletter*, the plant manager met with the Regional Director of the US Environmental

Protection Agency to discuss the possibility of a government produced communication about the long-term remediation effort after the plant's closure.

The US EPA agreed to send a letter to all residents explaining how the remediation work would be conducted in the absence of the company. The company agreed to leave the Manager of Remediation Projects in State College to monitor clean up progress and be available to the public and media to address concerns. While the community advisory council members were able to articulate their concerns about the long-term clean up efforts, the company sought additional public participation to better understand all the community's concerns. In so doing, an ethic of futurity was enacted.

The final research question, R₃: What company/community practices can be identified from the experience? As a result of this case study, Best Practices for community participation during crisis were designed and follow. It should be noted that the Manager of Remediation Projects had been involved with the Community Advisory Council for the duration of its existence. Over the years, he perfected active listening and speaking in non-technical terms to the public. However, those who work in a specific field on a regular basis tend to suffer from tunnel vision with time or a lack of understanding of the "other", as was the case initially.

The plant's management was shocked when community residents expressed fear that plant management wouldn't complete the remediation after the plant's closure. CAC members explained that the community's concerns were legitimate. They were adamant that it was unrealistic to believe the general public would be versed in Superfund policies and procedures and understand the commitment the company had made to the site. They persuaded management that the community needed to be informed that the clean up efforts weren't going to be abandoned. Further, the company had established on-going communication with the community and this level of interaction needed to be maintained. It was determined that the EPA would be the likely communicator after the plant closed. This process supports Walker's tenets of collaboration.

The following list of best practices summarizes the lessons learned as a result of this study.

Best Practices for Promoting Public Participation During Crisis

Upon reflection of the dialogue, processes, and procedures utilized to address community concerns during the closure of a chemical manufacturing plant in the process of cleaning up its contaminated site, several best practices can be observed that should prove helpful to other organizations or communities in similar situations.

- 1) **Don't assume: use formal or informal research methods to collect data to understand stakeholders' concerns.** "I liked the idea that they tried to have community involvement, although I don't know exactly what it accomplished. I hope the displaced workers are okay" was a comment communicated by a respondent who appreciated the opportunity to express her concerns.
- 2) **Use all available means to communicate: Identify other venues to advise the public of your situation.** The EPA newsletters, meetings with the press and community leaders, and Department of Labor briefings were examples of other venues used to share information with the community.
- 3) **Embrace diverse voices: Use advisory groups to inform decision-making and problem solving.** The CAC stayed until the last piece of equipment was hauled away. They toured the plant site with the Manager of Remediation in October of 2004. He found their guidance to be extremely valuable and they realized he would be the only voice for his company in the community.
- 4) **Understand the pros and cons associated with your product or service and acknowledge the publics' views.** RÜTGERS had reached out to the community by providing information that led to a shift in public opinion. Residents and CAC members understood that RÜTGERS inherited past business practices from Nease Chemicals that generated the Superfund listing. CAC members credit the company with its consistent effort to inform the public about past business practices and efforts to remedy the contamination.

Discussion

Due to the convenience sample size, it is difficult to make sweeping generalizations. However, the results aid our understanding of the importance of collaboration and solicitation of input when making decisions during a crisis situation or understanding the perspective of the "other". Specifically, the

feedback gleaned from this study enhanced the organization's trustworthiness in the eyes of the community. Rutgers was able to understand the community's concerns regarding the remediation process and generate communication through the US EPA and plant personnel that addressed those concerns.

Conclusion

Three research questions were answered as a result of this study:

R₁: Community members expressed fear that RÜTGERS wouldn't complete remediation efforts at their Superfund site when they ceased operations.

R₂: The organization demonstrated an "ethic of futurity" by conducting a study and strategically planning communication and personnel to respond to the community's concerns. The US EPA agreed to send a letter to all residents explaining how the remediation work would be conducted in the absence of the company. The company agreed to leave the Manager of Remediation Projects in State College to monitor progress and be available to the public and media to address concerns. When the company launched the community advisory council, it altered its communication practices and opened the door to collaborative learning and collaboration.

R₃: In order to understand the perspective of the "other" and devise appropriate short and long-term strategy to communicate effectively with the community, the last research question focused on evaluating the experience and generating a potential best practices perspective:

- 1) Don't assume: Use formal or informal methods to collect data to understand stakeholders' concerns.
- 2) Use all available means to communicate: Identify other venues to advise the public of your situation
- 3) Embrace diverse voices: Use advisory groups to inform decision-making and problem solving.
- 4) Understand the pros and cons associated with your product or service and acknowledge the publics' views.

On 29 June 2005, In-Pharma technologist.com posted a news release that stated, "RÜTGERS plans sales of five business units." While the company appears to be repositioning itself, as of 20 June 2007, the Director of Remediation is still in State College monitoring the clean up efforts and working with the US EPA to communicate progress.

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Carrying Forward the Voice of the Public: The CDC's Public Involvement Effort on Community Control Measures for Pandemic Influenza

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Abstract

Public participation formats are increasingly designed to create learning, dialogue, and collaboration among participants. Hamilton and Wills-Toker (2006) have argued that the goal of such formats should be to foster a "dialogic discourse" in which participants come to understand their similarities and differences and the relationships among each other's perspectives without closure or resolution among them. However attractive this concept may be in theory, more research is needed about how it operates in practice. Currently there are innovative participation efforts that create a space for exploring similarities and differences, but the ability of these efforts to continue the dialogue is less considered. In this essay we take up this question by asking whether and how agencies can carry forward the multiple voices that emerge in public dialogues into official guidance or decisions on an issue. We look at a case in which the Centers for Disease Control and Prevention (CDC) and the U.S. Department of Health and Human Services (HHS) prepared an interim guidance document on community control measures to slow the spread of pandemic influenza and conducted a public engagement effort to understand concerns and solutions related to those control measures. Evaluating the extent to which public perspectives are captured in the resulting Guidance, we found that two of the four citizen concern areas were strongly or moderately represented while two were moderately to weakly represented, and that the Guidance relied on strategies such as responses to specific concerns, use of significant phrases, and mention of the ideas presented in the recommendations to depict those concerns. In addition, while the Guidance did a fairly good job of capturing these concerns, it does not reference them explicitly as citizen-generated ideas coming out of the public meetings nor does it respond with specific solutions regarding how measures will be implemented and who will implement them.

Introduction

A frequently mentioned concern of public participants is whether their voice is being heard and whether it impacts or informs the decisions that are made. In fact, according to public involvement consultants Christakis and Bausch (2006), "we all need to be heard . . . If people ignore and reject us, they deny our importance and even our autonomy" (p. 7). Especially in a democratic society, citizens expect their voice to matter, yet Fiorino (1996) describes a continuing "participation gap" (p. 194) or gap between citizen expectations and ability to contribute to decisions. Important work has been accomplished, especially since the 1990s, to improve the ways in which the public is involved in decision-making about environmental and human health risks. Researchers and

practitioners alike have emphasized the need for participatory processes that allow citizens not only to be informed and to comment, but also to learn, analyze, discuss, and collaborate in order to "co-determine" decisions with government officials (Daniels & Walker, 1996; Fiorino, 1996; Juanillo & Scherer, 1995; Laird, 1993; Webler, 1995). This has led to the design of various formats such as public meetings, roundtables, collaborative learning workshops, and citizen advisory boards that reach beyond legal mandates and create a dialogue among sometimes contending parties.

Our recent research argues that a somewhat overlooked goal of such dialogue-based participation is to explore differences as well as connections among various perspectives and to retain these multiple and varied voices in a

continuing dialogue (Hamilton & Wills-Toker, 2006). A key challenge then is how to design or orchestrate participation that does not explore various perspectives merely as a starting point for discussion, but rather carries them forward and incorporates them in recommendations, reports, or decisions as the outcomes of dialogue. In fact, according to Depoe, Delicath, & Elsenbeer (2004), most public involvement efforts do not have “adequate provisions to ensure that input gained . . . makes a real impact on decision outcomes” (p. 3). So although the concept of a dialogic discourse is attractive in theory, more research is needed about how it operates in practice. Specifically, theorists and practitioners of public participation should be concerned with whether participants’ voices become a part of the actual decisions made and whether and how decision documents are able to reflect a multi-voiced, rich dialogue.

In this essay, we explore the question of whether and how agencies can carry forward the multiple voices that emerge in public dialogues into official guidance or decisions on an issue. We look at a case in which the Centers for Disease Control and Prevention (CDC) and the U.S. Department of Health and Human Services (HHS) prepared an “Interim Pre-pandemic Planning Guidance” (hereafter the Guidance) on community control measures to slow the spread of the pandemic influenza they are anticipating and conducted a public engagement effort to understand concerns about those control measures. In what follows, we describe the concept of a dialogic discourse, provide background on the CDC’s public participation effort and the four key perspectives that emerged from that process, analyze the Guidance on community control measures for the extent to which it embodies these four perspectives, and discuss strategies employed by these health officials to sustain public perspectives within the Guidance. Based on this case, we draw conclusions about the ability of government agencies to carry forward citizen voices in policy discussions regarding environmental and human health risks.

Dialogic Discourse and the Continuation of Public Voices

Environmental, health, and risk policy conflicts are part of a broader struggle within American culture over the meaning of public participation in a democratic society. As part of

an “ongoing debate about the contours of citizenship in the United States...” (Williams & Matheny, 1995, p. 6), these conflicts reflect competing expectations about the purpose, structure, and outcomes of public participation. Frequent criticisms of mandated public participation such as public hearings and comment periods are that these forums elicit citizen input after solutions have been proposed, invite comment without learning or discussion, and fail to show how citizen perspectives inform decisions (Applegate, 1998; Depoe, Delicath, & Elsenbeer, 2004). A relatively recent trend has been instead to resolve environmental disputes through participation that is collaborative, dialogic, and learning-based (Daniels & Walker, 2001; Fiorino, 1990; Renn, Webler, & Wiedemann, 1995). Participation is no longer viewed as a transfer of technical information to citizens, or even an exchange among experts and citizens, but rather a model in which participants are interacting and constructing understandings (Graham, 2004; Katz & Miller, 1996; Waddell, 1996). Yet, this sense-making function of public participation has not been fully explored in the majority of participation studies that tend to focus on procedures for ensuring democratic processes and communication (Hamilton & Wills-Toker, 2006). Rather the emphasis is on building solutions and consensus among competing interests, which may lead to the exclusion of important voices and tensions that should be retained as part of the conversation.

This has led us in our recent research to Mikhail Bakhtin’s ideas about a dialogic discourse as one that includes the presence of multiple voices, allows them to interact by exploring their connections and their differences, and creates opportunities for those perspectives to continue in a dialogic relationship throughout ongoing participation efforts. Bakhtin’s (1981) understanding of dialogue provides a powerful reframing for how current public participation efforts envision the goals of collaboration and interaction among participants. Dialogic discourse is something capable of exhibiting alternative or contradictory viewpoints simultaneously. It does not dismiss or resolve perspectives but rather engages them in a continuous and generative struggle. We strive not for a discourse that is authoritative or monologic in which a speaker privileges his/her own point of view, but one that is dialogic in enabling participants to recognize alternative viewpoints on the situation and to create

interaction among diverse views in which meanings may be co-generated.

Based on these ideas, we have conceptualized two goals for dialogue: one to derive a solution by creating agreement among participants and the other to share and learn connections and relationships among the various perspectives (Hamilton & Wills-Toker, 2006). We framed these goals as producing two discourses—problem-solving discourse and sense-making discourse—that should ideally alternate throughout participation to encourage long-term efforts and relationship building among participants. We identified three important qualities of a sense-making discourse:

- 1) “orienting to essential differences and similarities,”
- 2) “recognizing the struggle among diverse perspectives from which new meanings emerge,” and
- 3) “creating a multi-voiced and ongoing dialogue that builds understanding and relationships over a period of time” (p. 760).

Participation scholars and practitioners increasingly recognize the first and to some extent the second of these qualities and attempt to design techniques that orchestrate sense-making goals of allowing diverse points of view to be present, to interact, and to co-generate meanings for the situation (Hamilton & Wills-Toker, 2006). What has been less explored is the difficult, yet important, question of the extent to which these efforts enable multiple perspectives to continue in the conversation and by what strategies they do so. Below, we explore this question in greater detail through case analysis of a CDC public participation effort.

The Public Engagement Project on Community Control Measures for Pandemic Influenza

In 2003, a new pathogenic influenza virus came to the attention of health professionals around the world. Although this virus posed no immediate threat to humans, the evolving, virulent nature of H5N1 caused it to spread rapidly among migratory birds in South East Asia. Since then, there have been a growing number of human cases of the Avian Flu

resulting from bird to human contact. Since it was a new virus, with no vaccine or natural human immunity, half of the humans who contracted the bird flu died (Pandemic Flu, n.d.). The world community felt poorly prepared for the appearance of a powerful influenza virus that could potentially spread quickly around the globe. This thinking sparked pandemic preparedness planning on a global scale.

As their part of this effort, the U.S. government initiated a strategic planning process in 2005. They adopted three strategic goals to guide planning efforts: “to limit the spread of a pandemic; mitigate disease, suffering and death; and sustain infrastructure and lessen the impact on the economy and the functioning of society” (CDC & HHS, 2007, p. 7). In order to achieve these goals, the CDC and the HHS in collaboration with other Federal agencies and partners in the public health, education, business, health care, and private sectors began developing “a comprehensive community mitigation strategy that includes both pharmaceutical and nonpharmaceutical measures” (CDC & HHS, 2007, p. 7). Vaccine is the most “effective tool for mitigating a pandemic” (CDC & HHS, 2007, p. 8); however, it will not be available until after the first wave. It is also unknown whether there will be enough anti-viral medications or that the current types will even be effective. These realities of pharmaceutical interventions make nonpharmaceutical measures a key component of the mitigation strategy. The main nonpharmaceutical intervention proposed by the government is Community Control Measures.

Community Control Measures (CCMs) are a series of partially effective nonpharmaceutical measures that target different compartments for transmission and if applied early and consistently can work together to reduce the total number of persons infected with pandemic influenza. The sick and their close contacts are isolated and quarantined and healthy children and adults are “distanced” in order to reduce the spread of the disease. Four specific measures were proposed by the interagency work group: 1) Isolation and treatment (as appropriate) with influenza antiviral medications of all persons with confirmed or probable pandemic influenza, 2) Voluntary home quarantine of members of households with confirmed or probable influenza case(s) and consideration of combining this intervention with the prophylactic use of antiviral medications, 3) Dismissal of students

from school (including public and private as well as colleges and universities) and school-based activities and closure of childcare programs, and 4) Use of social distancing measures to reduce contact between adults in the community and workplace including, for example, canceling large gatherings and alteration of workplace environments and schedules (CDC & HHS, 2007).

These measures would be “layered” and initiation of each would depend on the severity of the pandemic. For example, in a severe pandemic with the potential of over 900,000 U.S. deaths, all measures would be recommended for the maximum duration (7 days for quarantine and isolation and 12 weeks for school closures). In a moderate pandemic with the potential number of deaths between 90,000 and 900,000, isolation would be recommended and the other measures should be considered with schools being closed for 4 weeks. In a mild pandemic with a potential number of deaths below 90,000, only home isolation would be recommended.

The CDC recognized that the CCMs would be “socially disruptive” to the community and that their effectiveness hinged on community preparedness and personal motivation. Since the “buy in” of citizens was key, the CDC decided to engage the public “to learn what level of support the public might have and what tradeoffs citizens might be willing to make for [the] package of control measures (Keystone, 2007, p. 6). The agency initiated the “Public Engagement Project on Community Control Measures for Pandemic Influenza” (hereafter the Public Engagement Project) through a cooperative agreement in the fall of 2006 with the Association of State and Territorial Health Officials (ASTHO). Since the main goal of the project was to use findings to inform the Guidance slated to be completed by January 2007, it was planned and executed rapidly.

This project was modeled after the Public Engagement Pilot Project on Pandemic Influenza that was conducted in 2005 on the question of who should be vaccinated first early in a pandemic when supplies of vaccine are limited. In this model, approximately 100 citizens participate in one of four deliberation days held at major regions of the United States. These meetings are followed by a meeting of representatives from organizations most affected by the particular policy decision, called

stakeholders. The charge of this group is to continue the conversation started by the citizens by elaborating on and synthesizing their ideas.

The four citizen meetings were all held in a period of two weeks in Atlanta, Georgia; Lincoln, Nebraska; Seattle, Washington; and Syracuse, New York in late October and early November of 2006. In each of these cities, citizens first listened to presentations by subject experts concerning basic information about influenza and the proposed community control measures. Next, citizens were given a hypothetical scenario depicting only the most severe case of a pandemic. Then the citizens were asked to accomplish five tasks in small and large group discussion formats. These were to learn the facts essential to have an informed discussion about pandemic influenza and proposed community control measures; discuss the pros and cons of five proposed control measures; decide if they supported implementation of these measures, and if so, when; identify the most important concerns surrounding implementation; and, propose actions that could assure successful implementation. They also voted electronically on the control measures (Keystone, 2007, p. 7).

Following the public meetings, 50 stakeholders adjourned in a two-day meeting in Washington, DC on November 29 and 30, 2006. Representatives from health professional organizations, federal agencies, state and local government organizations, business, education, faith community, minority organizations, consumer advocates, and labor also first heard presentations about influenza and the control measures. Next, they heard the results from all four meetings and had the opportunity to ask citizen representatives any questions. Stakeholders completed the same five tasks as the citizens; however, they were also asked to integrate “the results of the citizen deliberations into their discussions” (Keystone, 2007, p. 8) and “to identify those actions without which the implementation of pandemic influenza control measures would fail” (Keystone, 2007, p. 8).

In order to complete these tasks, stakeholders participated in four small group discussions that corresponded to concern areas expressed by the public. They were asked to prioritize solutions, and then on the second day they worked together in a large group to “clarify and elaborate” (Keystone, 2007, p. 8) on the

solutions. They added their voices to citizen concerns and continued the conversation by developing more detailed recommendations. Thirteen key recommended solutions were then distilled from the proposed solutions and presented to a joint CDC and HHS workgroup charged with preparing the Guidance for State, territorial, tribal, and local communities.

Although the recommendations list was officially presented to the joint CDC and HHS workgroup in December of 2006, many members attended the public and stakeholder meetings and had been updated with interim reports. The citizen concerns and stakeholder recommendations became components used by the joint CDC and HHS workgroup in creating the interim Guidance that was released in February of 2007.

Community Perspectives that Emerged in the CDC Public Meetings

The public conversation over community control measures began in the four community meetings held across the country. In all cities except Seattle, over half of the citizen participants supported implementation of all control measures suggesting that there was little disagreement over the fact that the measures should be implemented. However, many concerns arose over *how* they should be implemented. In what follows, we summarize four specific concerns or perspectives that emerged from these meetings as well as participants' proposed solutions to ease the implementation of CCMs (Keystone, 2007).

Soundness of Planning

The largest area of concern for participants was the soundness of planning. First, participants were worried that the community control measures were unclear and not specific enough. They felt that details such as who had decision authority, when the measures should be implemented, and how the measures would be enforced need to be determined. They also expressed concern that government, organizations, communities, businesses, and individuals would not be able to launch a coordinated effort due to the fact that Americans have an individualistic mentality and arms of the government do not work together. Next, they mentioned that the diverse situations of the American population such as essential personnel

and rural citizens, single parents, people with special needs, the prison population, and non-English speakers have not been taken into consideration in planning. Finally, participants feared how basic supplies and services would be maintained. Specifically, they were concerned about impacts on the supply/demand structure, strain on social services, and a lack of essential services such as telephone and utilities.

In order to address these concerns over the soundness of the plan, participants suggested many solutions. First, participants agreed that details such as decision authority, time frame for implementation, and enforcement should be determined well in advance. To deal with coordination, they suggested having all sectors of society work together to create contingency plans and conduct exercises to see if the plan works. On the local level, participants suggested enhancing already existing alliances between food banks, human services organizations, churches, and other voluntary organizations. To deal with diverse situations, citizens proposed organizing community groups to care for individuals with specific needs and creating special policies and procedures for essential personnel. In order to maintain supplies and services, the citizens recommended retraining displaced workers such as teachers and using schools as make-shift hospitals or distribution points for supplies. Neighborhood networks could help support neighbors in need and programs such as the Women's Infant's and Children's Nutrition Plan (WIC) and Meals-on-Wheels could be adapted to pandemic conditions.

Economic Impacts on the Population

The second area of concern expressed by citizens was economics. In fact in Seattle, loss of income and potential loss of job was considered the main driver for compliance. In all cities, participants thought that economic impacts would be felt on all levels of the economy. They were worried that there were no policies in place to sustain workers if they can not work. People would be unable to afford essential supplies or other goods and services which would have an impact on businesses, creating a "ripple effect."

In order to ease the economic impacts on the workforce, citizens suggested creating government policies to protect individuals financially by rescheduling debt, waiving power

and tax bills, and creating special subsidies for medication by extending programs. Other policies that were proposed included one that protects individuals from evictions or foreclosure and one that grants access to retirement funds. For businesses, they suggested the immediate preparation of a business planning kit and giving incentives to employers who allow flextime and working from home.

Information Needs of the Population

Citizens were also very concerned over having adequate, trustworthy, and motivational information. Citizens first expressed an immediate need to have straightforward information about government planning and policies. They felt that the lack of such information fuels distrust and suspicion. Next, they expressed concern that during a pandemic they may not have access to vital information such as the definition of “exposed” and “sick” as well as signs and symptoms and how to care for ill family members. They worried about rumors, misinformation, sensationalism in the media, and multiple and conflicting sources.

In order to mitigate against these informational concerns, participants first proposed that the government begin building trust with the American people by sending out information now. They also suggested examining critical communication pathways and developing messages in advance so that they would be prepared when a pandemic strikes. A key spokesperson at the national level who is a credible, nonpolitical appointee should be identified. Messages then should be filtered to various pathways and messengers that are already in place. These might include call-in numbers for health questions, Public Service Announcements, key cultural leaders, and educational packages for schools and grassroots organizations. Messages should be both informational, such as how to care for sick people or to prepare at home, and motivational, stressing the positive results of compliance.

Social Stresses

Concern over the psychological states and behaviors of the American population was the final area of concern. Some participants felt that American social values such as “individual rights and freedom of movement and assembly” (Keystone, 2007, p. 84) may work against

individuals complying with community control measures. Noncompliance might result from people’s “difficulty balancing personal interests with the good of the community, conflicts between personal/professional responsibilities—especially for essential personal, the belief that they will not be affected, the fact that many people are ‘stuck in a routine,’ and in the case of isolation, the fear that others may not check on me.” (Keystone, 2007, p. 84). Participants also worried about the psychological stress of isolation and canceling large gatherings and schools. With no “social outlets or diversions, stress may increase, fueling domestic violence, worsening the symptoms of the disease, or causing people to become complacent” (Keystone, 2007, p. 84).

In order to mitigate against the behavioral and psychological impacts, participants suggested that community leaders step forward and implement campaigns to make it socially acceptable to comply with the CCMs and other preventative measures, such as wearing a mask. In order to combat social stress of compliance, citizens identified “programs to keep kids out of trouble, social networks to reach out to others, and ‘creative communication’ such as teleconferences, email, cell phones and live telephone conferences to keep people connected” (Keystone, 2007, p. 84).

When stakeholders met they continued the conversation by considering the four areas of citizen concern that had emerged from the public meetings. They divided into a work group for each area of concern, talked through each concern, and worked through the solutions offered. They then developed the most significant solutions into comprehensive recommendations. A number of significant recommendations resulted from stakeholders adding their perspectives and engaging in dialogue. From this list, thirteen key recommendations were then formalized for presentation to the workgroup.

The 13 Recommendations:

- 1) Engage different levels of government and all key sectors of the community in the development of a detailed and fully-coordinated plan.

- 2) Conduct the planning work in the most transparent and highly visible ways possible to build public trust.
- 3) Conduct needs assessments to measure and track ‘pandemic wellness’ or ‘pandemic readiness’ scores for both individuals and communities.
- 4) Create incentives for employers to conduct business ‘continuity of operations’ plans and communicate effectively what employers will expect from their employees and what supports employers will make available to lessen the burdens of the pandemic on employees.
- 5) Train elected officials for the leadership roles they are unfamiliar with now but will have to fulfill in a pandemic emergency.
- 6) Develop special focused plans for maintaining the personnel and infrastructure that will be needed to meet the surge in demand for health care and the disruption of critical community services.
- 7) Develop clear and practically useful guidance for making ethical decisions around the use of scarce resources and other difficult value-laden choices that will be required in a severe pandemic.
- 8) Modify workplace policies or create new programs to relax the requirements on employees and to make it easier for them to bear the financial and family care burdens of a pandemic.
- 9) Conduct an ongoing public education campaign before the pandemic strikes, which provides necessary and straightforward information about the control measures, pandemic influenza, and preparedness.
- 10) Create messages prior to and during the pandemic that motivate individuals to comply with control measures and reinforce the expectation that compliance is a socially desirable and necessary behavior with positive benefits to all.
- 11) Establish specific mechanisms at the federal, state, and local levels for ‘just in time’ communication when the pandemic strikes.
- 12) Connect existing community organizations and volunteer groups into social networks that can deliver information, services, and social or psychological support needed to weather the pandemic.
- 13) Link providers in the social network in advance of the pandemic with the people in need, paying particular attention to the most vulnerable populations.

These recommendations correspond to the four concern areas identified by citizens. Recommendations 1 through 7 correspond to concern over the soundness of planning; recommendation 8 corresponds to economic impacts; recommendations 9 through 11 correspond to concerns over information needs; and finally recommendations 12 and 13 correspond to concerns over social impacts (Keystone, 2007).

Although the concerns and solutions identified by the citizens became “officialized” as they moved through the deliberations of the stakeholder, the resulting recommendations did remain true to the essential ideas offered by the citizens. The list clearly reflects the major concern areas identified by community members. In the final report, these recommendations are directly linked to the concern areas. Many times during discussion the stakeholders adopted the same language that citizens used in their deliberations. Comments such as “don’t reinvent the wheel” that were coined by the citizens became key themes in stakeholder discussions. Stakeholders sometimes also appropriated citizens’ language in their framing of a solution.

For example, they adopted the citizen’s term of “network” to refer to the joining together of community members, organizations, and volunteer groups and the term “centralized” to describe the communication channel. They also adopted the specific details of how a particular solution should be carried out. For example, in recommendation 6, stakeholders included citizens’ suggestion that displaced workers and dormant facilities be used to fill the need for health care and other critical community services. In recommendation 8, they also carried through the idea that government “safety net” programs should be “adaptable to pandemic conditions.” In this way, they built on the citizen perspectives and carried their voices and concerns forward so that they might have a voice in the Guidance.

Community Perspectives in CDC’s Guidance

In this section, we analyze the Guidance for the extent to which it carries through the four concerns identified by citizens and the corresponding recommendations developed by stakeholders. This will be done by identifying the concern as strong, moderate, or weak in the Guidance based on the frequency with which the

ideas are mentioned in the document and the extent to which it emphasizes significant aspects of the citizen concern. We also consider what, if any, strategies are used in the Guidance to retain these perspectives or multiple voices. As the stages of dialogue progress on this topic from community discussion to stakeholder discussion to government agency discussion, we can see that strands of community perspectives continue while others fade. Perspectives about sound planning were the most strongly carried through followed by economic ripple effects, while informational and psychosocial concerns were moderately to weakly represented in the document.

Soundness of Planning

The perspective that a sound plan is essential to be prepared for a pandemic had been the number one concern identified in citizen meetings and was strongly represented in the Guidance. Table 1 lists the concerns, suggestions, and recommendations coming out of the community and stakeholder meetings related to this perspective. Ten out of fourteen of these perspectives were present in the document.

Table 1

Soundness of Planning	Present/Absent
<u>Concerns:</u> - CCMs are unclear, non-specific (who has decision authority, when are CCMs implemented, how will they be enforced) - Lack of coordinated effort at all levels and sectors of society - Diverse lifestyles and vulnerable populations not considered - Impacts to supply/demand and potential lack of essential services	Present p. 11 (when) Present p. 15 Present p. 15 Present p. 53
<u>Suggestions:</u> - Determine in advance who, when, and how to implement CCMs - Have all sectors work together to make plans and conduct exercises - Enhance existing alliances and networks	Present p. 11, p.42 (when) Present p. 57 Absent
<u>Recommendations 1-7:</u> - Engage different levels of government and all key sectors of the community in the development of a detailed and fully-coordinated plan. - Conduct the planning work in the most transparent and highly visible ways possible to build public trust. - Conduct needs assessments to measure and track ‘pandemic wellness’ or ‘pandemic readiness’ scores for both individuals and communities.	Present p. 15, 64 Absent Present p. 11, 14, 47 Present p. 80

• Create incentives for employers to conduct business ‘continuity of operations’ plans and communicate effectively what employers will expect from their employees and what supports employers will make available to lessen the burdens of the pandemic on employees. • Train elected officials for the leadership roles they are unfamiliar with now but will have to fulfill in a pandemic emergency. • Develop special focused plans for maintaining the personnel and infrastructure that will be needed to meet the surge in demand for health care and the disruption of critical community services. • Develop clear and practically useful guidance for making ethical decisions around the use of scarce resources and other difficult value-laden choices that will be required in a severe pandemic.	Absent Present p. 48,55 Absent

The Guidance responded to these perspectives throughout the document in several ways: response to specific concerns, use of significant phrases, and mention of the ideas in recommendations. A major concern of the public was the ability of communities and the government to launch an effort coordinated to the level necessary to make the CCMs effective. The Guidance responded to this concern by stressing the need for “drills and exercises . . . to test plans and to maintain response proficiency” (CDC & HHS, 2007, p. 57). It states that such “real-world operational experience could yield invaluable empirical evidence regarding how readily particular pandemic mitigation measures might be implemented and how well they might work if applied on a larger scale and / or for longer duration” (CDC & HHS, 2007, p. 57). Use of “real world” exercises to test the functioning of the plan was also mentioned by the public as a solution to the problem of coordination between various arms of the government and community sectors. In the Guidance, it was stressed three times. A second major concern of the public was that the circumstances of vulnerable and less mainstream populations had not been considered in the planning process. The Guidance clearly reflects this community concern with the statement, “the feasibility of following pandemic mitigation interventions is of particular concern for vulnerable populations (e.g., people who are living alone, the poor or working poor, elderly, [particularly those who are homebound], homeless, recent immigrants, disabled, institutionalized or incarcerated)” (CDC & HHS, 2007, p. 53). Here, the Guidance recognizes the concern and mentions most of the populations identified by the public. A final concern of the public related to the issue of planning was a lack of trust over the ability of the government to follow through with a plan. By calling the

Guidance “a step in our *commitment* to address the challenge of mitigating a pandemic by building and enhancing community resiliency” (CDC & HHS, 2007, p. 15), the Guidance recognizes this concern and attempts to demonstrate a long-term commitment to the planning process by continuing to build and enhance community resiliency.

The Guidance captures citizen perspectives in the document by using key words and phrases offered by the community. In presenting solutions to the planning concerns, the public stressed that they wanted a detailed, consistent, comprehensive, and coordinated plan. They used key phrases such as clarity, coordination, inclusion of all levels of government and all segments of society and consistency. The Guidance also uses these key phrases stressing “clarity” on policies, “coordination” in strategy, inclusion of “all levels of government and all segments of society,” and “consistency” in the Guidance several times. For example, the statement that “public officials at *all levels of government* must provide unambiguous and *consistent* guidance that is useful for planning and can assist *all segments of society* to recognize and understand the degree to which their collective actions will shape the course of a pandemic” (CDC & HHS, 2007, p. 21), uses key phrases voiced by the citizens in their discussion of planning solutions. Direct mention of these phrases is significant because these were qualities that citizens viewed as essential to a sound plan.

Finally, the Guidance carries the perspectives of citizens and stakeholders forward with statements that appear to correspond to specific recommendations, although the document does not explicitly cite the recommendations as the source of these ideas.

Recommendation 1 advocates the inclusion of all levels of government and all segments of society in a coordinated and detailed plan. The Guidance touches on this suggestion with the statement, “planning and preparedness for implementing mitigation strategies during a pandemic are complex tasks requiring participation by all levels of government and all segments of society” (CDC & HHS, p. 15). Although this statement reflects the recommendation, there is no discussion about how that goal will be achieved. Recommendation 3 suggests conducting needs assessments of communities and individuals to track readiness. The Guidance also suggests the need to assess “local public health capacity and healthcare surge” (CDC & HHS, 2007, p. 11) and assist “individuals and families in identifying their own preparedness needs” (CDC & HHS, 2007, p. 47). According to the Guidance these are “critical community factors in achieving success” (CDC & HHS, 2007, p. 47). Recommendation 4 advocates creating incentives for employers to outline continuity of operations plans and communicate effectively what employers expect from employees and what supports will be available to lessen the burden. The Guidance reflects this recommendation somewhat by stressing the need to “establish and clearly communicate policies on sick (and other) leave and employee compensation” (CDC & HHS, 2007, p. 80). However, this statement, found in the business planning section of the appendices, provides no specifics as to if and how current policies should be adapted to pandemic conditions. Finally, stakeholder recommendation 6 suggests developing “special focused plans for

maintaining the personnel and infrastructure that will be needed to meet the surge in demand in health care and disruption of critical community services” (Keystone, 2007, p. 15). The Guidance reflects this recommendation by discussing the need to coordinate and plan “systems for distribution that could leverage the combined capabilities of public health organizations, the private sector, community organizations, and local governments” (CDC & HHS, 2007, p. 48). The Guidance even adopted a specific suggestion of the stakeholders that was discussed in the recommendation: that of using displaced workers and dormant facilities for community needs. It states, “If students are dismissed from school but schools remain open, school- and education-related assets, including school buildings, school kitchens, school buses and staff, may continue to remain operational and potentially be of value to the community in many other ways” (CDC & HHS, 2007, p. 55). At the same time however, the Guidance does not explicitly say what they will be used for or how they will be used.

Economic Impacts on Population

The perspective that the CCMs will have an economic impact on individuals and communities was moderately to strongly represented in the Guidance. Table 2 lists the concerns, suggestions, and recommendations coming out of the citizen and stakeholder meetings related to this perspective. Four out of seven perspectives about economic impacts were present in the document.

Table 2

Economic Impacts on the Population	Present/Absent
<u>Concerns:</u> • Loss of income/job is main driver for compliance • Lack of policies to sustain workers • Widespread impacts on all levels of economy <u>Suggestions:</u> • Creation of government policies to protect financially • Government planning kit for businesses • Economic incentives for employers to help workers	Present p. 51 Present p. 28, 54 Present p. 51 Absent Absent Absent
<u>Recommendation 8:</u> “Modify workplace policies or create new programs to relax the requirements on employees and to make it easier to them to bear the financial and family care burdens of the pandemic.”	Present p. 35, 54

The Guidance captured these perspectives in the document by responding to specific concerns and mentioning the ideas in the stakeholder recommendation. For community members, a major concern was that the threat of losing one's job from extended absence would influence people's willingness to comply with the CCMs, suggesting it is extremely important in planning for a pandemic. A related concern, therefore, was that policies that support and sustain the workforce are needed. The Guidance responds to these related concerns in several places with statements about the need for leave policies for employees such as, "Employers will be encouraged to establish liberal/unscheduled leave policies, under which employees may use available paid or unpaid leave without receiving prior supervisory approval...In this way, the amount of disease transmission that occurs in the workplace can be minimized, making the workplace a safer environment for others" (CDC & HHS, 2007, p. 28). Although more liberal leave policies may make the "workplace a safer environment" and "discourage unnecessary absenteeism" (CDC & HHS, 2007, p. 28), citizens were concerned that it could lead to financial hardship for some. The Guidance reflects these concerns over financial burdens saying some might offset lost income through programs such as unemployment insurance: "following a major disaster declaration under the Stafford act, additional individual assistance, including disaster unemployment insurance, may become available to eligible persons. The Family and Medical Leave act may also offer protections in terms of job security for up to 12 weeks for covered and eligible employees..."(CDC & HHS, 2007, p. 54). In addition to discussing the need for liberal leave policies and ways to recover income to sustain workers, the Guidance addresses another major concern of citizens: the ripple effect that worker absenteeism could have on the entire economy. The document states, "Workplace absenteeism, if severe enough, could also affect employers and contribute to some workplaces reducing or closing operations (either temporarily or permanently). Depending on the

employers affected, this could limit the availability of essential goods and services provided by the private sector and the government, interrupting critical business supply chains and potentially threatening the ability to sustain critical infrastructure" (CDC & HHS, 2007, p. 51). Concern about a ripple effect throughout the economy is clearly captured in statements such as this in the Guidance.

The Guidance also carries forward citizen and stakeholder perspectives on economic impacts expressed in recommendation 8 regarding the modification of workplace policies or the creation of programs to relax the requirements on employees and make it easier for them to bear the financial burdens. The Guidance captures this recommendation in statements such as, "State, local, tribal, and territorial officials should review laws, regulations and policies to identify ways to help mitigate the economic impact of severe pandemic and implementation of the pandemic mitigation measures on employers, individuals, families, especially vulnerable populations. Clarity on such policies from employers and the government will help workers plan and prepare for the potential threat" (CDC & HHS, 2007, p. 54). Although statements such as this one affirm that laws and policies to mitigate the economic impact should be reviewed, the Guidance does little to specify who will provide such clarity and the incentives to businesses to accomplish this. The Stakeholder recommendation and the citizen solution both suggest that the government should be responsible for the creation of new policies yet this is notably absent from the Guidance.

Information Needs of Population

Perspectives related to the information needs of the population were moderately to weakly represented in the Guidance. As indicated in Table 3, seven out of twelve citizen and stakeholder concerns, suggestions, and recommendations were present in the document

Table 3

Information Needs of Population	Present/Absent
<u>Concerns:</u> - Need trustworthy, motivational, and straightforward information - Need access to vital information during a pandemic - Potential for misinformation, sensationalism, multiple and conflicting sources	Present p. 20-1 Present p. 37 Absent

<u>Suggestions:</u> • Send information out now to begin to built trust • Examine critical communication pathways and develop messages in advance • Identify a key spokesperson at the national level and point person at the state and the local levels • Filter messages through the gatekeepers and pathways in place • Messages should be informational and motivational • During pandemic, clear-honest-consistent-persistent messages	Present Absent Absent Absent Present p. 20 (informational) Present p. 20
<u>Recommendations 9-11:</u> • Conduct an ongoing public education campaign before the pandemic strikes, which provides necessary and straightforward information about the control measures, pandemic influenza, and preparedness. • Create messages prior to and during the pandemic that motivate individuals to comply with control measures and reinforce the expectation that compliance is a socially desirable and necessary behavior with positive benefits to all. • Establish specific mechanisms at the federal, state, and local levels for ‘just in time’ communication when the pandemic strikes.	Absent Present p. 14, 47 (during, and only informational) Present p. 15

The Guidance captured these perspectives in the document by responding to specific concerns and mentioning the ideas in recommendations. A key concern of citizens was that the American public needs trustworthy, motivational, and straightforward information now regarding the planning for the pandemic. Citizens felt that following hurricane Katrina the need is greater than ever to provide information to build trust in our government’s ability to respond to crises. The Guidance acknowledges this need for trust-building saying, “to maintain *public confidence* and *enlist the support of private citizens* in disease mitigation efforts, public officials at all levels of government must provide unambiguous and consistent guidance...” (CDC & HHS, 2007, p. 20-1). Another key concern of citizens was that during the pandemic they will not be able to get basic health care information such as how to recognize symptoms or take care of ill persons. The Guidance, to expresses this concern, states, “ill individuals and their household members need clear, concise information about how to care for an individual in the home and when and where to seek medical care” (CDC & HHS, 2007, p. 37). Although the Guidance acknowledges these basic information needs, it does not mention citizens concerns about the media sensationalizing the pandemic or multiple sources of information creating confusion and misunderstandings.

Citizens suggested that messages be created that are both informational (conveying key facts) and motivational (gaining the compliance of the public in adhering to CCMs). Additionally, they suggested that messages be clear, honest, consistent, and persistent. The quote above stating that “unambiguous and consistent guidance” is needed to “enlist the support of private citizens” (CDC & HHS, 2007, p. 20) reflects these suggestions. However, the Guidance appears to overlook related suggestions regarding identifying a key spokesperson as a central point of information and using existing gatekeepers to get information out.

The Guidance carries forward citizen perspectives on the informational needs of the population through mention of the ideas in recommendations 10 and 11; however, it is in a very general way. Recommendation 10 suggests creating messages that will facilitate compliance and “reinforce the expectation that compliance is a socially desirable and necessary behavior with positive benefits to all” (Keystone, 2007, p. 16). This is picked up in the Guidance through general references to “Timely and effective risk communication” (CDC & HHS, 2007, p. 37), which is described as a “requirement of success” for control measures such as voluntary isolation. Repeated references to “generating appropriate risk communication content/materials and

effective means for delivery” (CDC & HHS, 2007, p. 14, 47) reinforce this understanding in the Guidance of the need for clear and consistent risk information as something that will be necessary for people to comply with to ensure the control measures are successful. At the same time, the motivational quality of the message that is stressed by the stakeholders is not mentioned in the Guidance. In recommendation 11 stakeholders suggested establishing “specific mechanisms at the federal, state, and local levels for ‘just in time’ communication when the pandemic strikes” (Keystone, 2007, p. 17). The Guidance likewise suggests that “A severe pandemic would challenge all facets of government and community functions. Advance planning is necessary to ensure a coordinated communications strategy and the continuity of essential services...” (CDC & HHS, 2007, p. 15). The phrase “coordinated communications strategy” captures the idea that federal, state, and local levels need to plan together how to disseminate information about the pandemic. These general references about the fact that

communication should be coordinated overlook stakeholder suggestions about how coordination would be achieved through an information tree established prior to the pandemic and used during the pandemic. The Guidance also fails to mention stakeholder recommendation 9, which stresses the importance of proactive communication through establishing an education campaign well before the pandemic strikes to support implementation of the four CCMs and instead emphasizes reactive risk communication as evidenced in the above quotes.

Social Stresses

Perspectives related to the social stresses of the population were the most weakly represented in the Guidance. Table 4 lists the concerns, suggestions, and recommendations coming out of the citizen and stakeholder meetings related to this perspective. Five out of eleven perspectives were present in the document.

Table 4

Social Stresses	Present/Absent
<u>Concerns:</u> - Behavioral noncompliance for a variety of reasons - Psychological effects of isolation during a pandemic (boredom, anger, panic, violence)	Absent Present p. 38
<u>Suggestions:</u> - Leadership required from community leaders - Campaigns to make changes more acceptable - Enforcement for non-compliance - Programs to keep kids out of trouble - Social networks to reach out - Creative communications to keep people connected - Education and honest open information from trusted sources	Absent Absent Absent Present p. 55 Present p. 38 Absent Absent
<u>Recommendations 12-13:</u> - Connect existing community organizations and volunteer groups into social networks that can deliver information, services, and social or psychological support needed to weather the pandemic. - Link providers in the social network in advance of the pandemic with the people in need, paying particular attention to the most vulnerable populations.	Present p. 54 Present p. 14

The Guidance reflected these perspectives throughout the document by responding to specific concerns and mentioning ideas included in the recommendations. A major social concern of citizens was the psychological effects of isolation, quarantine, and canceling schools and large gatherings. The Guidance also acknowledges “that maintaining the strict confinement of children during a pandemic would raise significant problems for many families and may cause psychosocial stress to children and adolescents” (CDC & HHS, 2007, p. 38). However, it only mentions stress among children and does not mention the impact of the CCMs on adults. Citizens proposed the creation of alternative children’s programs, social networks, and creative communications such as teleconferences, email, cell phones, and live Internet conferences as ways to connect people and deal with the stress of social isolation. The Guidance reflects these suggestions, offering “gatherings of children that are comparable to family-sized units” as a means for “facilitating social interaction and play behaviors for children and promoting emotional and psychosocial stability” (CDC & HHS, 2007, p. 38). The Guidance also suggests continuing education through “television, radio, mail, Internet, telephone, or other media” (p. 55) not only to maintain learning, but also “to engage students in constructive activity during the time they are being asked to remain at home” (CDC & HHS, 2007, p. 55). However, this is only a small part of the many suggestions made by citizens.

The Guidance also recognizes the perspectives of the stakeholders by mentioning the two recommendations offered. Although stakeholder recommendations 12 and 13 are not referenced explicitly, two statements in the Guidance reflect them. Recommendation 12 suggests linking community organizations and volunteer groups into social networks that can provide goods and services to the community. The Guidance likewise suggests the creation of social networks but only in reference to childcare needs. For example, it states that “families may be able to develop support systems with co-workers, friends, families, or neighbors, to meet ongoing childcare needs” (CDC & HHS, 2007, p. 54). In this network, participants “could prepare a plan in which two to three families could work together to supervise and provide care for a small group of infants and young children” (CDC & HHS, 2007, p. 54). Yet, the use of social networks as a solution for providing

other goods and services such as information or social and psychological support is not mentioned. Recommendation 13 proposes that vulnerable populations should be identified well before a pandemic and they should be linked with providers in the network. The Guidance agrees that “communities should pre-identify those for whom these measures may be most difficult to implement, such as vulnerable populations and persons at risk (e.g, people who live alone or are poor/ working poor, elderly [particularly those who are homebound], homeless, recent immigrants, disabled, institutionalized, or incarcerated” (CDC & HHS, 2007, p. 14); however, no specific mention is made of the stakeholder suggestion for how the needs of these populations could be met through social networks.

Discussion

In general, the Guidance does a sufficient job of carrying forward the perspectives of the citizens and stakeholders. Twenty six of the forty four perspectives voiced in the deliberations were present in the document. The heavy emphasis on sound planning and economic impacts in the Guidance also reflects citizen and stakeholder emphases on these areas in their deliberations. At the same time, the Guidance fails to fully represent the perspectives of participants on significant issues related to informational needs and social stresses. In addition, stakeholder recommendations regarding leadership training for public officials (rec. 5), conducting planning in a highly transparent way (rec. 6), guidelines for ethical decisions for allocating scarce resources (rec. 7), and an ongoing public education campaign (rec. 9) are notably absent from the Guidelines. Lack of representation of these aspects might result from the fact that the federal workgroup may have sensed these issues as the responsibility of the state and local governments or other entities, but this should have been stated.

Specifically, guidelines fall short of carrying the perspectives forward in two ways. First, a primary concern of citizens and stakeholders was that specifying who, when, and how plans would be carried out is essential to prepare for a pandemic. The Guidance addresses the “when,” but to a lesser extent the “how” and “who” of how measures will be implemented. For example, stakeholder recommendation 8 explicitly names a number of federal programs

that could be adapted and suggests the creation of a new federal policy called “Pandemic Leave.” All of these suggestions answer how the economic stress caused by control measures could be alleviated and who is responsible for alleviating them. While the Guidance admits to the citizen concern over economic impacts and suggests the need to locate and implement policies for mitigation, the questions of specifically how this would be done and who is responsible for doing it are left ambiguous. Another example stems from the information needs identified by the community. While the Guidance stresses that effective, coordinated, and clear communication will be necessary, it does not identify specifically how that goal will be achieved. In recommendation 9, the stakeholders present the idea of a communication tree to coordinate and centralize information. At the center is a single spokesperson on the national level who will send and filter messages to state then local levels. Since the Guidance does not mention this suggestion, identification of how effective communication will occur and who will be responsible for that communication is notably absent from the document. Finally, when discussing the special needs of vulnerable populations, the Guidance admits that these needs should be assessed. Once assessments are complete, the stakeholders offer a comprehensive way that goods and services should be distributed to vulnerable populations through a community network in recommendation 13. However, the Guidance makes no mention of this suggestion and again leaves the question of who and how, open to interpretation. Although we recognize that this is an interim document and will be updated and that the appendices are more specific, participants were explicit that they wanted that level of detail to be included in planning documents.

Second, an important limitation of the Guidance is that it does little to reference ideas as citizen perspectives that were generated during public meetings. The Guidance responds to citizen concerns, uses specific language, and mentions the ideas contained in the stakeholder recommendations, but does not explicitly reference these as perspectives emerging from the public engagement project. The project is referenced a few times in the document as a general source (University of Nebraska, 2007). It is also discussed in greater detail on page 14 of the Guidance. However, as concluded by an

evaluation of this effort out of the University of Nebraska, it is not used directly as evidence to support the community’s acceptance of the community control measures even though the findings clearly indicated support (University of Nebraska, 2007). Public perspectives also could have been used as support in the section that discusses “requirements for success of measure.” Both noting support and discussing solutions offered for success would have added credibility to any claims about public acceptability. A final place where perspectives could have been discussed was following the explanation of the engagement project. Here, the four themes and thirteen recommendations could have been identified and described. Mention of citizens’ concerns and suggestions and stakeholder recommendations in all of the above ways also would have made it more clear that the workgroup did consider these perspectives as an important part of their decision-making process.

We are not suggesting that the Guidance incorporate all citizen ideas. We understand that the credibility and soundness of the document requires that it be grounded in various forms of evidence and draw on recommendations from a variety of scientific and planning resources. However, it could have done a better job in citing its use of the findings of the Public Engagement Project and providing the detail citizens said was so important.

Conclusion

In this essay, we examined a case of public participation regarding acceptability of control measures for slowing the spread of a pandemic influenza for the extent to which public voices were carried through to the issuance of federal Guidance. This examination of the CDC case is part of our effort to explore the concept of an “ongoing dialogue” in practice. Our recent research has argued that the context for public participation should be a dialogic discourse capable of engaging and retaining multiple voices in an ongoing dialogue. This type of dialogue would inform decision-making as part of a *continuous* process of developing dialogic relationships rooted in understandings of both connections and differences. We have identified techniques that facilitate aspects of this type of discourse in practice, but struggled to find mechanisms for encouraging open-endedness, or the continuation of dialogue throughout participation and decision-making and even past

decision points, suggesting the need for further research.

Here we have investigated this by tracing the extent to which the federal workgroup was able to carry forward the public voices throughout stages of discussion—public discussion to stakeholder discussion to government agency discussion. We argued that the Guidance does capture citizen-raised concerns with two perspectives strongly or moderately represented in the document while two were moderately to weakly represented. However, while the Guidance did a fairly good job of carrying forward these concerns, we also identified two limitations of this effort that can inform our understanding of how “ongoing dialogue” works in practice.

First, even though citizen ideas are present in the document, the Guidance does not attribute them to either the citizens or the stakeholders, so there is no way to trace the “path of influence” that led to their inclusion. To an extent the concerns had an impact on what will be considered in planning for the pandemic, yet failing to give credit for ideas negates some of the positive impact of including them in the first place. Second, even though citizen ideas came through, they were generalized or abstracted without the specificity provided in the recommendations put forward by the stakeholders. The federal workgroup failed to respond to these concerns or to adopt the specific solutions regarding “who” and “how” ideas will be implemented. Therefore, in addition to attributing the ideas to citizens, health officials needed to be forthcoming in explicitly stating the extent to which they adopted a recommendation. This would add credibility to some of its claims about public acceptability and demonstrate to participants that their suggestions were valued and considered in the process.

Citizens investing time and energy to learn, discuss, and provide feedback on environmental and health risk issues want their ideas to influence the decisions that are made. The increasing use of collaborative, learning, and dialogue-based formats facilitates interaction and influence among competing perspectives on an issue thereby meeting some dialogic goals. The larger question remains, however, as to the extent to which the input gained from these formats can have an actual impact on decisions—whether public voices are carried

forward from public participation to decision-making and beyond. The CDC case teaches us that it can, but that government agencies incorporating citizen perspectives in decisions need to attribute the ideas to the citizens and to indicate the extent to which they are adopting those ideas. The CDC case also teaches us some general strategies that agencies might use to carry forward the multiple voices that emerge in dialogue by incorporating them in recommendations, reports, or decisions. The Guidance analyzed here used citizens’ ideas or in some cases specific terms; however, importantly the document did *not* retain them as citizen voices per se. Past discussions of this issue such as Glover’s (2000) analysis of Environmental Impact Statements found that including comment letters and government responses as part of the report allows the citizens to speak for themselves and therefore “contains the seeds for dialogism” (p. 49). Although the citizen ideas do continue in the Guidance document, this aspect of a dialogic discourse is lacking because they are not acknowledged as citizen voices and therefore are limited in the extent to which they are capable of moving forward.

Glover’s suggestion goes further than the Guidance also by recognizing diversity and dissent in those voices, which is central to dialogism. Elsewhere we have pointed out the “difficulty in constructing discourse that reports a decision yet captures multi-voicedness and communicates dissent...” (Hamilton & Wills-Toker, 2006, p. 770). As a strategy to carry voices forward, therefore, we suggested that “any decision document should include discussions of dissenting views and points of disagreement as well as the final decision” (p. 770). In the CDC case, not only were the citizen ideas abstracted from a public participation effort without mention of them being citizen voices, but the document also fails to mention differences in opinion. These are two fairly significant limitations in the effort to achieve an ongoing dialogue. In the end then, the CDC project teaches us that it is essential to attribute ideas as citizen-generated and incorporate diversity of ideas. While we recognized that some of the richness of dialogue is lost when captured in written form, we also believe that practitioners need to go further than just listening to citizens and actively engage in a dialogue with them by carrying their perspectives forward to impact decisions and decision documents.

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DeComponomics

A performance script created by:

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Abstract

Through satirical humor, Janet Donoghue-Wilson and Alison Aurelia Fisher perform the imaginary characters of Glenda Greenhouse and Mary Mercury, otherwise known as “The Composters”. Compost is one of the most organic of the earth’s processes, for it pulls nitrogen from dead matter to make soil. Due to the literal transformative process of compost, we can propose a metaphoric transformative process for personal and political change; if we can decompose banana peels and apple cores, can we compost the war machine? Decay is no longer seen as disgusting, but as the foundation for a new, nurturing substantial spread. In DeComponomics, Glenda and Mary compost economics and envision worlds of parody and change.

Glenda: Hi, I’m Glenda Greenhouse.

Mary: And I’m Mary Mercury.

Both: And we’re the Composters!

Glenda: And we’d like to welcome you to the...

Both: Composting Revolution!

Mary: Because what’s more revolutionary than making some shit out of things?

G: Check! And some things out of shit...

M: Balance!

Both: All at the same time.

G: Payment’s due!

M: Cash on delivery!

G: Make the check out to...

M: The Composters because this is our—

Both: DeComponomics (*Said in fragmented voices*)

M: Summer 2007 tour. And what a better place to throw the stuff on the compost pile than where we talk nonstop about the environment?

G: CoCE!

Both: (*Singing*) Summertime...

M: And the living’s easy...easy? What does that

mean, easy?

G: Really, do you have to deconstruct the song, right as we are singing it?

M: Isn’t that what we do? Derridian deconstruction through the metaphor of compost?

G: Yes, but sometimes I just want to finish the act.

M: Okay...

Both: (*Singing*) Your daddy’s rich...and your ma is good looking...(Mary starts moaning)

G: Stop!

M: Oh, but that is so ripe!

G: Or rotten, depending on how you look at it.

Both: (*Singing*) So, hush little baby, don’t you cry...

G: (*Still singing*) although you may want to, because you are going to be inheriting a shitty world.

M: And we’re not just talking about no social security.

G: We’re talking no oxygen...or no place to live...

Both: But not anymore!

M: Because today is your lucky day.

G: Prepare to get your numbers and nitrates blown off the charts!

M: Because you tuned into the...

Both: Compost Obtainment Network!

G: That's right, welcome to...

Both: The CON!

M: But, who's conning whom?

G: Exactly. And what are you willing to pay for our secret?

M: And we're not talking about the book about self-fulfilling prophecy...

G: No, where talking about compost philosophy but...shhhh...

Both: It's a secret!

M: But ultimately—here's our thesis, we threw our current economic system on the compost pile—

G: Way to keep a secret...but now that the cat's outta the bag, we'll just let you know that when you compost economics you get...

Both: DECOMPONOMICS!

M: Which is what we're selling you!

G: DeComponomics is a package deal, featuring decomposition, you might not realize the full benefits of decomposition.

M: Yea, you get to view new things coming out of the ground instead of the same shitty dead stuff you see at the end of last winter.

G: Yea, without decomposition we wouldn't have shit!

M: You might be asking how much this costs?

G: Whatever it is ...it's a steal!

M: It's a bargain, on this out of this world offer...

G: That you can't live or die without.

Both: Literally!

M: And we aren't going to stop at decomposition...for a limited time only...

G: And we do mean LIMITED! Start the clock please! If you order today and today only...

M: Not only do you get a lifetime of decomposition...

G: That's as much decomposition as you need for your whole life, how could you sweeten that deal?

M: You throw in POLLINATION!

Both: For FREE, Oooh!

M: Pollination has many benefits, like helping create 60% of what I ate today¹

G: You know what they say, the bee dies and the rest of western civilization isn't far off.

M: For sure, you must be talking about Colony Collapse Disorder

G: Does that mean bees are coming from broken homes?

M: No, it is the technical term for 38% of our bees disappearing²

G: Yes, our bees have CCD and our kids have ADD. My daughter asked me about the "birds and the bees" the other day, and I started out by explaining extinction. Then I realized she was looking for something else.

M: But without the bees how do you teach about sex?

G: I know, without the bees we lose the insemination metaphor, we lose the penises

M: Maybe phallocentric Pfizer will help CCD in the end—they can patent something like Ritalin for bees.

G: Save the bees, save the penises and save Sex Ed!

Both: (*Singing*) Let me tell you about the birds and the ...

G: Fleas?

M: Ok, DeComponomics!

G: So, what you are really saying is that if our audience acts now on this deal, they are getting a steal!

M: A bargain, indeed!

G: Patent pending...

M: Thanks Mother Nature!

G: Whoa.

M: Whoa is right, or to give you a root value—combined, decomposition and pollination contribute to 33 trillion dollars annually (McKibben 27).

G: Ding, ding, ding! Eat that at the stock market!

M: Or the dinner table.

G: Talk about worker bees...

M: Talk about DeComponomics...

G: We are moving down the food chain!

M: Playing economics flippy cup!

G: With DeComponomics you transcend the system and..

M: Become the change you want to see in the world.

G: Didn't Gandhi say that?

M: Which Gandhi?

G: What do you mean, which Gandhi?

M: Hello, he was married and she was pretty great too. You know what they say, "Behind every great man ...

G: Is a great partner...usually with an "oops I shit myself kind of surprised look on their face.

M: Hey! But now that I think about it, that's a great description of Michelle Obama right now—

Both: Love her!

M: So, ok, DeComponomics.

G: Let's break it down.

M: Forget the blue light special; this is a rainbow light special, because we are offering you a once in a billion year blow out sale on hydrocarbons (Hawken xii).

G: You may be asking yourself, what does this cost?

M: But we're throwing one back at cha: What are you willing pay?

G: Really, because we are really selling it to you.

M: Installing it into your minds...I mean bodies, I mean homes.

G: Whatever thought container makes you the most comfortable—

M: I like my thought containers to be in high definition.

G: I like my thought containers to be TiVo ready so I'm always connected.

M: Or fucking disconnected.

G: Mary I think we need to watch it with the "F bomb," this is an academic conference...fucking doesn't go on here.

M: The F bomb is the least of our worries.

G: You're right. We have to contend with the GW bomb right now.

M: George W. Bush?

G: Kinda, but I was thinking of the GW bomb that's bigger than Bush.

M: Bigger than Bush?

G: Maybe we're not speaking the same language, the CC bomb.

M: Huh? Sorry, I haven't been checking my e-mail lately.

G: GW-global warming, CC-climate change...

M: Whichever rhetorical truth you run with!

G: Whatever, when our president heard we needed to fight global warming, he thought that meant sending troops to the sun (Cagles 7).

M: And, cherry blossoms did bloom in New York in January (Holz 9).

G: I think it is time for the triangle. (*Ding triangle*)

M: Today we are introducing to the world, the Composters' inverted triangle!

G: Normally this would be presented to you as a pyramid scheme.

M: But, this is an inverted pyramid.

G: Subverted.

M: Inverted.

G: Subverted.

M: Inverted. Anyway, bottom's up...

G: No, bottom's down.

M: No, it's inverted.

G: That's what they said about your right nipple—

M: Yea, and we both know that pops out!

G: Everything in its right circumstance.

M: And that's the point. Wait! Are we still talking about nipples?

G: Almost every performance has some kind of boob joke, so I guess always in a meta, meta kinda way.

M: We are looking at things differently. (*Glenda and Mary put on goggles*)

G: Put on your terministic screens.³

M: I am ready to go!

G: Mary, those are beer goggles.

M: Sorry, I should have said, I am lit, ripped *and* ready to go.

G: It's not only about looking, but also thinking and acting differently.

M: That's right! This is activism via metaphor.

Both: DeComponomics!

M: We have to compost economics, as we know it!

G: And you're in good hands, too, after all we are the Composters, and we have ethos damn it, we have been composting outdated crap for two years now.

M: Let's share our values.

G: Every revolution's gotta have values.

M: And every compost pile has gotta have a revolution.

Both: Turn the pile!

M: Our pile has been turning for two years now. Let's share some tales from the pile along with our values.

Both: The Composters Humanifesta!

M: Number one, feminism.

G: The "F" word.

M: Home is where the heart is.

G: And the Greek word for human home is *oikos*, which translates to eco—as in ecological and economical.

M: So, is female to male like nature is to culture?

G: I don't know, but we'll find out with...

Both: Feminism!

M: It's something to sing about!

Both: (*Singing*) My grandma and your grandma...sitting by the pile...my grandma told your grandma I'm a wishing I'd get fired...

G: Because she had to perform pink collared work.

Both: (*Singing*) Eco, eco, we pay!

M: Number two: embrace the cycle of life.

G: Oh, we did this when we buried ourselves in compost!

M: Yeah, most burials involve death.

G: Talk about subversion, sister. It seems so fitting that that was our first performance. It's as if we were but seedlings and we planted ourselves in the nutrient rich, post-modern, amorphous...

M: COMPOST! Take it to the bank!

G: I love going to the bank—all of those suckers—

M: Sorry, you don't get a sucker unless you have a kid with you.

G: That's not fair—I'm wired for sweetness. I like Dum-Dum's.

M: Number three, sustainable living.

G: Remember when we deconstructed one of our audience's trash?

Both: (*Pause to look at audience and then to the trash receptacle*)

G: It must have been 80% of the stuff in there was recyclable!

M: For sure, which leads me to number four, commitment to social and environmental change.

G: Trust us, we're committed.

M: Community garden plot...

G: Annual local fundraising...

M: Community environmental radio show...that leads us to Number five, the personal is political.

G: We are currently securing a grant to put "Compost This!" stickers— non-toxic, biodegradable of course— on produce at a local grocery store. Somehow we have made the apple political.

M: As if the apple wasn't political before, hello! Eve! Number six, think about where away is.

Both: Hmm...

G: We thought so hard about this that we decided that away wasn't that far; it was the dump in our neighboring town. So, we wanted to dress up to meet the dump. (*Both candidly discuss their fieldtrip*)

M: Number seven, utter respect for irony, satire and comedic persuasion.

G: (*Laughing*) She said udder...and, now a word from our sponsors.

M: Underwriters.

G: Sustainers!

M: Gaia!

G: Connecting you to your consciousness.

M: Take Madge for instance, not many people would. Take her seriously, or listen to her, she was just a housewife. A regular old mom....

G: Old?

M: Until she got her Gaia on. Listen to her story.

G: Well, if anyone would have told me that I could own decomposition, I would have thought they were crazy!

M: And don't forget pollination for free, Madge.

G: Needless to say it's been quite an adjustment getting used to my newfound status.

M: Before DeComponomics—

G: Excuse me?

M: Hold on a minute, (*Gets on the phone*) Sally what did you want to get for lunch today? Did you want to order out? Girl, we gotta talk about what happened on "The View," that split screen...wow, what was that about? Sabotaging Rosie.

G: Excuse me? I need help!

M: Feeling lost, feeling betrayed, Madge binges on late night television and cookie batter. In her last straw of desperation, while clutching the remote control in one hand and a credit card in the other—

G: I'm in charge...I'm in charge...I'm in charge...

M: In the midst of her frantic channel flipping, she spots...The CON!

Both: Compost Obtainment Network!

M: And she orders DeComponomics from our infomercial.

G: And I get pollination for free right? It said it was free.

M: Absolutely free, Madge, when you order a lifetime supply of decomposition, which she did. And after DeComponomics—

G: (*Sprinkles dirt on herself, walks into store*)

M: May I help you? Is there anything you need?

G: I'm looking for a book.

M: Let's get it together.

G: It's called Deep Economy.

M: I love any title with the word "Deep" in it. I have some others you can check out too, after we find this. Do you like Rosie O'Donnell? What scent are you wearing? You smell insatiable...

G: It's a musk.

M: It makes me want to pollinate—

G: Really?

M: All over your face!

G: Oh my! (*Sneezes*)

M: Oh, let me. (*Pulls tissue from bosom*)

G: You know, I was in here two weeks ago and you didn't give me the time of day, but now I am in here, and I have clearly got what I wanted!

M: Is that from "Pretty Woman"?

G: I love that!

M: Me, too!

G: (*Smiling at audience*) And I love DeComponomics.

M: Decomposition and economics with pollination for free!

G: It was the best investment I ever made, thanks Gaia.

M: Lose it if you use it—

G: Too much. (*Beat*) Welcome back to The Con, we're glad you stayed with us.

M: And it's going to be worth it because here is the inverted...

G: subverted!

M: Triangle...Poof! (*Inverted triangle appears on screen*)

G: Hmm...that shape looks familiar; do any of the other social movements use it?

M: (*Images of various triangles appear; triangle on money, recycling etc.*) Um, it's totally not copyrighted.

G: Yeah, that's what they said about nature. (*Picture showing triangular front of woman's pubic area appears on the screen*)

M: You said you were going to take the Bush out.

G: I wish I could take the Bush out, but there were just too many connections.

M: This is DeComponomics, Glenda— not Decompinism!

G: This is ecofeminism, and you're trying to jump ship, but there is no getting away from the Bush.

M: But the Bush isn't as inclusive as it could be. I just wish there was a better rhetorical strategy to environmentalism and feminism that doesn't leave people out.

G: How can we leave out the people that are already in from the get go—get it? What am I a party host?

M: Kind of.

G: It's complicated.

M: That's what the EPA Administrator said last month about reducing CO2 emissions in light of the supreme-court ruling (Johnson

www.fas.org/sgp/crs/misc/RL33938.pdf).

G: And there you have it! It's poetic, he was simply doing his part in a "logic of domination (Warren 125), where "women" and "nature" are gendered feminine and considered subordinate and I am not a victim, nor do I have a victim mentality.

M: I hate to say: I am an ecofeminist. Because it seems gender essentialist that I say only women have a connection to nature.

G: I don't think it says that. Now, I want you to know that you are heard in this moment, listened to, and on some level understood. But, "ecofeminist" is in the first line on our mission statement on our website. It states that we are "An ECOFEMINIST, post-modern, performance duo." I need that place to exist in the world. We bonded over it. Remember? The next thing you are going to tell me is that you're not postmodern (or humus forbid!) you're...not a duo.

M: You know, I think I am a Marxist feminist now. You know, instead of connecting women to nature, we should disconnect from the capitalist system and liberate women from under its patriarchal heel.

G: That's swell, but remember when we talked about Heidegger and how he said that we can't disconnect from technology and industry.

M: So, we have to embrace it? (*M & G hug*)

G: Listen, I realize there is danger in creating realities that separate men from both women and nature, and that the term can be challenging to environmentalist and feminists but I can't help but to see there are "connections between the oppression of people and the domination of nature" (Benton 141). I believe that essentially we share the same bush, and everyone is welcome, despite what some have said like one of our favorite witchy crone warriors.

M: Mary Daly!

G: C'mon, Mary Daly discussed this very issue with the background and foreground thinking that women do (6).

M: But I don't want to focus on the background anymore.

G: All right then, let's move to the foreskin—I mean foreground.

M: It is all about the foreplay! Or, perhaps we need to give some thought to the "femecologist" idea.

Both: Jonny Gray!⁴

M: All right, DeComponomics! It's time for the pledge.

Both: "No system has so revolutionized, ordinary expectations of human life, lengthened the life span, made the elimination of poverty and famine thinkable, and enlarged the range of human choice, as democratic capitalism" (Hawken 7).⁵

G: It's time...

M: We have no more time to waste, after all your time is ticking away on getting this deal!

G: Time is money; don't let the opportunity pass you by!

M: You know what they say, more money...

G: More...things?

M: Or more problems.

G: Money doesn't grow on trees.

M: It just comes from them.

G: We have to start spending our time and money more wisely.

M: Like with these puns on money and time.

G: Precisely. Well, put your money where your mouth is and waste not, want not a minute longer.

Both: (*To the tune of "There's No Business Like Show Business"*) DE-COMP-O-No-MICS...

M: Economics is so ripe for composting!

G: There's a thin line between ripe and rotten.

M: And things are starting to stink around here!

G: And all that perfume *you* buy won't cover it up.

M: And *your* addiction to bleach isn't going to make the stain go away.

G: Dead is the new alive.

M: Old is the new young.

G: Economics has little organic life left in it.

M: And that's why it has to be

Both: Composted

M: We put economics on the pile and (heap and glory!) as the pile was revolving we turned up DeComponomics!

G: You never know what you'll find in a revolution.

M: You may have thought that was a tired old cliché, but with compost, revolutions are necessary in order to produce liquid gold!

G: Why that's better than oil, I tell ya!

M: We done struck gold!

G: Yes, thank goodness for compost, thank goodness for decomposition and pollination for free, for transformation via decay, deconstruction and rebirth...without compost I wouldn't have hope!

M: And I wouldn't have raccoons. Anyhoo, ready for the reveal?

G: Yes, Compost This!

M: In order to get rich you need to get dirty.

G: C'mon, c'mon, c'mon!

Both: No More Magic! (*A highlighted NO appears by one side of the triangle, A is dancing*)

G: Wait a minute "NO MORE MAGIC." I like my magic. Does this mean I'm going to have to give up artificial sweetener?

M: Metaphorically speaking.

G: But I like things sweet without having to pay for them with cash, calories or consequence.

M: Seriously, you might want to rethink fat free ice cream, and strawberries in December⁶.

G: Oh, they are so good together; it makes me feel equal and splendid.

M: Why don't you start small and really enjoy strawberries when they are in season?

G: That means I can't have it when I want it. Isn't that what "season" is code for anyway?

M: It's very allegorical at this point.

G: Didn't you say the same thing about the war?

M: No, I said that the war was a synecdoche.

G: Doesn't that mean that one thing that stands in for the whole of something?

M: Yeah, as in the war budget is standing in for the whole budget.

G: Mary I heard a rumor back in 2004 that THIS war is...

M: Privatized.

G: Oh, you heard that one...what's next?

M: Water.

G: You know Halliburton's stock has quadrupled since the war began.⁷

M: Yeah, and not one amendment has been passed to protect us from war profiteering.

G: And speaking of water, did you know that Coca-Cola is buying the rights to water in Sudan?

Both: (*M and G sing different versions*) I'd like to buy the world a Coke (I'd like to buy the world a water)

G: Ahh, Just do it!

M: We do things right!

G: I'm lovin' it!

M: Plop, plop, fizz, fizz!

G: Have it your way!

M: Doesn't it feel like the constitution should read—?

G: Made in China?

M: No, more like *of* the companies, *by* the CEO's, and *for* the patriarchal world domination?

G: And you said you weren't an eco-feminist.

M: NO! (*Un-pyramid is highlighted*)

G: Yes, that is the first part to our un-pyramid, and if you think of it as negative just think...

M: Negative is the new positive.

G: Hey, it worked for Enron.

Both: NO!

G: Because some human labor costs less than others.

M: Which reminds us that the 2006 round of tax cuts delivered 70% of its benefits to the richest 5% of Americans (McKibben 12).

G: And 6.5% to the bottom 80% of American wage earners (McKibben 12).

M: Because sustainable...

G: Is considered alternative.

M: And fair trade...

G: Is a luxury by our economy's standards.

M: It's guilt free.

G: No, I still feel guilty but the personal is political, and when I buy fair trade the growers get three cents for each cup of coffee.

M: \$.03...that's fair?

G: It's two cents more than regular coffee.... my two cents adds up (Shoumatoff & Spangler 202).

M: Let me put my two cents in, because people vote with their paychecks!

G: The system stays in place because...

M: You have to stay in the system!

Both: We're part of the system!

G: I'm my own world trade organization.

M: I'm NAFTA.

G: I'm the International Monetary Fund.

M: I'm the World Bank and I love shopping at World Market.

G: But what is the real cost?

M: I know, and what are...

Both: We willing to pay?

G: Demo time: a little DeComponomics in action! Say, you purchase a vegetable scrubber from your world market.

M: Oh, it was so cute; it looked like a little potato with eyes!

G: Yea, so your little fake potato scrubber costs...

M: 99 cents, what a deal!

G: But who's getting ripped off?

M: The little debris from the dirty carrot I scrub?

G: No, Mary. Let's look at the equation using our eco-dollar system.

M: Oh, boy.

G: Now the scrubber costs 99 cents but it was made in China and shipped here, the CO2 emissions on that alone will cost you \$20.

M: OK, so \$20.99 for the scrubber.

G: Well, Mary you are forgetting that the bristles and the fake potato are made of plastic, so you have to add in your no-decomposition tax because what do we know about fake potatoes...

M: They don't compost?

G: That's right so add in \$100 eco-dollars for your no-decomposition tax and what do you have?

M: \$120.99.

G: For a fake potato scrubber, you can use your hands when you are scrubbing your potato.

M: But wait, we're talking global economics here.

G: (*Holding scrubber*) Exactly.

M: A potato scrubber is so small, compared to the bigger eco-debts we have to pay, and besides, you are a hypocrite because you are on the stairs up...you are working your way up until you hit the glass ceiling.

G: Oh, that's going to hurt my head...and besides, I

do *not* represent the white-collar mentality.

M: We *are* representing white collared jobs of the Ivory Tower; we're at an academic conference.

G: Well then maybe one of these fine educated folks can answer a question we have been pondering for years now: where is the Ivory Tower? Does anybody know?

M: We heard it was in the upper east coast but all we saw there were red bricks and dead ivy.

G: Yeah and besides, when I think of ivory, I think of elephants and we know that's a bad scene.

M: Better stick to your Lance Armstrong live strong bracelet. So, what color collar do you think your coffee growers have?

G: Green?

M: No.

G: Brown?

M: That is racist.

G: Well, environmental racism does exist, and I am not afraid to claim that. And you know what environmental racism reminds me of?

M: The Lower Ninth Ward?

G: Ah, where 80% of New Orleans black population lived.

M: Yea, and most of the people that didn't get out.

G: No, it doesn't remind me of that.... try another one.

M: Eco-justice?

G: Oh, hearing that reminds me of Clinton's Executive Order stemming from the Civil Right Act of 1964 that states that any federally funded organization had to make environmental justice part of it's mission and that environmental hazards shouldn't unfairly affect minority and low-income populations (Agyeman 18)...but that's still not what I was thinking of.

M: Was I at least close?

G: In the ball park, or site for a hint...

M: Um, global eco-justice?

G: No...but that is a good one too.

M: Yes, and it makes me think of the Mercury Market Minimization Act of 2007 that Barack Obama put together to stop the U.S.'s shipment of toxic mercury to undeveloped nations (Hawthorne 12).

G: Location, location, location!

M: Racism, racism, racism! Wow, what could be harder to say that racism a bunch of times?

G: Globalization, globalization, globalization! Now, you still didn't guess what I was thinking of.

M: Give me a hint.

G: I said if you were really good we might go...you love the food...you get to ride the rides...

M: Oh, oh, the Abusement Park!

G: That's right, its time to have...

Both: SUPER FUN! *(Some carousel music starts playing)*

M: Oh, yes, I could be princess for a day. Is there a superfund(d) site nearby? Can I get a funnel cake?

G: You betcha! They're never too far away, you get to choose from the 427 sites in Illinois alone (Environmental Protection Agency) 139 in cook county alone, and if your really good, we'll get a funnel cloud!

M: Oh, can we go to the Lake Calumet Cluster Site? Do they have a magic mountain?

G: *(Marks Mary with the number of the site)* Oh, yes, and it's majestically carcinogenic.

M: Oh yeah, the Lake Calumet Cluster was declared a superfund site, but hasn't there been a slew of governmental and business initiatives to make it into an eco-park?⁸

G: One that features endangered animals that have to exist in this shoddy swampland.

M: Maybe we could see the screaming eagle!

G: It's attempt at urban environmental activism...

M: Oh, the merry go round!

G: Yes, that's what you will get if you pursue direct action, considering George Ryan earmarked 12 million dollars for the eco-park back in 1996. It was going to be a beacon of sustainable hope.

M: I want to go on the raging waters!

G: Yes, 87 acres of wetlands that the steel industry dumped on, framed by mercury, ethylene glycol, chromium and trichloroethane.

M: Are they fun?

G: Well, they aren't easy to pronounce, and it's not called superfund for nothing, princess for a day!

M: Does it have a scrambler or twister? I love that I

almost puke because I lose equilibrium on those things.

G: Oh, you'll puke all right!

M: All of this fun makes me thirsty. Can we grab a slushy?

G: Not just any slushy, we can get our hands on a toxic sludge slushy.

M: I think I'll just have water. *(Goes to drink it)*

G: NO! No, don't drink the water!

M: Why not, if it's good enough for the million people who are living within a ten-mile radius of the eco-park?

G: That's insufficient data... Still, don't drink the water.

M: But I get to keep my crown, right?

G: Not really, there's lead in it; there's been a recall.

M: So, I have to give it back? But I wear it everyday? You know, "ecological economists argue that natural and created capital are fundamentally complements" (Goodstein 202-3). Complementary, geez...I feel like we are programmed to think of them as polar opposites.

G: Yeah, but we are going bankrupt on natural capital.

M: Ohh, I love how you are using economic jargon to equate the way we take earth's production for granted.

G: It's like we are charging it.

Both: Charge!

M: Paying off your carbon offsets each month...\$100.

G: Filling up with ethanol fuel each time...\$52.

M: Knowing that you are going in the red because you decided to go green...

Both: Priceless!

M: We are using plastic to buy plastic, and we are becoming overdrawn with our oil.

G: And plastic is the excrement of oil (Mailer 205).⁹

M: And plastic is just a rationale for MORE! *(Triangle reappears and More is highlighted)*

G: More is better...

M: I buy it, don't you?

G: I have a magic trick! Can I try it? Can I try it?

M: Okay.

G: I am going to make this plastic bag disappear. Abracadabra! Schzam!

M: Nice try.

G: Damn, it worked before.

M: No it didn't, don't be an Inhofe about this, because that is the point—it doesn't go away.

G: Well, it could...

M: It's like our friend who bought plastic tits with plastic.

G: But they get re-poed.

M: Yeah, but she got more for a small amount of time.

G: And so did her boyfriend.

M: Speaking of plastic, Californians alone (almost all of whom have access to clean tap water) now throw away 1.2 billion single-serving water bottles annually (Imhoff and Carra 30).

G: And now a word from our sponsors...

M: But stay tuned, because when we get back we're bringing the magic! (*Gets bottle of water, moves downstage*)

G: Rising temperatures got you feeling parched? Are you dehydrated? Run down? Have a little kidney inaction going on?

M: I'm usually so good with my water intake, I'm downright religious, what happened I forgot to drink...well...the water, and then I got this bad infection...I don't want to talk about it!

G: And you don't have to—any explanations necessary—only desire for a little Artic Ice!

M: I feel so cool.

G: Yes the ice caps are melting and we are packaging it up in billions of plastic bottles and shipping it around the world just for you.

M: For me and my kids, um, I mean kidneys.

G: Never fear wherever you find gas we'll be near! Look for us in the cooler and, grab the Artic Ice!

M: (*Drinks the whole bottle and ends up soaked*) Hmm, what's that?

G: Polar bear hair, it's incidental...Artic Ice you melt it, you drink it! Cool and refreshing!

M: Hmm...good.

Both: (*Singing*) Oh-oh-oh it's magic, you know...never believe it's not so, oh-oh-oh, it's

magic...

M: That's right, welcome back! It's time to get our magic on.

G: Think outside our boxes.

Both: (*singing*) Little Boxes...little boxes...

G: We manicure our lawns with hazardous materials.

M: We drive in our own temperature-controlled bubbles.

G: Yeah, and I want as many people to vote for our next president as they do for American Idol.

M: What kind of magic do we need to make that happen?

G: A billion dollar marketing campaign?

M: Eh, it's been done.

G: What about corporate sponsorship?

M: That's so 2004.

G: Maybe the candidates can sing cheesy pop tunes?

M: Hey, that's what got Clinton elected!

G: My six-year-old niece can name all the corporate logos.

M: Oh yeah, is that the same niece that thinks chicken McNuggets have chicken in them?

G: Well 30% of them are chicken.

M: That's magical. How do you put 30% of something into that "something" even though it isn't that "something"?

Both: Magic! (*Magic is highlighted*)

M: Is Santa Claus...

G: It's microwavable meals...

M: It's disposable diapers...

G: It's being cold in the summer time because the air conditioning is blasting...

M: It's butt wipes for grown ups...

G: It's true security...

M: It's social security...

G: (*Laughing*) Magic is that the war's on credit. And so is this outfit.

M: Mine too! Everything is so funny to her...but this is serious!

G: Seriocomic.

M: Right, because we credit the war as the problem for...

G: Economic insecurity...

M: Industrial instability and...

Both: Oil addiction!

M: It's all about the magic and magic is about not thinking about where things come from.

G: Or where they go when you're done with them.

M: It disappears, it's magic.

G: Then it reappears for \$.99 at the dollar store.

M: You know what else is magic? Tomatoes.

G: Oh yeah, especially with mozzarella and basil.

M: Actually I was thinking it's magic that 80% of our tomatoes are harvested and shipped green and then artificially ripened upon arrival at their retail outpost (Halweil 45).

G: It's tomato trafficking. I mean how many of you would like to be artificially ripened? I just got here. And I appreciate a little foreplay.

M: That's not magic, and now I am pissed that I went to Whole Foods and spent my whole paycheck.

G: Seems like it takes a lot of green to be green.

M: Not really, if you are truly reducing and reusing

G: But I have to buy all the new eco-gadgets.

M: You get what you pay for.

G: When I spend time sorting my recycling, or walking instead of driving—do I get what I pay for then?

M: I don't know for sure...we'll find out.

G: What if I don't get a payoff for all my investments?

M: That's the risk of playing the market.

G: I'm not worried about it; I'll just charge it!

M: Consider it an investment.

G: With interest, especially my own in the moment when I want what I want and I want it now!

M: It makes us think of more and better.

G: We should be proud of our asses and our national debt...they're the biggest in the world!

M: Our homes are bigger: the size of new houses has doubled since 1970, even as the average number of people living in each one has shrunk (McKibben 34).

G: And it takes more to heat and cool those houses.

M: I just love vast amount of air-conditioned empty space.

G: Some of these things have explanations...magicians always have their tricks.

M: That's not magic, that's illusion.

G: Exactly. I mean magic is Santa having different wrapping paper than Mom and Dad.

M: And the tooth fairy—breaking into the house—to “leave money”.

G: Magic is Las Vegas.

M: Yeah, escaping is magic.

G: We don't need explanations for that. We are fully trusting in the magic of those moments.

M: Like diamond rings...do you know how many ad campaigns have “magic” in them?

G: Helzberg Diamonds, Zales Diamonds, Jones Brothers Diamonds... (Farah 14).

M: Uh, blood diamonds. Magic for them is pillaging South Africa.

G: Finders-keepers.

M: Um, keep your fingers...Underprivileged, impoverished folks are so *not* hot right now.

G: Unless you're adopting one.

M: Geez, Glenda...that's crossing a line.

G: But where is the line?

M: My line is that the only regular boyfriend I see is my Fed Ex man, whom I know by name, Bob, I miss you...be back soon, love. Or, that I read Deep Economy and decided to only eat what was in my pantry until I used everything before I went shopping and after three days of that lifestyle I went to the grocery store everyday for the next five days—to stock my pantry up, and I hate most of all that I have mold growing in my walls and my landlord demands that I keep the air conditioner running, even when I am not there—just so it doesn't grow.

G: Eww... It seems like my life is a contradiction. Don't I deserve those 99 cent bargains? My water comes wrapped in petroleum. And I tried to take a no Styrofoam pledge, only to be begged by my daughter for a snow cone—that they only serve in Styrofoam. And, I'm living on an underground oil spill because I would go bankrupt if I reported it. Me, Glenda Greenhouse who goes around saying “how can we expect big business to do it if we won't do it

ourselves,” I am the contradiction of consumption.
Kill me now!

M: Okay...(Pulls out gun)

G: Do we really need that display of violence?

M: It’s just plastic-- it’s harmless.

G: Do it, quick—before I change my mind, and don’t aim for the face.

M: (Shoots) Hold on...(Sprays green “blood” on her...Glenda falls) She’s so dramatic!

G: This is my diva moment!

M: Yeah, walking over that would be like climbing Mt. Everest.

G: What’s the alternative? I don’t always want to die and you don’t always want to kill.

M: Eventually we have to be concerned about societal satisfaction and durability.

G: Satisfaction and durability – add soft and that reminds me of my toilet paper.

M: Right on, it’s like “we’re wiping our asses with endangered habitat”.¹⁰

G: 500,000 acres of virgin forest a year – clear-cut, every year for us to wipe our asses (Shoumantoff & Spangler 201).

M: On magically soft toilet paper

G: Squeeze the Karma!

M: Yeah, all of these economists talk about production and consumption being the main components of any commerce model Paul Hawken tells us that the missing piece is waste.

G: We have to ask what does commerce make, what does it take and

Both: What does it waste?

G: It’s what we have been saying all along, where does it come from and where does it go?

Both: DeComponomics!

G: We all win with decomposition, and don’t forget pollination for free if you act now.

M: Glenda, nothing is free. Maybe we should stop giving nature away for free.

G: I am just trying to get people to believe in nature. This environmental movement is humanity’s immune

response to resist and heal...

M: ...political disease, economic infection and ecological corruption caused by ideologies.

G: Yeah, so it is up to us to decide about possibilities and solutions. Don’t you think human kind knows what to do?

M: I hope so, I mean if people buy DeComponomics, which includes decomposition, economics...

G: And don’t forget pollination for free!

M: Exactly, Glenda. Because during the span of the twentieth century big ideologies, like religion, have dominated our beliefs...

B: (Glenda and Mary sing with jazz hands) capitalism, socialism, communism...

M: Because this is the first time on earth that a powerful non-ideological movement has arisen.¹¹

G: What are you willing to pay for nature to stick around year after year, to clean up our messes in the oceans and in the air?

M: How much does it cost to trust in the one thing that has *never* failed us?

G: You are what you charge, are you over your limit?

M: But we didn’t charge anything for this show, and nature doesn’t ever charge us for her services...

G: So, are you willing to take green to a new level? If so, give us your dollars.

M: Yeah, you give them to strippers.

G: And we’re dirty girls!

M: And perhaps a little (Wink) greener...

G: And Mary does a great lap dance! C’mon, are we really willing to pay?

M: I want alternative energy to be the new normal and I don’t care how!

G: I want sustainability to be sustainable, give it to me, now!

M: I want a new understanding of wealth and growth and I don’t care how much it costs!

G: I want balance and I want it now!

M: I want it now Daddy!

G: I want it now!

Endnotes

- ¹ A Congressional Research Report for Congress on the honeybee decline estimates that 33% of the entire American diet is dependant on honeybee pollination. Depending on food choices of an individual it is entirely possible to eat large percentages of food in the daily diet that is dependant on the honeybee.
- ² Joe Robinson, of the Los Angeles Times estimates, “38% of the general bee population has disappeared” (1).
- ³ “If any given terminology is a reflection of reality [,] by its very nature as a terminology it must be a selection of reality; and to this extent it must function also as a deflection of reality” (Burke 45).
- ⁴ Professor Jonny Gray discussed ecology informing feminist politics, instead of the other way around (which is typically the way ecofeminist thought is generated). He called this “femecology.”
- ⁵ Paul Hawken was quoting ecological theologian, Michael Novak’s homage to and for capitalism.
- ⁶ Barbara Kingsolver’s book *Small Wonder* explores many of the author’s personal experiences and observations with an inquiry into their environmental consequence, on such example was the purchase of berries during winter months.
- ⁷ According to the 2006 documentary, *Iraq for Sale: The War Profiteers*, Halliburton’s stock has quadrupled since “the war began in 2003,” which leads us to believe that yes, indeed, companies are profiting off of the war.
- ⁸ According to a 2006 Illinois Government News Network press release clean up of the site was set to begin but results from certain studies were still pending and would effect how the clean up is conducted and funded.
- ⁹ Allen Hershkowitz, of the Natural Resources Defense Council, quipped when asked about the future of endangered habitats. Essay found in the Shoumantoff & Spangler article “An Eco-System of One’s Own.”
- ¹⁰ This idea was present by Paul Hawken at a Bioneers conference in 2006 and echoes his recently published book *Blessed Unrest: How the Largest Movement in the World Came Into Being*.

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A Sociable Movement: Coming Together at Farmers' Markets

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Abstract

This essay explores the historical roots of farmers markets in the United States and examines their current growth within the framework of a larger social movement, using M.C. McGee's conception of social movements as changes in human consciousness. The essay argues that farmers markets form a significant link in the sustainable foods movement and help negotiate symbolic and sensual connections between human culture and the natural environment. Focusing on markets in the San Francisco Bay Area as a particular case study, research for this essay includes a June 2007 survey conducted with patrons at the three weekly farmers markets in Berkeley, CA. Special attention is paid to social, economic, and environmental considerations in consumer decisions to shop at farmers markets.

Well before dawn nearly every Saturday of the year, farmers from a dozen different counties surrounding the San Francisco Bay begin heading towards 43 different farmers market sites throughout the Bay Area to sell their produce. These same cities host another 60 farmers markets on Sundays and weekdays, either seasonally or throughout the year. Even before ten in the morning on Saturday, when the downtown Berkeley Farmers Market officially opens, nearby residents have begun to weave their way along the block-long stretch of Center Street lined with tables covered by awnings or umbrellas and laden with fresh produce, herbs, cut flowers, breads and pastries, freshly roasted organic coffee, olive oils and balsamic vinegars, meats, fish, prepared Thai and Himalayan dishes, sushi, jams, honey and beeswax candles, orchids, garden plants, a knife sharpener, a massage table, and musicians. Five hours later, as the market closes, farmers and vendors barter the last of their goods, sweep up the veggies and fruits that have fallen to the street, pack tables, boxes, baskets, and awnings back into their trucks and head for home. In the hours between, nature and culture, city and country, producers and consumers mingle in a rich panoply of sights, sounds, tastes, and smells, giving material expression to a larger social movement that has been on the rise for the past few decades.

Paul Hawken, the eco-entrepreneur, has recently garnered attention for his latest book, *Blessed Unrest: How the Largest Movement in the World Came into Being and Why No One Saw It Coming* (2007). In the latest issue (May/June 2007) of *Orion* magazine, Hawken presents a summary of the book's thesis, arguing that the environmental and social justice movements have become intertwined with the efforts of indigenous cultures to resist globalization—and

together have created a social movement with more than a million organizations across the world working towards ecological sustainability and social justice. Hawken writes:

By conventional definition, this is not a movement. Movements have leaders and ideologies. You join movements, study tracts, and identify yourself with a group. You read the biography of the founder(s) or listen to them perorate on tape or in person. Movements have followers, but this movement doesn't work that way. It is dispersed, inchoate, and fiercely independent. There is no manifesto or doctrine, no authority to check with.

(<http://www.orionmagazine.org/index.php/articles/article/265/>)

Hawken does indeed follow conventional thinking with regard to social movements, equating them essentially with membership in formal organizations. In doing so, he may inadvertently explain "why no one saw it coming"—or at least "no one" who was focused solely on tracts, charismatic leaders, or membership lists.

Nearly 30 years ago, Michael Calvin McGee (1980) argued that social movements need to be understood as changes in human consciousness rather than as merely an account of human organizational behavior. For McGee, evidence of a social movement is not to be found by tallying membership lists within activist organizations, but rather by observing and recording changes in ideographic

structures of social norm systems, examining a culture's understanding of the world. A social movement not only demands change, it may be argued to exist only to the extent that it is successful in moving or changing the *status quo*—thus changing the terrain for all citizens, not just those activists in the vanguard. The reach or impact of the women's movement, for example, can be measured far beyond the ranks of dues paying members of the National Organization of Women (NOW) to encompass nearly everyone whose perceptions of women's roles and rights have been altered—whether willingly or not. Ideologies work hand in hand with legislative acts and material conditions, changing the texture of our daily lives; a social movement becomes visible only in the interplay of all of these forces.¹

For many cultural observers, such a shift in human consciousness (translated into changes in human behavior) has emerged in the last few decades with regard to the foods we eat. The material practices surrounding food production and consumption deserve attention from communication scholars—and especially those interested in environmental communication. The decisions we make each day with regard to the foods we purchase and eat are political choices; we vote with our food dollars and forks in ways that help determine both personal and environmental health, safety, and well-being. Tom Philpott (2007) has noted, "Today, even as corporate giants such as Monsanto and Archer Daniels Midland consolidate their grip over how most food is grown and consumed in this country, people are forging new relationships with and around food. They're flocking to farmers' markets, joining CSAs, growing food in urban community gardens" (<http://www.grist.org/comments/food/2007/02/15/renaissance/index.html?source=friend>). Philpott and others consider these activities to be part of a growing sustainable food movement. With 4,385 farmers markets currently operating across the United States, (an 18 percent increase since 2004 according to the USDA), the rise of farmers markets represents an especially interesting phenomenon within this larger sustainable foods movement. In bringing food producers and consumers together in a shared space, farmers markets help clarify Wendell Berry's (2002) proposition that "eating is an agricultural act" (321), reminding us that we are all participants in agriculture. Farmers markets visibly unite the city and country, helping to undermine the divides that are integral to the system of industrialized agriculture that dominates the contemporary rural landscape—and the contemporary supermarket. The alternative values and practices responsible for the resurgence of farmers markets in the past quarter century form a

direct and integral link between rural and urban lives and lands, and to the past as well. This essay examines the phenomenon of farmers markets, exploring both their historical roots and the contemporary ideological structures that support them.

A History of Farmers Markets

Biblical evidence attests to a centuries-old tradition of farmers markets. Within the United States, they date back to the largely agrarian society of colonial America. Most sources cite Governor John Winthrop's 1634 order that a market should be held every Thursday in the city of Boston as evidence of the first farmers market on record in the United States.ⁱⁱ By 1700, "there were 9 other markets in New England, 10 in New York, New Jersey, and Pennsylvania, and one in the South" (Wann *et al* 4). During the colonial period, most cities held markets once or twice a week and most of the farm commodities for sale at them were brought in by wagon, produced within a 5 to 10 mile radius of the city (Wann *et al* 5). Farmers markets remained the primary place where city residents purchased fresh produce into the opening decades of the 20th century. When the US Census Bureau conducted its 1918 census, it "found that more than half of American cities with 30,000 inhabitants or more had municipal markets. In total, the Census Bureau counted 237 municipal markets in 128 of the 227 cities with populations above 30,000" (Spitzer and Baum 10). Even as late as 1948, a USDA study emphasized that "it is important and interesting to note the small size of town which will support a farmers' retail market. . . . About 15 percent, or 41 of the retail markets [then in operation], were located in towns of even less than 10,000 and 15 of these were in towns of less than 5,000" (Wann *et al* 45).

Farmers markets were founded on the principle that they served the public good, benefiting local farmers and city residents alike. In 1658 Boston residents constructed a wooden building to house the weekly market and in 1742 the wealthy merchant Peter Faneuil, built Boston's Faneuil Hall to replace the wooden structure, presenting it as a gift to the city of Boston.ⁱⁱⁱ Other cities followed Boston's lead, building public market halls that also served as community centers, housing public meeting rooms, town government offices, fire watchtowers, or even large halls to accommodate council meetings, dances, or theatre productions (Spitzer and Baum 10). Market halls became public spaces in a community where a wide range of individuals could meet and interact easily in a safe, inviting, and lively setting.

Following World War II, however, large corporations began to dominate food distribution in the US, aided by developments in transportation as well as new refrigeration and food processing technologies. A 1948 USDA publication notes that, “As this country grew and developed into a great industrial nation, the farmers’ produce markets became proportionately less important in the overall food distribution system. However, the number of these markets and the volume handled by them continued to increase” (Wann *et al* iii). This increase in number and volume may be attributable at least in part to the fact that the USDA included both city wholesale markets and wholesale shipping point markets as part of the total count of US farmers markets in the 1940s. Of the 724 farmers produce markets in operation in the US in 1946, less than 300 were retail markets with direct-to-consumer sales. An additional 208 were classified as “farm women’s markets,” located mostly indoors and in the southern states, offering farm women an opportunity to sell eggs and butter, baked goods, preserves, and crafts along with some seasonal produce. Overall, “even though there are many more retail markets than wholesale, the latter handle a greater volume of business” (Wann *et al* 9).

The decline in the number of retail farmers markets in the United States following WWII and continuing through the mid-1970s may be attributable to a constellation of factors: growth of urban populations and the spread of suburbs, the loss of nearby farmland, the adoption of specialized vs. diversified agricultural production, more efficient means of transportation, new food technologies (including improved refrigeration for shipping as well growth of the frozen food industry), changes in consumer shopping habits, and an increase in the number of women working outside the home (Wann *et al* 9, National Commission on Food Marketing 7-8).^{iv} In its June 1966 report, members of the National Commission on Food Marketing argued,

Rising incomes have even more impact than growth of population on the American food industry. . . . Consumers have been increasingly able to eat expensive rather than cheap calories (steak instead of beans), buy high quality in all foods, pay for packaging, afford variety, shop in attractive stores, and indulge their tastes and whims. Demand for services incorporated in or attached to foods has

increased more than demand for raw food materials. . . . Rising incomes have enabled consumers to purchase convenience—built-in maid service—in the form of prepared or semi-prepared foods. (Not all convenience foods are more expensive than their ingredients would be if purchased separately.) (8)

These trends all worked to the detriment of farmers markets, although not without some degree of irony. Consumers seemed to have been persuaded that the convenience of canned and frozen fruits and vegetables far outweighed the loss of flavor they would have enjoyed from fresh (especially locally grown) produce. The concept of “variety” apparently translated to an ability to eat foods out of season with produce like tomatoes and lettuce available for purchase year round throughout the country. For most Americans, the “meat and potatoes” diet that predominated in these years demonstrated little variety in flavor or form. Agriculture in any case was growing increasingly less diversified, turning towards consolidation of farms, vast monocultures of commodity crops (corn, soy, wheat), and loss of diversity of fruit and vegetable varieties. And though food prices increased, consumers on average had more disposable income to devote to food purchases than ever before, so that food expenditures as a percent of income began to decline fairly rapidly during this period, helping to buttress an expectation that Americans could count on an inexpensive and abundant food supply.^v During the 1950s many of the public market halls built for farmers markets deteriorated and many were abandoned altogether or converted into private enterprises.

The language of the USDA’s 1948 publication gives further evidence of changing relationships between city and country. The shift from retail to wholesale methods of selling was described as an “evolutionary process,” set in motion by demographic and technological changes. “Since it was impossible for a farmer several hundred miles from the market to sell his products on the market in person, it was only natural that some agency would emerge to perform this task” (Wann *et al* 9). What emerged was neither “natural” nor pre-ordained, but the result of deliberate public policy choices which resulted in significant declines not only in the number of farmers markets but in farm incomes beginning in the decades following WWII. In place of direct contact between farmers and city-dwellers, food wholesalers and distribution companies began to

siphon off ever-increasing marketing shares of the food dollar. The increase in food prices went exclusively to the marketing cost of foods, while its “farm value” (the percentage of a food dollar that went directly to farmers) steadily declined.^{vi}

Beginning as early as the mid-1970s, the trend in the declining number of farmers markets began to reverse. The Farmer-to-Consumer Direct Marketing Act of 1976, passed by the US Congress during the Carter administration, helps mark this reversal. Established as a 3-year pilot program (to end after the 1980 growing season), the act authorized 3 million dollars in federal grant money to “initiate, encourage, develop, or coordinate methods of direct marketing from farmers to consumers” (*Direct Farmer-to-Consumer* i). The 1979 energy crisis, emerging at the mid-point of this project, helped call further attention to the heavy reliance on fossil fuels in producing and transporting agricultural products. Many areas of the country depended on out-of-region food sources, even ones that were themselves rich in agricultural lands, prompting concerns about food security. In 1980, Robert Sommer noted, “a century ago, Connecticut produced 80% of its own food supplies. Today 85% of Connecticut food is imported from outside the state and often from outside the nation” (14). It is not unusual for food grown in one area of the country to be shipped out to wholesalers located elsewhere—sometimes to be shipped back again in a few days. One study cited in the 1980 Report to Congress detailed the situation in Knoxville, Tennessee, reporting that less than 5% of the food sold in Knoxville was grown locally. “Although about 3,000 acres of tomatoes are cultivated in the Knoxville area, virtually none are marketed there. . . . \$17 million worth of Tennessee’s annual fruit and vegetable production is shipped out of State while \$32 million worth of fruits and vegetables is shipped into Tennessee from Texas and California” (*Direct Farmer-to-Consumer* 6). Congress has reauthorized appropriations for this act continuously since 1980.

In his 1980 book, *Farmers Markets of America: A Renaissance*, Robert Sommer presented the findings garnered from his research and travels to farmers markets across the United States. Sommers traces this renaissance back to the “turbulent 1960s,” offering some evidence of the growth in the number of farmers markets during the 1970s and detailing the benefits for consumers and producers alike. Eighteen years later, Harriet Festing’s study could claim *Farmers’ Markets: An American Success Story* as its title. Though Festing uses 1980 as the starting point for her narrative, the USDA figure she cites of 1200 farmers markets in operation within the United States

in that year indicates that Sommer was a prescient observer; this figure represents a 260% increase over the number of retail farmers markets in operation in 1946 and it is likely that this growth occurred primarily in the late 1960s and throughout the 1970s.^{vii} Some regions showed especially dramatic increases in these early years. For example the number of public markets in Tennessee and Alabama grew from 18 in 1977 to 26 one year later. California held 15 farmers markets in 1978 and 184 by 1992 (Sommer 13; Festing 1).^{viii} (Currently there are 439 farmers markets in California [“State Marketing Profiles: California”].) In 1996 the number of farmers markets had doubled to 2400 and USDA reported over 20,496 farmers who sold their goods at farmers markets directly to over a million Americans each week (Burns and Johnson). Just four years later, another 463 markets were added to the USDA rosters, but more significantly still, the number of farmers selling their goods at markets more than tripled to 66,700 farmers who now served 2,760,000 customers weekly. According to the USDA’s most recent report in December 2006, farmers markets have experienced an additional 18.32% increase in the past two years, with 4,385 markets currently operating in the United States (“Farmer’s Market Growth”).

A history of farmers markets itself already begins to indicate some of the reasons for their resurgence—both for farmers and city dwellers. It should be noted that cities have also benefited from this trend as indicated in Spitzer and Baum’s 1995 study, *Public Markets and Community Revitalization*. Civic and municipal organizations, then, have often continued to play an important role in the creation and maintenance of a local, public market.

Contemporary Incentives and Attitudes

Contemporary surveys and other empirical studies offer some evidence of the motivations that encourage farmers and city dwellers alike to participate in farmers markets. To supplement this material, I conducted a survey with a small sample of shoppers at each of the three weekly farmers markets held in Berkeley, California. (See Appendices A-G for the survey and its results.) The factors which help explain the resurgence of farmers markets over the past 30 years might be divided into the broad categories of economic, social, and environmental incentives—and all three influence the motivations of farmers and city dwellers, sellers and buyers alike.

Economic Factors

Selling fruits and vegetables (and other farm commodities) directly to consumers at farmers markets affords farmers more control and independence both over what they grow and how they price it. Farmers markets help farmers retain a greater percentage of the farm value of the goods they produce, keeping many small farms solvent and restoring farming to a viable option for farmers' children. Sommers' 1980 study found that for some crops (like strawberries), even "taking into account the increased expenses for time and travel, the profit margin at the farmers market is almost three times better than at the wholesale market" (35). More recently, the USDA reports that average annual sales per vendor at farmers markets in 2005 totaled \$7,108 (Shaffer and Cox "USDA Releases"). Though this figure seems low, farmers markets provide enough revenue for at least 25% of farmers to rely on them for their sole source of farm-based income. And farmers markets are, significantly, a cash-based enterprise, providing a regular income throughout the growing season. The success of small farms, in turn, helps revive rural economies.

Though farmers earn more in selling their produce directly to consumers than to wholesalers, this does not necessarily translate into higher prices for consumers. In Sommers' 1980 study, farmers market prices for produce were less expensive than supermarket prices in 91% of the markets surveyed. Nearly two decades later, perhaps attesting to the rapid growth in organic sales, Festing concluded that "most consumers who buy directly are not looking for bargain prices; one researcher found that 25% of respondents he questioned expected to pay more for farm produce. However, in general fruit and vegetables seem to be cheaper than supermarket produce" (Festing 30).

At the Berkeley Farmers Market, consumers gave satisfaction with price a mean rating of 3.67 in comparison to means of 4.74 and 4.47 respectively for their satisfaction with the quality and variety of produce available at the market. In a question asking what drew them to the market only 41 out of 166 (25%) gave prices as a reason for shopping at the farmers market. While completing the questionnaire, one individual was heard to exclaim "definitely not price!" when she reached this question. Others made a point of saying that while the prices were high, they felt the higher quality and freshness of the produce—as well as the act of supporting local agriculture—justified the added expense. In a comparison of prices for 6 items (apricots, strawberries, figs, lettuce

mix, heirloom tomatoes, and potatoes—all organic) found at the farmers market and in 3 local grocery stores in the same week, farmers market produce was lower or comparably priced in 4 instances and higher in two instances (both times at an independent Berkeley grocery store that specializes in produce). But in 12 instances no comparable organic produce was available at grocery stores (and in two instances conventional produce was more expensive than its organic counterpart at the farmers market).

Still, there remains a perception that farmers markets are expensive, catering to individuals who can afford to pay higher prices for food. The San Francisco Ferry Plaza Farmers Market (operating on Tuesdays and Saturdays throughout the year) received some perhaps unwanted attention recently on this score following the publication of Carlo Petrini's book, *Slow Food Nation*. As an anonymous writer for the SF Chronicle's food section describes it in an article entitled "Showdown at Slow Food,"

It seemed like a natural -- Slow Food's Italian founder, Carlo Petrini, would sign copies of his latest book at San Francisco's Ferry Plaza Farmers Market, arguably the slowest of all food markets in the country. But the plug was pulled abruptly after some of the market's management and farmers read what he'd written about Ferry Plaza in his book "Slow Food Nation." Among other things, he called the prices "astronomical ... boutique-y," the market "extremely exclusive," the farmers "all well-to-do college graduates" and the customers "either wealthy or very wealthy ... most of whom seemed to be actresses" who showed off their vegetables "like jewels, status symbols."

<http://www.sfgate.com/cgi-bin/article.cgi?f=/c/a/2007/05/16/>

Yet farmers markets have long worked hard to make fresh, wholesome produce available to low and fixed income individuals. "With the help of such USDA programs as the Women, Infants and Children (WIC) Farmers Market Nutrition Program and the Senior Farmers Market Nutrition Program, farmers markets also provide low-income people with increased access to fresh foods" (Shaffer and Cox "USDA Announces"). Pilot programs across the country have begun to implement payment systems

that allow people to redeem food stamps or use electronic benefit cards at farmers markets.

Social Incentives

While a farmers market is clearly a setting in which commerce is conducted, that is not the sole and for some not the primary motivation for returning week after week. The market gives farmers an opportunity to interact directly with customers, allowing them to introduce new fruits or vegetables, exchange recipe ideas, and better judge consumers' changing interests and preferences. Over time, conversations between farmers and customers who return each week expand to include swapping news about families or travel or common interests. Anecdotal evidence indicates that many farmers relish these interactions. In an interview a few summers ago, Andrew at Full Belly Farm described his weekly experiences at the farmers market as providing the "juice" that energized him for the rest of the week. Andy of Mariquita Farm near Watsonville, California, recently made the decision to quit selling his produce at the San Francisco Ferry Plaza Saturday market, opting instead to focus on his CSA and restaurant sales. (As he notes, "It's never enough to just grow vegetables to survive as a farmer. The challenge of farming is to change as fast as the marketplace does.") In his on-line posting, he writes,

Over the years Julia and I have made many friends in San Francisco, and we won't be able to see them every week any more. Saturday at the farmers market has been the high point of our social lives for years, and no matter whether Julia or I went to the market, the first question we've always asked each other when the truck got back to the ranch wasn't, "How much money did you make?" but "Who did you see?"
(<http://www.mariquita.com/Farmers%20Market/whatwerebringing.html>)

It should be noted that websites, blogs, and newsletters (sometimes delivered along with CSA boxes) are other means that farmers have adopted to keep in touch with their customers.

Consumers obviously enjoy the social aspects of the farmers market as well. Respondents to various surveys have identified the social atmosphere as an

important reason for their decision to shop there. In Festing's 1998 study, 63% of respondents listed this as a motivation. She cites additional research conducted in California as finding that "when compared to supermarket shoppers, customers at farmers' markets are more likely to come accompanied by a friend or relative and, in separate ratings, it was found that they considered farmers' markets to be more friendly, happier, more sociable, more rural, and to have more personal settings" (30). This bolsters a small study conducted by Sommer which found "there were three times as many informational encounters at the farmers markets and four times as many social encounters" than at supermarkets (52). My own survey found 39 of 166 (23%) respondents reporting they regularly meet and socialize with friends at the market. The music and other activities that often accompany a farmers market help enliven the experience, encouraging some survey respondents to voluntarily describe the market as a creating a form of community, or a neighborhood within the city.

This community includes the farmers who travel to the market. Nearly half of the respondents to my farmers market survey rated knowing who grows or sells their food as "very important." Overall this aspect of the market scored a mean of 4.16 on a scale of 1 to 5. One survey-taker noted that she especially appreciated the multi-ethnic diversity of the farmers and vendors at the market; another appreciated the opportunity to speak Spanish. But even individuals who might not interact directly with the farmers still gain knowledge from the experience of sharing a common space with them and their farm goods. By simply shopping regularly at a farmers market and observing what's available, consumers learn the rhythms of the farming seasons and the more specific effects of weather. The farmers market helps those who are interested learn to eat seasonally. As one survey respondent succinctly stated, "it's fun and educational."

The pleasures to be found at successful farmers markets can spill over, helping to revitalize downtown areas. Spitzer and Baum conclude,

In many ways, public markets at their best represent what is desirable about urban life: variety, color, action, the mixing of people with different backgrounds, serendipity, and fun. As effective magnets for attracting people, public markets can transform barren public spaces and provide

safe, stimulating, and nurturing environments. They can reintroduce the good elements of cities that, unfortunately, often have been lost. (115)

I consider it significant that this reintroduction of the best features of urban life involves reconnecting urban and rural lives—recalling the motto carved across the front of one of the buildings on the University of California campus in Berkeley: “To preserve for human society the native virtues of rural life.” The elements of the city that had been lost were its links to the rural landscapes that surround it—and that make urban life possible. It is also a reintroduction of nature in the form of farm goods. The produce for sale at a farmers market is admittedly a much modified form of nature, but food represents the intersection of nature (sun, seed, soil, water) and culture (the careful cultivation of plant species suited to sustaining us)—perhaps in much the same way that parks and green spaces in the city represent contained and controlled versions of nature. Yet both seem essential to enhancing the quality of life in metropolitan areas. Farmers markets create a diverse micro-environment within the city, injecting variety in the form of the abundance of farm products for sale, but also people, mixing age groups, ethnicities, income levels or occupations, political and religious affiliations. And just as diversity in the natural world is a sign of health and sustainability, so too does it help create a more healthy and vibrant city or town.

Environmental Considerations

The mingling of city and country at farmers markets embodies an environmental ethic—one which many consumers value. The environmental benefits for eating locally grown and organic food are multiple, perhaps most notably in reducing consumption of fossil fuels. By shrinking the distance produce travels from field to table, farmers markets help reduce dependence on oil. Additionally, small scale, diversified organic farming that employs alternatives to (fossil-fuel based) pesticides, herbicides and nitrogen-based fertilizers reduces this dependence even more. Currently, the production and transportation of food is the single-largest source of oil consumption in the US.

Local and diversified agriculture can also lead to greater food security. States can begin once again to reverse the balance in the percentage of food they produce vs. the percentage they import from other regions of the nation—or from other countries.

Additionally, the reintroduction of many heirloom fruit and vegetable varieties has increased the genetic diversity of American food crops, lessening the chance that a single plant pathogen or insect could decimate vast monocultures of a single commodity crop. If, as Sommer asserts, part of the incentive for the resurgence in farmers markets beginning in the turbulent 1960s was concern for the health of the environment (and individual health), that motivation remains in place a quarter of a century later.

Berkeley residents seemed keenly aware that their purchasing decisions and their eating constituted a political and an environmental act. Ninety-three percent of the consumers surveyed at the Berkeley farmers markets identified the opportunity to support local agriculture as one of the reasons they were drawn to shop at there. For 41 individuals (nearly 25%) this was the most important reason they chose to spend their food dollars at the farmers market. Additionally, the opportunity to purchase fresh, local and organic produce was valued by 96 and 90 percent of the respondents respectively. If consumers value the interactions with farmers available at the market, they also value knowing where their food is grown (a mean of 4.24 on a scale of 1-5) and how it is grown (a mean of 4.55). I interpret these as further indications both of consumer interest in and knowledge about agriculture and the importance these survey respondents placed on local and sustainable agriculture. A few of the individuals surveyed made a point of expressing their desire to shop outside the system of industrial agriculture that ends up for sale at the local supermarket. These values extend beyond wanting food that tastes delicious (no trivial matter) to wanting food that they perceived as healthy and good for them—and, by extension, good for the planet. Carlos Pettrini has observed that one cannot be a gastronome without being an environmentalist—and that it is foolish to be an environmentalist without being a gastronome.

Conclusion

For a variety of reasons, farmers markets matter to people. The vast majority (132 of 166 or 80%) of survey respondents in Berkeley, California, stated that having a year-round farmers market available to them was “very important.” One person added the comment, “Having access to the Berkeley farmers markets is a key factor in my satisfaction with living in Berkeley.” Though this and earlier surveys conducted by other researchers sampled only a small percentage of individuals shopping at farmers markets, and though the total number of individuals who frequent farmers markets represent still only a

very small percentage of the American public, their very presence at the market and the dollars spent there offers the sort of evidence of a shift in human consciousness that McGee may have accepted as evidence of a social movement underway.

In negotiating symbolic and sensual connections between human culture and the natural environment, farmers markets are sites of pleasure as well as politics, community as well as commerce, where

rural and urban interests meet in mutual benefit rather than conflict. The foods for sale at farmers market stands—whether carrots or coffee, strawberries or sushi—mediate nature and culture in complex (and delicious) ways. Farmers markets thus serve as a visible expression of a “blessed unrest,” the fusion of social movements arising from concerns about the environmental, social justice, and resistance to globalization, a movement that is changing—for the better--rural as much as urban lives and landscapes.

Endnotes

¹ Hawken further argues that “This is the first time in history that a large social movement is not bound together by an “ism.” What binds it together is ideas, not ideologies. This unnamed movement’s big contribution is the absence of one big idea; in its stead it offers thousands of practical and useful ideas” (ibid). His point here is somewhat perplexing, conflating the term “ideology” with “isms,” and failing to recognize the ways in which ideologies necessarily structure our very understanding of the world and our place within it. Ideologies are largely invisible and are not reducible to an easily espoused “ism.” The example of the anti-war movement in the 1960s (and currently) might also encourage a reader to quarrel with Hawken’s claim that this is the first movement without an “ism.”

² See for example, John L. Wann, Edwin W. Cake, William H. Elliott, and Roger F. Burdette. Farmer’s Produce Markets in the United States (USDA, 1948), Robert Sommer Farmers Markets of America: A Renaissance (Capra Press, 1980), Theodore Morrow Spitzer and Hilary Baum, Public Markets and Community Revitalization (Urban Land Institute, 1995).

³ Boston’s Faneuil Hall (and its adjoining Quincy Market built in the early 1800s) may serve as an illustrative example of the growth and deterioration of farmers markets in the US. According to the Boston Public Market’s web site, “The complex remained a vital commercial hub well into the 20th century. But by the 1950s, the buildings had fallen into disrepair and the once-thriving marketplace faced demolition. In the early 1970s a committed group of Bostonians sought to revitalize the old market. They succeeded in creating the country’s first festival marketplace but did not bring back Boston’s traditional public market. Today, Boston has more than twenty seasonal, open-air farmers markets, the two most prominent at City Hall and in Copley Square. But after two and one-half centuries, the city has lost its year-round central marketplace” (<http://www.bostonpublicmarket.org/>).

⁴ An irony emerges between the lines of this USDA document. Writing in the late 1940s when just under 20 percent of the US population lived on farms, the authors note that “the farmers produce market continues to be the most important source from which some cities obtain their fresh fruits and vegetables during at least a part of the year” (Wann *et al* 9). The publication includes a photograph of the street outside the Faneuil Hall Market lined with vendors with a caption that reads in part, “The space originally provided in the open streets for selling by growers is now entirely inadequate” (Wann *et al* 7). These tiny clues offer some evidence that the public still may well have preferred purchasing fresh fruits and vegetables directly from local farmers, but the opportunities to do so were disappearing.

⁵ In 1929, when the USDA began calculating and tracking this figure, Americans spent about 23% of their income on food (USDA Economic Research Service <http://www.ers.usda.gov/Briefing/CPIFoodAndExpenditures/Data/table7.htm>). This includes all monies spent on food, whether for in-home consumption (e.g. from grocery stores) or away-from-home consumption (e.g. dining out at restaurants). The figure dipped below the 20% mark briefly in the early 1940s (perhaps as a consequence of food rationing and the emphasis on planting home “victory gardens”), and then permanently beginning in 1953. By 1965, this figure had dropped to 15 percent. It currently stands at just under 10%--despite Americans’ increasing tendency to dine out. (Forty-one percent of all food expenditures are currently spent away-from home.)

⁶ In the absence of controls on agricultural production, market oversupply and low prices to farmers followed. Additionally, the USDA notes the “relative ease with which cost pressures within the marketing system can be passed backward rather than forward. In any event, the comparative stability in farm food prices during a period [1950-1965] when most other prices and costs were rising meant a decline in the farmer’s share of the consumer’s dollar” (National Commission on Food Marketing, June 1966, 15-18). The farm value of the food dollar compares the amount of each dollar spent on food that goes to farmers vs, the amount paid to marketing (including labor, transportation, packaging, advertising, etc.). Currently a farmer receives 19 cents of each dollar spent on food in the US; marketing takes the lion’s share of 81 cents per dollar. In 1965, farmers were receiving 39 cents; from 1947-1949, farmer’s earned 50 cents from every food dollar.

⁷ In 1994 the USDA defined a farmers market as “a common facility or area where multiple farmers/growers gather on a regular recurring basis to sell a variety of fresh fruits, vegetables, and other farm products directly to

customers” (Payne 1). Farmers wholesale markets or shipping point markets were no longer counted, and though other forms of direct-to-customer methods of marketing (roadside stands, pick-your-own operations, and Community Supported Agriculture [CSA] were recognized, they weren’t included in the count. The USDA first compiled its *National Directory of Farmers Markets* in 1994 and has updated it every two years since then.

⁸ The Berkeley Farmers Market, under the management of the Ecology Center, was added during this period in 1987, and is celebrating its 20th anniversary this year. The oldest of the Bay Area farmers markets, the Alemany Farmers Market in San Francisco, began in the 1940s and remains in operation every Saturday from 6 am to 5 pm. It may well be the San Francisco Ferry Plaza Farmers Market (operating on Tuesdays and Saturdays throughout the year), however, that garners the most attention.

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Appendix A

Farmers Market Survey

I teach at UC Berkeley and am interested in the role of farmers markets as part of my research in environmental communiation. Your help in filling ou this anonymous, one page survey will be greatly appreciated. Thank you!

Gender: M F

Age: _____

Ethnicity: _____

Occupation: _____

Market Date: Sat. Tues. Thurs.

1. How often do you shop at a farmers market during each of these seasons? Please circle.

	<u>At Least once/week</u>	<u>Most Weeks</u>	<u>1 or 2 Times/Month</u>	<u>Rarely</u>
Spring (Mar - May)	4	3	2	1
Summer (June - Aug)	4	3	2	1
Fall (Sept – Nov)	4	3	2	1
Winter (Dec – Feb)	4	3	2	1

2. In a typical week, what percentage of your produce (fruits and vegetables) do you purchase at the farmers market during each of these seasons? Please circle.

	<u>100%</u>	<u>75-99%</u>	<u>50-74%</u>	<u>25-49%</u>	<u>Less Than 25%</u>
Spring (Mar - May)	5	4	3	2	1
Summer (June - Aug)	5	4	3	2	1
Fall (Sept – Nov)	5	4	3	2	1
Winter (Dec – Feb)	5	4	3	2	1

3. Given the number of places you could shop, what draws you to the farmers market?

PLEASE CHECK ALL THAT APPLY.

- ☐ a. Prices
- ☐ b. Convenience
- ☐ c. Fresh, local produce
- ☐ d. Organic produce
- ☐ e. Prepared or artisan foods (e.g. meals, bread, cheese, coffee, meats, etc.)
- ☐ f. Other vendors or activities (e.g. massage, music, food tastings/demos., etc.)
- ☐ g. Support local agriculture
- ☐ h. Meet and socialize with friends
- ☐ i. Other _____

PLEASE CIRCLE THE ONE MOST IMPORTANT REASON ABOVE.

4. Overall, how satisfied are you with the following features of the fruits and vegetables available at the farmers market?

	<u>Extremely</u>				<u>Not At All</u>
Price	5	4	3	2	1
Quality	5	4	3	2	1
Variety	5	4	3	2	1

5. How important is it to you to:

	<u>Extremely</u>				<u>Not at all</u>
a. Know who grows/sells your food (e.g. talk with farmers/vendors)	5	4	3	2	1
b. Know where your food is grown (e.g. names/locations of farms)	5	4	3	2	1
c. Know how your food is grown (e.g. organic, biodynamic)	5	4	3	2	1
d. have a year-round farmers market available	5	4	3	2	1

6. Any additional comments? Please feel free to write them on the back of this page.

Appendix B

	SATURDAY		TUESDAY		THURSDAY		TOTALS	
Gender	#	%	#	%	#	%	#	%
Male	20	38.46%	11	20.75%	20	36.36%	51	31.25%
Female	32	62.50%	42	79.25%	35	63.64%	109	68.13%
Age	#	%	#	%	#	%	#	%
<25	4	7.41%	4	7.55%	8	15.09%	16	10.00%
26-39	8	14.81%	13	24.53%	15	28.30%	36	22.50%
40-59	25	46.30%	23	43.40%	16	30.19%	64	40.00%
>60	17	31.48%	13	24.53%	14	26.42%	44	27.50%
Ethnicity	#	%	#	%	#	%	#	%
White	42	91.30%	41	87.23%	38	82.61%	121	87.05%
Black	1	2.17%	3	6.38%	2	4.35%	6	4.32%
Yellow	2	4.35%	1	2.13%	5	10.87%	8	5.76%
Brown	1	2.17%	0	0.00%	0	0.00%	1	0.72%
Other	0	0.00%	2	4.26%	1	2.17%	3	2.16%

Appendix C

	How Often	SATURDAY		TUESDAY		THURSDAY		TOTALS	
Spring	4	25	44.64%	29	52.73%	31	55.36%	85	50.90%
	3	13	23.21%	12	21.82%	14	25.00%	39	23.35%
	2	13	23.21%	12	21.82%	6	10.71%	31	18.56%
	1	5	8.93%	2	3.64%	5	8.93%	12	7.19%
Summer	4	30	54.55%	34	62.96%	32	60.38%	96	59.26%
	3	12	21.82%	11	20.37%	13	24.53%	36	22.22%
	2	10	18.18%	8	14.81%	5	9.43%	23	14.20%
	1	3	5.45%	1	1.85%	3	5.66%	7	4.32%
Fall	4	25	45.45%	28	51.85%	25	49.02%	78	48.75%
	3	11	20.00%	10	18.52%	13	25.49%	34	21.25%
	2	12	21.82%	13	24.07%	9	17.65%	34	21.25%
	1	7	12.73%	3	5.56%	4	7.84%	14	8.75%
Winter	4	21	40.38%	22	40.00%	23	46.00%	66	42.04%
	3	10	19.23%	10	18.18%	9	18.00%	29	18.47%
	2	9	17.31%	12	21.82%	10	20.00%	31	19.75%
	1	12	23.08%	11	20.00%	8	16.00%	31	19.75%

Appendix D

	% Produce	SATURDAY		TUESDAY		THURSDAY		TOTALS	
Spring	5	6	11.54%	9	16.36%	6	10.91%	21	12.96%
	4	22	42.31%	26	47.27%	22	40.00%	70	43.21%
	3	4	9.76%	11	21.15%	13	26.00%	28	19.58%
	2	9	17.31%	6	10.91%	9	16.36%	24	14.81%
	1	11	21.15%	3	5.45%	5	9.09%	19	11.73%
Summer	5	6	12.00%	10	18.52%	6	12.00%	22	14.29%
	4	26	52.00%	27	50.00%	20	40.00%	73	47.40%
	3	5	11.90%	6	11.76%	12	26.09%	23	16.55%
	2	5	10.00%	8	14.81%	8	16.00%	21	13.64%
	1	8	16.00%	3	5.56%	4	8.00%	15	9.74%
Fall	5	4	7.84%	7	12.96%	5	10.42%	16	10.46%
	4	20	39.22%	24	44.44%	12	25.00%	56	36.60%
	3	9	22.50%	8	17.39%	18	42.86%	35	27.34%
	2	7	13.73%	7	12.96%	7	14.58%	21	13.73%
	1	11	21.57%	8	14.81%	6	12.50%	25	16.34%
Winter	5	4	8.16%	4	7.41%	5	11.11%	13	8.78%
	4	15	30.61%	20	37.04%	10	22.22%	45	30.41%
	3	9	26.47%	11	26.19%	9	25.71%	29	26.13%
	2	6	12.24%	7	12.96%	11	24.44%	24	16.22%
	1	15	30.61%	12	22.22%	10	22.22%	37	25.00%

Appendix E

Draws	SATURDAY				TUESDAY				THURSDAY				TOTALS	
	#	54	Most Imp.		55		Most Imp.		57		Most Imp.		166	
Prices		13		0%	19	35%		0%	9	16%	1	2%	41	25%
Convenience		16	2	4%	15	27%		0%	25	44%	1	2%	56	34%
Fresh/Local		52	24	44%	53	96%	22	40%	54	95%	24	42%	159	96%
Organic		46	9	17%	51	93%	17	31%	53	93%	17	30%	150	90%
Prepared		20	1	2%	20	36%		0%	23	40%	1	2%	63	38%
Activities		17	1	2%	7	13%		0%	6	11%	1	2%	30	18%
Support Ag.		52	14	26%	50	91%	15	27%	52	91%	12	21%	154	93%
Socialize		20	2	4%	11	20%		0%	8	14%		0%	39	23%
Other		13		0%	16	29%	1	2%	10	18%	2	4%	39	23%

Appendix F

Satisfied		SATURDAY			TUESDAY			THURSDAY			TOTALS		
Price	5	10			21			13			44		
	4	10			17			17			44		
	3.5	1		3.40 mean	2		3.91 mean	0		3.67 mean	3		3.67 mean
	3	19			10			20			49		
	2	6			4			4			14		
	1	1		47 Tot Res	0		54 Tot Res	1		55 Tot Res	2		156 Tot Res
Quality	5	40			46			45			131		
	4	11		4.78 mean	7		4.83 mean	10		4.79 mean	28		4.74 mean
	3	0			1			1			2		
	2	0			0			0			0		
	1	0		51 Tot Res	0		54 Tot Res	0		56 Tot Res	0		163 Tot Res
Variety	5	31			40			24			95		
	4	13		4.45 mean	9		4.63 mean	23		4.31 mean	45		4.47 mean
	3	6			4			7			17		
	2	1			1			0			2		
	1	0		51 Tot Res	0		54 Tot Res	0		54 Tot Res	0		159 Tot Res

Appendix G

	How Important	SATURDAY			TUESDAY			THURSDAY			TOTALS		
Who	5	24			33			24			81		
	4	14			12		4.40 mean	19		4.11 mean	45		4.16 mean
	3	11		3.98 Mean	9			7			27		
	2	1			1			4			6		
	1	4		54 Tot Res	0		55 Tot Res	1		55 Tot Res	5		164 Tot Res
Where	5	24			36			29			89		
	4	21		4.19 mean	12		4.29 mean	18		4.23 mean	51		4.24 mean
	3	6			17			4			27		
	2	1			0			3			4		
	1	2		54 Tot Res	0		65 Tot Res	2		56 Tot Res	4		175 Tot Res
How	5	36			44			37			117		
	4	10		4.46 mean	3		4.69 mean	13		4.50 mean	26		4.55 mean
	3	5			7			4			16		
	2	3			0			1			4		
	1	0		54 Tot Res	0		54 Tot Res	1		56 Tot Res	1		164 Tot Res
Market	5	43			48			41			132		
	4	4		4.58 mean	3		4.75 mean	12		4.68 mean	19		4.67 mean
	3.5	1			1			0			2		
	3	7			3			3			13		
	2	0			0			0			0		
	1	0		55 Tot Res	0		55 Tot Res	0		56 Tot Res	0		166 Tot Res

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Putting the Human Animal at Ease with Itself: Deconstructing the False Human/Animal Dichotomy

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Abstract

The problematic binary opposition of culture/nature can be reduced to a more specific binary of human/animal. In critiquing this dualism, Derrida describes the human as an “animal at unease with itself.” Our denial to surrender to our animality serves as the foundational relationship justifying the construction of a speciesist western society that is callous toward the lives of nonhuman animals while simultaneously promoting the superior “humaneness” of humankind. To deconstruct inconsistencies such as these in the human/animal dualism, this essay uses the insights of Derrida (and other poststructuralist, postmodernist, and posthumanist scholars) on what he calls humanity’s fundamental “question of animality.” This analysis examines discursive tensions around inconsistent definitions of the term “animal,” our inability to define the human border, debates over whether species should be defined by mental instead of physical traits, paradoxes over the concept of “humanity,” whether ethics and compassion are humanist verses natural/animal traits, whether animal rights should promote principles of animal unity or diversity, and the struggle to find non-speciesist terminology. This essay’s deconstruction aims not only to transform our anthropocentric culture but also to strengthen the animal rights movement by unearthing the inconsistencies in the movement’s often humanist strategies for dismantling the human/animal dualism.

Crossing borders or the ends of man I come or surrender to the animal –to the animal in itself, to the animal in me and the animal at unease with itself..” – Jacques Derrida (2002, p. 372).

Derrida (2002) describes us humans throughout time as being an “animal at unease with itself” (p. 372), at unease over whether the animal who is looking at us is the other or ourselves and whether or not we should surrender. Evidence of unease, like the growth of the animal rights movement in the last quarter century combined with recent news headlines about animal personalities, animal laughter, and animal intelligence, demonstrates the tension and curiosity we feel over not knowing whether we should surrender and what that means. Should we continue to try to escape our animality or should we begin to include other animals as “persons” who are part of our circle of moral concern? Derrida (2004) sees these debates themselves as indications of a “growing unease” (p. 73) in industrial European society with what he terms as “the question of the animality” (p. 62).

This essay will use the insights of Derrida (and other poststructuralist, postmodernist, and posthumanist scholars) to interrogate the animal question. Derrida’s model of deconstruction (Chandler, 2002) is used to problematize the inconsistencies inherent within the false dichotomy of the human/animal dualism, which sits at the very heart of not only the question of animality but also the very question of the subject and the unjust “effects of subjectivity” (Derrida, 1995, p. 268). Deconstruction of this “violent hierarchy” is both

warranted and overdue, as it is deceptive and unjust and has been mistakenly taken-for-granted by much critical/cultural studies work. I hope this deconstruction will not only transform our mainstream anthropocentric culture but also unearth the inconsistencies within the animal rights movement’s often humanist strategies for dismantling the human/animal dualism, in order that the philosophies informing the animal rights movement may be strengthened. For example, should the movement promote the *similarities* between humans and other animals, or should they promote a higher respect for the *diversity* of all living beings?

Derrida’s Justification for Addressing the Question of Human’s Animality:

The two main reasons that the human/animal binary should be deconstructed are the fact that philosophy has largely failed to properly address the issue, calling into question the very validity of our current philosophies, and the fact that the effects of this dualism result in untold violence and suffering for nonhuman animals.

Beginning with the latter point, Derrida (1995, 2002, 2004) has no qualms about describing western culture’s treatment of animals as “violent.” And while a certain amount of violence towards other animals is both natural and traditional, Derrida

criticizes it in its modern form as “industrial, scientific, technical violence” (2004, p. 64) that results in “unprecedented proportions of this subjection of the animal” (2002, p. 394). He claims, “it is all too evident that in the course of the last two centuries these traditional forms of treatment of the animal have been turned upside down by the joint development of zoological, ethological, biological, and genetic forms of knowledge” that result in the “inseparable techniques of intervention” (2002, p. 394) that now literally transform animals into objects. He denigrates the mass slaughtering of nonhumans as the “‘techno-scientific’ pathologies of the market or of industrial production” (2004, p. 65). Consider the condemning terminology he uses in the following quote where he explains the need to combat both industrialized violence against animals and extinction of species:

I have *sympathy* (and I insist on that word) for those who revolt: against the war declared on so many animals, against the genocidal torture inflicted on them often in a way that is fundamentally perverse, that is, by raising en masse, in a hyperindustrialized fashion, herds that are to be massively exterminated for alleged human needs; not to mention the hundreds of species that disappear each year from the face of the earth through the fault of humans who, when they don’t kill enough, let them die – supposing that the law could ever be assured of any reliable difference between *killing* and *letting die*! (Derrida, 2004, p. 67).

This quote also expresses his lack of faith in the law and the animal rights movement’s proposed use of the law (based on a model of human rights) as the philosophical basis for solving this problem, which will be discussed later in the essay.

While Derrida (2004) does not propose a direct solution, he does suggest that the industrial violence against animals must and will change, particularly because the “spectacle man creates for himself in his treatment of animals will become intolerable” (p. 71) due to the negative “image of man it reflects back to him” (p. 73). Derrida predicts change will occur gradually, “this transformation will no doubt take centuries, but I repeat, I do not believe that we can continue to treat animals as we do today” (p. 73).

Derrida (2002) does not debate animal suffering, saying “no one can deny the suffering, fear, or panic, the terror or fright that humans witness in certain animals” (p. 396). Further, he claims “we know what animal suffering is, we feel it ourselves” (2004, p. 70). This last statement again connects us humans to Derrida’s “question of animality” (2004, p. 62) within us, a question that Derrida describes as “not one question among others” (p. 62) but as “decisive... in itself and for its strategic value” (pgs. 62-63). Emphasizing its fundamental importance to philosophy, he states:

It also represents the limit upon which all the great questions are formed and determined, as well as all the concepts that attempt to delimit what is ‘proper to man,’ the essence and future of humanity, ethics, politics, law, ‘human rights,’ ‘crimes against humanity,’ ‘genocide,’ etc. (p. 63).

Yet, while Derrida (2004) calls for an extension of the trace to the “entire field of the living” (p. 63), he laments that instead what dominates human culture and philosophical discourse on the subject of “something like ‘the animal’” is “the gravest, most resistant, also the most naïve and the most self-interested presuppositions” (p. 63). He criticizes the fact that this philosophical discourse is built upon the “phonocentrism or the logocentrism that always trusts in a simple and oppositional limit between Man and the Animal” (p. 63). Posthumanist Cary Wolfe (2003) also critiques the fact that cultural studies is predicated on the idea that the subject is human, with an implicit and fundamental repression of the “question of nonhuman subjectivity” (p. 1). Likewise, Derrida states the question of the animal is constituted within the broader philosophical debate over defining the *who* in the subject and emphasizes its fundamental importance to all social problems:

There is no need to emphasize that this question of the subject and of the living ‘who’ is at the heart of the most pressing concerns of modern societies, whether they are deciding birth or death, including what is presupposed in the treatment of sperm or the ovum, surrogate mothers, genetic engineering, so called bioethics or biopolitics...” (Derrida, 1995, p. 283).

Derrida (2004) claims that the way post-Cartesian philosophy has treated “THE (so called) animal is a major sign of its logocentrism and of a deconstructible limitation” (p. 63). He refers to their discourse as “hegemonic” but optimistically predicts what problematizes it and “resists” (p. 63) it is the fact that “there is a multiplicity of living beings” that we cannot deny that we are part of by continuing to delimit this variety into false categories of man and animal. He states the purpose of deconstruction in this regard is to limit the violence done towards animals. Deconstruction does not seek “to destroy the axiomatics of this (formal and juridical) solution, or to discredit it, but to reconsider the history of law and of the concept of right” (p. 74).

Since critics of Derrida emphasize the nihilism, relativism, or lack of productivity related to his philosophies, one may wonder if deconstruction is a constructive enough tool considering the gravity of the situation facing nonhumans. However, what I find useful in deconstruction is that it allows me as a researcher to unearth the logical inconsistencies of the foundational structures that inform philosophies surrounding humanity and our relation to nature – even philosophies, such as animal liberation, to which I ascribe. Perhaps it is more exploratory and disruptive than it is definitive or productive, but this Derridian-inspired method of analysis has proven to be useful in my goal to strengthen my philosophical approach to animal activism through a much deeper understanding of how to foreground the logical fallacies that undermine the humanist discourse that both animal rights activists and animal exploiters struggle to define.

In this essay, I explain the historical roots of the human/animal dualism, then its deconstruction will consist of my analyzing its discursive tensions, such as inconsistent definitions of the term “animal,” our inability to define the human border, debates over whether species should be defined by physical or mental traits, paradoxes over the term “humanity,” whether ethics and compassion are humanist verses natural/animal traits, whether animal rights should promote principles of animal sameness or diversity, and the struggle to find non-speciesist terminology.

Historical Roots of the Human/Animal Dualism

After feeling ashamed at having his cat stare at him while he was naked, Derrida (2002) described himself and all of humanity as an “animal at unease with itself” (p. 372), which inspired his essay “The Animal That Therefore I am.” Yet most humans in the West would likely not even feel comfortable

calling themselves an “animal” in the first place, as that goes against modern humanist notions of human dignity and uniqueness and other influential Judeo-Christian theories of man as created in God’s image. Lawrence (1995) describes the pre-Christian Classical World as possessing a much more fluid notion of species, and she reminds us that some ancient (and current) pagan belief systems viewed nonhuman animals as gods. But the Church sought to distinguish itself from paganism by privileging the human man as dominant among animals. St. Augustine and St. Thomas Aquinas aided this by denying other animals any intellect and emphasizing man’s rightful dominion over irrational brute creatures. Medieval philosophers built upon this religious dogma to assign all nonhuman animal behavior to pure instinct, in opposition to the reasoned behavior of men (Lawrence, 1995).

Another major influence on western speciesism, especially within the sciences, stems from the 17th century philosopher Rene Descartes, through his construction of the mind/body dualism (Lawrence, 1995). Explicit in this Cartesian philosophy is the notion that nonhuman animals possess no conscious mind and their bodies are more akin to automata. Applying this Cartesian-derived notion of animal mechanics to language, Derrida (2002) laments that as late as postmodern times most major philosophers still believe nonhumans merely *react* instead of fully *respond*, feeding the general belief that nonhumans’ lack speech because they lack cognition and language.

Inconsistent Definitions of the Term “Animal”

One reason Derrida claims that the reductionism inherent in the human/animal dualism is problematic is because all other animal species do not constitute a singular group:

I am suspicious of the appellation ‘Animal’ in the singular, as if there were simply Man *and* the Animal, as if the homogenous concept THE Animal could be extended universally to all nonhuman forms of living beings (p. 63).

Similarly, in the introduction to the book “What is an Animal?” (1988), editor and anthropologist Tim Ingold describes scholarly discussions regarding the inconsistencies inherent in the multiple meanings of the very term “animal.” According to philosopher Mary Midgley, the term “animal” has two definitions with differing connotations – a “benign” one that

includes humans and a “negative” one that not only excludes humans but represents what is “inhuman or anti-human” (Ingold, p. 4). These different connotations related to whether animality is inclusive or exclusive of humans both represent and cause inconsistencies. For example, Coy (Ingold, 1988) highlights the contradiction that occurs in animal welfare philosophies that sometimes promote animals as innocent “dumb beasts” we should take pity on and other times as living beings on par with humans in their possession of a full range of feelings. Regarding the former negative connotation, Dunayer (2001) notes that to call a human an “animal” is an insult, “nonhuman animal terms insult humans by invoking a contempt for other species. The very word *animal* conveys opprobrium. *Human*, in contrast, signifies everything worthy” (p. 2). She states that when someone says “humans *and* animals” they commit a “verbal ruse” (p. 11) by denying the benign definition of “animal” that includes humans in the animal kingdom.

Similar to Midgley, Tanner (Ingold, 1988) explains the two opposing conceptualizations of animality: 1. as a “domain or kingdom” (which includes humans – a scientific taxonomy that takes into account our ecological connections/dependence) and 2. as a “condition” (which excludes humans and is “opposed to humanity”) (p. 4). In the latter conceptualization, human culture is separated from nature, which is seen as the “animal’s” domain. This anti-human condition of being an “animal” represents the distinction between “natural” behaviors devoid of values or reasons and the process humans go through to become enculturated and overcome this animality.

Inability to Define Human Borders

In the debate over definitions of “animal,” Derrida prefers to embrace complexity, as he points out that there are many differences that could be characterized as “uncrossable borders” (p. 66) among all animals, even among humans; this diversity cannot be reduced to just one definitive border between man and all other animals: “There is not one opposition between man and non-man; there are, between different organizational structures of the living being, many fractures, heterogeneities, differential structures” (p. 66). Ucko (Ingold, 1988) echoes this claim that the borderlines are blurred, even between mammals and other animals, “Contrary to the normal assumption, the borderline between humans and animals, or more specifically between humans, and birds, fish or invertebrates, is anything but obvious, clear and immutable” (p. xii).

In fact, Derrida (2004) states it is very difficult to identify any trait that is uniquely “proper of man” or exclusive to humans, “either because some animals also possess such traits, or because man does not possess them as surely as he claims” (p. 66). Like Derrida, Ingold (1994) states that “no matter the trait chosen, either some people do not exhibit it or else members of some other species do” (p. 25), and Clark (1994) also points out that whatever hallmark we use to distinguish humanity from other animals, there are always some humans who fail to qualify. This is reminiscent of Singer’s (1990) contention that there are some nonhuman animals who possess more so-called “human” capabilities than human infants or some adult humans who are mentally challenged.

Championing the trait of language in particular, Derrida (1995) explains how his notion of *différance* (meaning’s fluidity) relates our language to that of other animals:

I am thinking in particular of the mark in general, of the trace, of iterability, of *différance*. These possibilities or necessities, without which there would be no language, *are themselves not only human*. It is not a question of covering up ruptures and heterogeneities. I would simply contest that they give rise to a single linear, indivisible, oppositional limit, to a binary opposition between the human and the infra-human. And what I am proposing here should allow us to take into account scientific knowledge about the complexity of ‘animal languages,’ genetic coding, all forms of marking within which so-called human language, as original as it might be, does not allow us to ‘cut’ once and for all where we would in general like to cut (pgs. 284 – 285).

For Derrida, the trait of language that might represent this border between species is analogous to a cut in the subject, which can be marked wherever humans choose. He lobbies for the cut to include nonhuman languages.

Other scholars have noted this same futile humanistic struggle for man to find a line he can draw in the sand based around one uniquely human characteristic. Lawrence (1995) details the many allegedly “human” traits throughout history that have

each failed to be proven exclusively human; these include making tools, teaching cultural practices, practicing rituals, having unique personalities, being aware of death, building and transforming nature, creating art, practicing altruism, possessing language, and experiencing wonder. Dunayer (2001) points to some evidence that traits that define humanity in the dictionary, such as a highly developed brain, organized speech, and abstract reasoning, are not unique to only the human animal in all cases. In a later section, one caveat I will suggest is that the only trait that seems to define most humans is acting excessively beyond what is natural/necessary.

Defining the Moral Boundary between Species

We have established that there is not a distinct division between humans and all other animal species, but Elstein (2003) contends that even “species” is a rather contested and arbitrary socially-constructed category. He uses philosophical and ethical logic to demonstrate the subjectivity and self-interested motivations of scientific categories and how different types of sciences (and cultures) have different, largely instrumental, criteria by which they distinguish species. Elstein quotes one of the pioneering scientists who we most associate with the concept of species, Charles Darwin, as saying that species categories are largely put in place for convenience sake based on resemblance. Darwin claimed that the term species “does not essentially differ from the term variety” (p. 5). Darwin believed that species is an “indefinable” category where differences between animals were more a matter of degree than kind. Elstein points out that although these degrees of difference represent varying “gaps” between species, there is no clear way to determine how *much* of a gap has any moral significance.

Elstein (2003) suggests all moral philosophers should start specifying what they *mean* when they say “species,” as it is not an essential or self-explanatory label that should continue to be taken for granted. Elstein claims a common logical fallacy is for people to say that species distinctions are based on some physical/biological trait, when really it is mental traits that they prioritize. He contends *physical* traits (such as ability to mate, DNA similarities, or physical resemblance) do not sufficiently warrant the exploitation or mistreatment of a species, while *mental* traits (such as language use, intelligence, or sentience) form the real basis for why people say species divisions matter. And I would add that religious humans would prioritize spiritual traits, like possession of a soul, as a significant factor in justifying differing treatment between species.

Clark (Ingold, 1988) echoes Elstein’s contention that mental distinctions trump physical ones. He states this physical definition of species variance where “individuals of a species are linked by their genealogical connection, as actual co-descendants of a common ancestor or as potential co-ancestors of a common descendant” (p. 3) does not give us a very distinct characteristic to which all individuals within the species relate. Like Elstein, Clark contends the moral boundary between species must be determined by something more significant and specific than biology.

To answer this call and be more consistent, Elstein (2003) argues that moral philosophers should switch to defining species by *mental* traits rather than physical ones. In quite a radical idea, he proposes reducing the myriad of animal species down to four different (but not mutually exclusive) “moral species concepts” that are based on an animal’s ability to plan for the future, experience boredom, suffer pain, and/or feel emotions. While this may be an ethical improvement on the more arbitrary way we currently make moral decisions about the treatment of others, Elstein fails to acknowledge the complications of hegemonic power in creation of knowledge (Foucault, 1980). Human elites would still maintain the power to define mental traits of nonhumans in ways that would in all probability just continue to serve human instrumental or commercial interests.

Despite these practical challenges, Elstein is astute to raise the question of what differences have moral relevancy because it is perhaps the most fundamental and vulnerable question at the heart of the human/animal dualism; it also serves to trouble animal rights philosophy as well. To explain animal rights philosophy, it argues that western discourse, based on historical relations of man’s control over nature, is speciesist. “Speciesism” is a term coined by prominent animal ethicist Peter Singer (1990) to critique discrimination of a living being based solely on species. Singer’s non-speciesist ethic promotes equal *consideration* for the interests of each being, as opposed to equal *treatment*, as the differing needs and interests of each individual must be taken into account. Singer (1990) claims *sentience* is the true moral distinguishing factor in human society, and since other animals also possess sentience, humans are then obligated to extend rights to encompass the interests of all sentient beings; this can be seen as a broader version of the privileging of mental traits that Elstein proposes.

Paradoxes Surrounding the Concept of “Humanity” in Critiquing Speciesism

A large part of humans’ “unease” about our mistreatment of nonhumans in western culture is based on a contradiction between the lofty humanist moral values humans *claim* to have and the way that natural “human kindness” is often not reflected in our actual relations with other animals, which seem largely based on self-interested rather than altruistic values. Dunayer (2001) suggests the word “humanity” is both speciesist and unjustified, as it implies that kindness is an inherent part of each human’s nature, yet many examples can be given of individual humans failing to show compassion. Likewise, she critiques the common use of the phrase “human kindness” as if the two words naturally fit together, whereas the term “animal kindness” seems foreign and senseless to the ear. The latter is because our humanist discourse precludes association of kindness and compassion with nonhumans, but Dunayer’s book contests this notion by providing some compelling examples of nonhuman animal altruism by mammals, birds, and fish.

Certain sociobiologists would likely attribute these altruistic acts in species to instinctual self-interest, theorizing the altruism is *biologically* motivated to ensure the survival of one’s genes, even if the benefit to one’s self is not immediately apparent and the action seems compelled by reason (Ridley, 1996). Yet while Dunayer’s (2001) anecdotal evidence of nonhuman altruism is not scientifically generalizable to the entire species, she claims that the very fact that certain *individual* animals (human and nonhuman) act with kindness towards others, while other individuals of the same species in similar circumstances do *not*, demonstrates that instinct is *not* always the motivating factor.

Mitchell (Wolfe, 2003) surmises humans must have some empathy for nonhumans because he states the notion of extending rights to nonhuman animals is “irresistible” (p. ix) on some level. He believes this underlying sympathy causes humans to feel both a sense of resistance and anxiety regarding our treatment of nonhumans. While the resistance to any major change is normal, he states the anxiety stems from our discomfort over our dim awareness that “human life as now constituted is based on the mass slaughter of billions of animals accompanied by untold suffering” (p. ix). Derrida (2004) predicts that this “industrial, scientific, technical violence” (p. 64) towards nonhuman animals must and will change, albeit over centuries, because it will become “more

and more discredited” and “less and less tolerable” (p. 64) as it becomes visible.

Derrida (2004) believes a driving force of this change is that this violence “will not fail to have profound reverberations (conscious and unconscious) on the image humans have of themselves” (p. 64). Because, as his quote indicates, we humans have a high opinion of our moral values, bearing witness to the violence we cause is key to facilitating change. This is why Derrida refers to this violence as an “intolerable” “spectacle” (p. 71). He asks his interviewer, Elisabeth Roudinesco “If you were actually placed every day before the spectacle of this industrial slaughter, what would you do?” (p. 71) and before changing the subject, she replies (as many of us likely would) that she would not eat meat anymore and would live somewhere else because she prefers not to see it. Her answer illustrates a point Derrida (2002) made in another article about our need to avoid acknowledging the violence:

No one can deny seriously, or for very long, that men do all they can in order to dissimulate this cruelty or to hide it from themselves, in order to organize on a global scale the forgetting or misunderstanding of this violence...(p. 394).

On one hand, Derrida’s and Mitchell’s quotes admit that our collective mistreatment and murder of other species causes humans to feel guilty, indicating these philosophers believe on some level in the humanist notion that we are a “compassionate” species, yet they also admit that instead of humans mobilizing our supposed compassionate values to end this violence, most of us willingly avoid directing our hearts and minds to this “spectacle,” choosing to remain uncomfortably complicit instead. Likewise, Dunayer (2001) states that one way we avoid feeling guilty is to construct the notion that “unjustified killing is murder only if the victim is human” (p. 4). She says we “prefer to couch nonhuman exploitation and murder in culinary, recreational, and other nonmoralistic terms” (p. 4). The *need* for this detached language also indicates to me that she paradoxically shares humanist notions that humans feel a sense of shame and guilt over their violence towards animals. This humanism is apparent in her critique of the deceptive use of the English language:

Speciesism is a lie, and it *requires* a language of lies to survive. Currently, our language denies the harm that humans routinely inflict on other animals; linguistically,

both the victims and the perpetrators have disappeared (p. ix).

Hence it seems safe to say we are indeed the “animal at unease with itself” – the animal who suffers “anxiety” over the suffering we cause to others, forcing us to hide behind the lies of our speciesist discourse.

I believe Dunayer’s positions described above reveal the complexity of the humanist tension in relation to animal rights, since she conceives of humans as a moral enough species to know they need to deceive themselves linguistically in order to continue being speciesist, yet she paradoxically states humans are not inherently moral enough to live up to the term “humane.” She does not deny that humans have the capacity to be moral; she only denies that morality and kindness are traits limited to just the human species.

A major conflict I see is that the very idea that we *should* treat nonhumans better is humanist, as it privileges humans with a certain ethical status presumably not found in other animals. If we animal activists were to be truly morally consistent, instead of supporting an implicit paternalism or dominionism towards other animals, we would have to expect all other animals to have ethical standards and duties too (albeit based on their capacities and freedom of choice), since we claim that species differences are more of degree than kind. This is a conundrum. But when it comes to the supposedly humanist ethical standards for how we treat other animals, is it possible these principles are actually derived from nature instead of culture, and therefore might naturally apply to all social animals?

The Nature vs. Culture Debate Applied to the Ethics of Compassion

I will begin to explain this idea of a “natural” ethic by stating that I think what we value in human ethics is a compassionate tendency for humans to protect the weak or innocent from predation/exploitation by the strong – this is the basis of social justice movements and on the surface appears to be in opposition to the harshness of nature. Yet our ethical prohibition against causing harm is legally limited to harm *in excess* of what is necessary for one’s survival, and this is a principle in line with what other animals practice in nature that assures ecological balance. Despite ethical standards, clearly, many humans do practice exploitation of the weak, and to the *excess* of other animals (consider child

pornography, slave labor, animal agribusiness, environmental destruction, genocide/extinction, etc.). In fact, I would argue that the one trait that *does* distinguish humans among other animals is our ability to do everything (both “good” and “bad”) to *excess* of what is natural/needed. This fits with aspects of a Burkean description of a human where he says we humans are corrupted by our pursuit of perfection to ascend in hierarchies, and we are given to excess in this pursuit; he especially notes our excessive use of symbols and tools (Foss, Foss & Trapp, 1991).

And since the human practice (by some individuals) of exploiting or harming other weaker animals to *excess* goes against principles found in nature, perhaps our ethical goal for compassion and protective justice is actually based on principles found in nature – embracing moderation, which leads to ecological balance. So I believe our fundamental ethical principles are (or should be) based on the idea of taking only what we need for our basic survival, complimenting the principles of deep ecology (Devall & Sessions, 1985), with any excess acts of harm constituting exploitation and a breach of ethics. Ultimately, this moderation is what other animals already practice, making us all equally subject to these same ethical guidelines/principles; this equality avoids the humanist tendency to imply that humans should be kind to animals because we are ethically superior beings.

Tensions over Whether Animal Rights Strategies should Promote Sameness or Difference

These inconsistencies associated with humanism and animal activist goals also caused Derrida and some posthumanist scholars to critique the philosophical basis of animal rights, while still remaining sympathetic to the need to end the modern institutionalized violence towards nonhumans. Derrida (2004) contends that animal rights is a flawed concept so long as it models itself after a juridical concept of human rights, as the notion of human rights is based on a humanist “post-Cartesian human subjectivity” (p. 64) that has led to the very oppression animal activists seek to end.

Consequently, to confer or to recognize rights for ‘animals’ is a surreptitious or implicit way of confirming a certain interpretation of the human subject, which itself will have been the very lever of the worst violence carried out against nonhuman living beings (p. 65).

In fact, Mitchell (Wolfe, 2003) advises fellow posthumanist scholars to study humanism, as it is essential to addressing questions related to speciesism.

‘Speciesism’ is ritually invoked in the denigration of others as animals while evoking a prejudice that is so deep and ‘natural’ that we can scarcely imagine human life without it. The very idea of speciesism, then, requires some conception of ‘the posthuman,’ an idea that makes sense, obviously, only in its dialectical relation with the long and unfinished reflection on species being that it goes by the name of humanism (p. xiv).

Wolfe (2003) criticizes the fact that Singer and Regan’s animal rights philosophies are based on humanism, “thus effacing the very difference of the animal other that it sought to respect” (p. 8). It is true that the tensions between the priorities of similarity and difference are essential to the paradox present within animal rights. But Ingold (1988) clarifies a misconception by stating he thinks it is *not* anthropocentric to show how a particular human trait, even a positive one, is *unique* to our species, as every species is also likely to have something unique about it. But he believes it *is* anthropocentric to compare nonhumans to humans and expect them to have the *same* capacities in order to deserve respect, which is something that many animal activists do.

This anthropocentrism is especially apparent in Singer and Cavalieri’s *Great Ape Project* (1994) where they use nonhuman primates as a bridge species to gain “animal rights” first, based on their obvious similarity to humans. But anthropocentrism is arguably apparent to a lesser degree in Singer’s (1990) *Animal Liberation* philosophy, which uses the common trait of sentience to link nonhumans with humans in our sphere of moral concern. Singer points out that degrees of consciousness/ awareness/ rationality in some other species exceed that of some human individuals, such as babies or the mentally challenged. He makes this comparison not to brag about nonhumans or to put down less rationally-advanced humans, but rather to demonstrate Elstein’s (2003) assertion that our *real* reason for extending rights to all people is that we respect their *sentience* over any other more specific or particularly humanist trait, such as intelligence.

This logic of sameness and connection between humans and nonhumans has been used by many other scholars throughout this essay to bolster their argument that all of the traits supposedly reserved for humanity could actually be attributed to certain other animals as well, which certainly does problematize the human/animal dualism. But before chastising animal rights for implicitly promoting humanism, one must determine whether the activist’s line of argumentation is based more on the desire to *build nonhumans up* in the “noble” likeness of man (expanding humanity to include other animals) or based more on the desire to *knock humans down* off their self-constructed moral pedestal, encouraging them to embrace, instead of shun, their innate animality (expanding animality to include humans). The distinction between the two tactics is key, with the latter perhaps being more morally tenable (and less humanist) but less commonly used, as it sounds more threatening to the humans we seek to convince.

The former humanist approach of proving animal likeness to man is perhaps philosophically problematic but much more pragmatic from an activist standpoint. It plays off the fact that people place a high value on “humanistic” traits (like intelligence, kindness, emotional sensitivity, symbolic communication, education, artistic talent, spirituality, etc.), so it is only reasonable that when trying to convince humans to have higher respect for nonhumans, animal activists appeal to the fact that nonhumans *do* also share some of these respected traits with us. Certainly, this tactic of emphasizing like traits was used successfully to gain human rights for historically oppressed groups of humans (Bormann, 1971; Campbell, 1989). Therefore, Derrida and Wolfe’s suggestion that animal rights philosophies should be less humanist and should avoid this human rights or “likeness” model is unsettling and challenging.

But I do admit that the tactic of emphasizing that nonhumans share many valued humanist traits runs the risk of just inserting these other animals into lesser categories of “sub-humans” because, as Wolfe (2003) states, different species cannot be expected to possess “qualities, potentials, or abilities that are realized to their *fullest* in human beings” (p. 53). This could leave nonhumans forever stuck in the role of *diminished* or immature humans, (just as we humans would always be a diminished version of cats, chimps, birds, etc). We also do not want to insinuate that nonhumans are *close* to being humans but they are just under-developed. Dunayer (2001) agrees that from an evolutionary perspective, species should not be ranked as more or less “primitive” against the

benchmark of humans serving as the “advanced” species (p. 13). She states “species don’t evolve toward greater *humanness*, but toward greater *adaptiveness* in their ecological niche” (p. 13). She states that this is reflected in the fact that Darwin did not believe in ranking species as higher or lower.

This case against promoting similarities seems to lead to the somewhat counterintuitive argument of promoting *differences* in order to gain equality. On the surface this flies in the face of reason. However, towards this goal, Ingold (1988) endorses Coy’s position that, “to defeat anthropocentrism, we must stop interpreting statements about the disabilities of other species as assertions of their inferiority” (p. 10). While other species are different, they are by no means “failed” versions of humans. In exploring the idea of embracing differences, I acknowledge that the advanced stages of some human social justice movements in America have also moved in this direction, as they now promote *diversity*. The problem with the earlier human rights approach to gaining equality by emphasizing the similarities between human groups (ex: men and women, whites and blacks, heterosexuals and homosexuals, etc.) was that the historically oppressed groups (or some might say the “marked” or “inferior” side of the binary) were then forced to assimilate into the dominant group’s world and live by the standards set by white western heterosexual males. Just as many in the civil rights movement do not advocate for complete “colorblindness,” under the premise that it would wipe out some distinguishing traits that some individuals value, so too the animal rights movement should not expect people to be blind to the many splendid variances among animals. We should ask people to *respect* these differences, as certainly “biodiversity” is respected as a strength from the standpoint of ecological values.

But as a caveat to totally abandoning approaches that favor inclusion/similarity, women’s rights activists or abolitionists did not have to “concede” that women and Africans were not as smart as Caucasian men (which was the general constructed fallacy that historically justified their lower status) arguing that they deserved rights anyway because America should value “diversity.” Many would rightly agree that human activists need not concede this, since the capabilities of women and Africans are obviously more likely to closely resemble the capabilities of others of their own species than nonhumans’ do to humans. But does this mean that animal activists must concede that nonhuman animals are not as smart or communicative or kind, etc. as humans but that these differences should not matter

in order to gain respect/rights? I do not want to fully concede that humans and other animals are so completely different.

I want the best of both worlds, where we can embrace both commonalities that provide kinship and the differences that provide diversity, and this blending or complicating of multiple ideas and blurring of borders is very Derridian, after all. The reason I cannot be comfortable with supporting only diversity in animal rights is that while I think people may come to value nonhumans and respect diversity, I am worried that they will still prioritize humans over other species if they do not see some *similarity* that *connects* all animals together and gives them a *reason* to value other species on the same level as they value our species. As a base connecting trait, I suggest that Singer’s idea of *sentience* may be the best option, as it combines principles of both sameness and difference and is broad enough to include many species yet still allow for diversity within and among species. It could be compared to the base connecting trait of *personhood* that has allowed for equality among races, genders, and ethnicities, while still allowing for diversity.

The promotion of sentience as an equalizing factor seems tenable so long as hierarchies are not reintroduced into the system by assigning higher value to those beings who we determine most exemplify this connecting trait of sentience (which is what complicates Elstein’s model). This essentialist logic would send us right back to an oppressive system. A key question is whether it is possible for people and most social animals to avoid creating pecking orders of some sort. I would like to believe we could avoid hierarchical structures, but human history seems to have proven otherwise; so the human tendency to evaluate, judge and rank should be accounted for as a complicating factor in any ethical system.

Struggle for Non-Speciesist Terminology

The last remaining conundrum is determining what non-speciesist terms we should use to denote the proper respect for all animals. Should we be calling other animals “nonhuman animals,” even though this still marks other animals by their negation to the dominant term of human? Activists sometimes refer to nonhumans using the term “being,” as in sentient being or living being, but this still does not carry the weight of “human being” as far as indicating an implicit dignity; there is no similar English term denoting “animal dignity.” Perhaps we should always use the term “human animal” instead of just “human,” to remind us of our

mutual status as animals; this may help to eliminate the use of the term “animal” as an insult towards humans. Or we could simply refer to all animals as “persons.”

It does seem like some new terms are needed to properly denote the new value we should be placing on “the living in general” (as Derrida puts it) and our mutual status as members of one group. Some might find Derrida (1995) and Wolfe’s (2003) term “infra-human” a bit cold or clinical, so perhaps Mitchell’s (Wolfe, 2003) “humanimal” is the best neologism proposed yet. Certainly, new terms are needed to circumvent the speciesist discourse in our current episteme, because as feminist Adrienne Rich (1971) so astutely noted, “this is the oppressor’s language.”

Conclusion

The major deconstructable tensions that were revealed in this essay revolve around the following:

- The illogic of lumping all other species into one reductionist category of “the animal” as if there is a definite border separating humans and everyone else and as if humans are not an animal. We use speciesist language to intentionally deceive ourselves and keep from noticing the frailty of this constructed border defining our superiority.
- The two contradictory definitions of the term “animal” that sometimes include humans and sometimes represent what is specifically inhuman. For clarity, we could start using the terms “persons” or “humanimals” to describe all animals, including humans.
- The arbitrary and debated notion of species and the idea that moral boundaries should be determined using mental traits, like sentience, instead of physical ones.
- The contradiction inherent in humanism where our species lauds itself as superior for its “humane” tendencies due to cultural refinement (in opposition to nature, which is supposed to be cruel), yet our behavior is often rife with excessive cruelties towards others. What we really should be

proposing is that humans embrace ecological principles of limiting harm to the minimum needed for survival, following a universal ethical guideline across the animal kingdom.

- The contradiction inherent in animal rights philosophies that serves to bolster humanist notions of rights being deserved contingent upon animals sharing human traits, when it is this anthropocentric humanism that has attempted to privilege humans above other animals in the first place. This leads to the counter-intuitive conclusion that promoting diversity instead of similarity is a better way to be morally consistent in a social justice movement, while still needing a broader connecting trait of sentience to create some sense of unity.

Through this essay, I have come to see the value in embracing the deconstructive principles of diversity, difference, and complexity, while still maintaining some ethical standards based on universal principles (like avoiding unnecessary harm) in order to avoid total relativism. While the constructivist approach to meaning does not allow for belief in one universal truth, perhaps getting closer to any truth comes only through embracing the complexity inherent in a blending of subjectivity and objectivity, or more specifically nature and culture. This encourages social constructionists to admit that natural tendencies and ecological principles have some merit and value, and, conversely, it encourages scientists to be open to the “humanity” of nature—blurring the lines between the sciences and the humanities within the academy and encouraging all philosophers to expand their notion of the subject to include animal life in general.

Derrida’s complicating philosophies encourage indecision, and perhaps this is wise because the answer to many questions are gray, not black or white. Yet it is this lack of borders, certainty, and stability that makes us “uneasy” and causes our need to create deceptive language that constructs tidy borders. Therefore, problematizing the fragile borders of humanity and species through deconstruction of speciesist language is a worthy goal of the animal rights movement. Hopefully it will serve to lift the cloud of deception that constrains us and prod us toward a willing surrender to the animal within

ourselves. Indeed, what we gain in excess physical comforts through living in a culture alienated from nature is countered by what we lose in not being able

to feel the mental comforts of internal consistency, which would likely be found by living a life more in harmony with our animal nature.

As you can see, in spite of appearances, I am speaking here of very 'concrete' and very 'current' problems: the ethics and the politics of the living. We know less than ever where to cut – either at birth or at death. And this also means that we never know, and never have known, how to cut up a subject. Today less than ever."

(Derrida, 1995, pgs. 284-285)

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Natural Manipulation: Orogenesis and Erosion in a Digital Landscape

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Abstract

Visual culture places extraordinary expectations on the veracity of photographs, which increases the expectation of abundance and beauty in preserved lands. As digital imaging software has increased in subtle capabilities, our “painted” lands become very different from those we actually experience. I explore where the photographer’s ethical responsibility and the audience’s critical eye must intersect. In hopes of enabling clearer perceptions of place and greater appreciation for local lands, I submit that perhaps the union of images and text can clarify these digitized places, allowing for both an explanation of the media and a sharing of the visually valuable.

Introduction

As a national park ranger in Alaska, I watched exuberant visitors scream out of buses toward caribou antlers, hoisting 3 to 4 foot spans to their foreheads. They’d have their pictures of the pretend battle with a family member, as if they really were the mating and raging males of this meandering ungulate. One problem: the antlers were on backward. Still, they would come into the Visitors’ Center and show me not only their antler antics, but the moose in the shadows about four miles out. All the while expressing their disappointment: they didn’t get to see “The Big Five” charismatic megafauna on their 9 hour bus ride through a six-million acre park, or they couldn’t get so extraordinarily close to a grizzly that they could see the bristles of its blonding guard hairs, “just like in the pictures.” The interesting paradox here is not that I found their sorrows unjustified (many had saved for a lifetime, both funds and hopes, to visit this remote place), but rather that the park itself, by arranging for special visitation permits for professional photographers and using their work in publications and advertisements, had inflicted these expectations upon an accepting public.

Though it’s not necessarily the chicanery of the park: first, those images were more than themselves—they carry the history of the camera lucida: the burning of light reflected off of what was there, the *truth*. The audience experiences them as accurate. Secondly, the visitors choose to read them that way rather than with a more critical eye given that many of these images are going to be heavily manipulated digitally. As one artist admits, “Now we have the tools to extend our vision beyond what we saw on location, to produce images that blur the boundaries between reality and art” (Angel, p. 58). The modern digital photographer is operating as a key element in the erosion of a human and land

relationship and expectations of place.

This paper establishes first how early film photographers vastly changed the way we perceive place. Though not entirely seamless, the transition to digital has not depreciated the influence of these artists and land photographers in general, only, I argue later, enhanced the expectations of place for the visual audience. Thirdly, I examine how these expectations reflect either a desire for a more spectacular experience outdoors, detracting from the quality of the everyday, or they draw the eyes of someone usually oblivious to the environment through the image to the outside. In questioning the ethics of digital image manipulation, how long and how well can photography, as digital may trouble traditional, maintain the historical ethos of veracity? In short, the dialogue between the extraordinary and the everyday, the enhanced and the honest, is a synecdoche of the environmental debate over which lands to protect. It is the issue of how we choose to represent lands in images that will affect an audience who will then choose how those places are managed.

Terms of Departure

Close is a relative term; it may refer to a spot of lichen or a reflecting pool in the sand, or more broadly in a larger connotation to a sheer cliff or a grove of trees. But in either case the photograph is an abstraction of nature—a fragment isolated from the greater implied whole, missed but imagined, a connection which assists in holding the viewer’s attention. The comprehensive, explicit view lacks more often than not this compelling quality. The relationships that

interest me are both biological and aesthetic, ecological in the broadest sense; interactions between living things and the physical environment, which includes rock, water, and ambient light.”
Eliot Porter (qtd. in Solnit, p. 4)

Tourists, as they are moving through “the stationary landscape,” come to define their experience by more than what they bring home in pixels. They mimic iconographic images. They also expect that what has been present in this place before will be there again—that they too will be lucky enough to see the loon with chicks afloat on their wide backs sliding through the morning still silver like a midnight sun. They have come to experience the world that has been shaped by the changed scope and charged aesthetics of place photography—but also by the language we use to describe it: the experience of digital photography suffers for lack of a separate lexicon.

In order to adequately examine the controversy between traditional film methods and digital imaging, we must first understand their roots in language. As Timothy Binkley has noted, “a digital image is an oxymoron. An image is an appearance that is inherently visible. A number is an invisible abstraction” (p. 13). But the numbers that make up the image would appear in a code of 1 and 0, the same straight line and long curve in everything we see; they are not so much abstractions then as translations. Not to mention that even the human body employs these abstractions and binaries to operate: the mind’s synapses firing with electrons, with a negative charge, and absences that by default become the positive space. This should make sense to any photographer—white space or negative space becomes a positive absence. The high contrast is potent in thinking in technological dualities.

Continuing with bodily connections and confusions, digital imaging is done by hands, fingers, phalanges, *digits*. Again, Binkley draws a boundary between fingers and numbers because though they are both separate and finite, only the finger is physical. The number can only hope to represent a concept of the physical, rendering in 2-dimensionality what can only exist in 3D. For the image to exist at all the physical finger must click the shutter, paint the pixels. For the physical to exist beyond its present moment, the numbers must replicate to the best of their flat ability. The engagement is in digital photography: “computers somehow bridge the gap between object and concept,

challenging venerable categories of thought that have become second nature in our culture” (Binkley, p. 13). In digital imaging, the photographer molds the intangibility of numbers and of social mores with our hands.

Similarly, we manipulate. Perhaps this is a more devious task given the connotation of contrived control: “to play upon by artful, unfair, or insidious means especially to one’s own advantage” (Websters, p. 724). The word “manipulate,” is derived from something so simple—*manus*, the hand. Are the powers of imaging software sleight of hand or handily slight? The hand is only an extension of our technical and mental capabilities. These physical changes made by our bodies are only the abstract connections made by understanding the physical possibility.

Veracity, or truth, heavily relies on the sense of sight. Barring religion, one cannot believe it until one has seen it for oneself. The word roots intertwine while photography untangles them. Images are seen, but they are not necessarily truthful, regardless of their method of capture. It is a selective capture of reality, chosen by the photographer, perhaps even arranged. An event occurred, though perhaps not that way. Digital imaging is little different in that it can only change the presence of other factors, enriching, diverging, falsifying an already half-truth. Barbara Savedoff argues that it is the future (and present) audience’s responsibility to see through the “manipulation” and reclaim the power of authority historically granted to photography because it is not the truth. We must return to reality (p. 201).

Finally, I choose “land” in lieu of “landscape” for this paper because I see, as several of the photographers mentioned do, the land as its own agency, not as a collective holistic conscience, but as a collection of individuals’ actions—voluntary and involuntary; abiotic and biotic; compositing, inert and eroding. Compare this with the term “landscape” that serves as backdrop to human and charismatic megafauna actions. It is, but a background and is acted upon. The overuse of this term does little to acknowledge the amount of environmental determinism in all human cultures and individual lives. For these reasons, I will use land and place photography in conjunction with David Abram’s term “the more than human world” because they are inclusive and nonhierarchical in their attention to difference. The use of “landscape” in the title, however, is meant to bring into question how we will deal with the digitally manipulated representations of land.

Orogenesis

Despite the difficulty in accurately reading a digital photograph (or even knowing that it is one), there are many reasons for its use, many based in how photography began. Most pertinent to our discussion of nature is the relationship of images of the west on the American public in the early twentieth century. Progressive politicians increasingly relied on images to make claims about urban blights at the same time that land surveyors were scanning public lands with camera in hand. For example, Herbert Gleason captured his love for present and potential national parks. With every superlative landform outlined in black and white, he, and his supporters, demanded their preservation (Dunaway, p. 4, 5).

After the lands had been protected, there was a push for the public to get out and enjoy them. Nature photography in the early 1960s made that connection, that leap in thought, a new kind of utilitarianism was possible. A most notable example is Eliot Porter's popular book *In Wildness is the Preservation of the World*, which, as art critic Rebecca Solnit notes, shaped our perceptions of the natural world beyond our backyards, but not as beyond our reach. The flash of a robin's wing in the nest¹ or the glossy connections of reeds and rivers² in a composed and connected perspective shared that sacred moment of interconnection with the "more-than-human world." In the way that Porter had "...hoped that people would see beyond what they had been conditioned to see, to perceive the subtle and intricate interrelationships that shape the natural world" in turn shaped the way that people who experienced his art would experience place. Solnit argues that "...this work is compelling to the point that it eventually becomes how we see and imagine, rather than what we look at" (p. 6). Photography formed expectations of place and taught people how they *should*, more so than *could*, experience the place.

Similarly, Wynn Bullock molded the American imagination with bright forest light, lichens around a child's body and the gnarled dark forms of driftwood in white surf. In a more abstract way than Porter, Bullock struggled to share the essence and meaning of bodies of nature, "I didn't want to tell the tree or weed what it was. I wanted it to tell me something and, through me, express its meaning in nature" (Aperture, p. 6). In order to do this, he took on a strong sense of self-awareness in direct dialogue with his subjects. According to Aperture magazine, this is what allowed his photographs to "powerfully [reflect]

[nature's] mysterious beauty on a level extending beyond the everyday" ("Book," p. 1). We now live in a world that these early nature photographers helped to invent (Solnit, p. 6), and that has the greatest implications for how we experience, manage, imagine, and love the land close and distant from our everyday homes. How digital imaging will change those perceptions I will discuss next in the hopes that it will allow for an inquiry into the ethics of natureimage manipulation.

Stasis

Digital photography: consider how it can be a juiced-up version of an otherwise common place. It can entice those attracted to the city to nature's lights. It can be the bridge to places that most people will never visit. Yet only some images are evocative enough of political action, a condition Susan Sontag laments—photographs are feared for this possibility and they frequently serve as visual voice.

This may be why Subhankar Banerjee's collection of images of the Arctic National Wildlife Refuge was stripped of its captions and moved to the basement of the Smithsonian for its grand debut. Because of the temperatures there in the winter, Banerjee had to use a manual film camera, but he would bring the photos back and have a lab digitally correct the colors. In a conversation with him in spring of 2006, he told me that he purposely shoots on the "ugly" wintery days of mixed light in order to diminish the sense of the sublime. Because so many people expect glorious days of sunshine or bright rays and are disappointed when the outdoors treat them poorly, Banerjee sees it as essential to provide the varied moods and weathers of the places he documents. According to Dunaway, this aesthetic effort has huge implications for what his images mean to our perceptions of the far and near:

They gesture toward an alternative way of viewing the [arctic]: not as separate and remote, a faraway land disconnected from the rest of the United States, but rather a space vitally connected to national and even global ecosystems, a landscape valued not only for its special and unique qualities but also because of its crucial links to places closer to home. (p. 161)

Some photographers have made the full switch to digital, allowing for many different marketing venues. Kennan and Karen Ward have worked as

rangers in Alaskan national parks, as zodiac drivers on the Antarctic peninsula, and always as photographers everywhere in between. Because of their skill and diverse market, Kennan was able to go to Washington D.C. and speak with senators about protecting the Arctic National Wildlife Refuge, not on any environmental ethic, but based on economics. Because his photography depends so heavily on the well-being of the ecosystems there, he was able to argue legitimately for its protection in terms of money, terms that politicians understand. Here, I am not arguing that this legitimacy is based on his shooting digitally, but rather that his ability to share the natural world with others depends on a specific kind of environment, one with life and animals and plants and lichens. Be it digital or not, there needs to be a certain aesthetic worth sharing.

Erosion

Apparently the ways in which photographers and multimedia artists approach nature has been changing as rapidly as our continually sculpted and remodeled landscape itself.

—Daniel Kunitz (p. 46)

Digital imaging allows for more than extension of the existing film photography. It radically changes the possibilities for perception and for representation (Savodoff, p. 201). While it limits the credibility of the photographer and the veracity of the document, technology amplifies other powers of depiction. Notably, Andreas Gursky, Noriko Furunishi, and Joan Fontcuberta use many different types of software and hardware to shift perceptions of land and nature into a realm completely different from any possibilities in film photography. In this way, the land images become “a tug of war between realism and digital manipulation, between fine art and commercialism, and between photography and painting” (Hammes, p. 72).

Andreas Gursky uses rich colors, sharp focus, and a large format meant solely for exhibition. His work has been described as antagonistic; given that humans are locked into an “ant-like scale,” it seems appropriate that this species would feel threatened in experiencing this new perspective. Nothing about Gursky is about the individual—its about patterns that cannot be seen without his aid. This provides a completely different emotional attack on the viewer, putting them in their place so to speak, while offering a new way of thinking about themselves. “He seduces the viewer with the most stimulating patterns of

shape and color, and with all of the control of a painter” to digitally aestheticize the most quotidian forms and shapes.

Not unlike Gursky, Noriko Furunishi puts people in their displacement.³ She was recently featured in the International Center of Photography, NYC’s “Ecotopia,”⁴ a study of the “state of nature and humanity’s often troubled relationship to it” for her digitally composited images that leave the viewer disoriented. They “dislocate and defeat perceptions of one-point perspective” (Wallis et al., p. 74, 76). Perhaps by removing the utilitarian hope for a soothing earth, Furunishi’s images will help to enforce a new image: a dynamic, tumultuous earth.

I had the opportunity to experience one of these photographs at the ICP in Boston. And I carefully choose the word “experience” because it is as powerful as the gravity of our bodies being pressed back against by the earth. It is an active field of removed and inverted (maybe even subverted) fragments blended with many different images. Only in digital could a document of such great size (about 12 feet tall) be so seamless, a shifting of sands beneath our body and our eyes, just like the subjects of these photographs.

In the same exhibit are the works of Joan Fontcuberta.⁵ This Spanish artist employs a topographical mapping system to remake old Stieglitz and Brandt photographs into unreal, but nearly possible lands. These “unnatural versions” generate a new perspective on nature: “Something alienated and fundamentally transfigured by human activity” (Kunitz, p. 46). His work and that of other digital artists float in the liminal space of everyday realities, the extraordinary instances we rarely experience, and those only possible in the imagined, the digital (Hulick; Punt). By working in between familiarity and total estrangement, artists suggest a more realistic relationship with the more than human world, though it may not *look* as realistic. As Davis notes, communication between the natural world, the artist, and the audience relies on a symbiotic and visceral sharing as the “artist and viewer perform together. The dead replica and the living, authentic original are merging, like lovers entwined in mutual ecstasy” (p. 381).

Redemption

*Clouds are not spheres, mountains
are not cones, coastlines are not
circles, and bark is not smooth, nor
does lightning travel in a straight
line.*

—(Mandelbrot qtd. in Hemenway,
p. 124)

While Savedoff begs the question of whether these digital manipulations and manipulators will ever be seen by us as constructions “rather than as revealing something uncanny about our world” (p. 213, 214), I choose to explore something more answerable: how digital photographers edit, enhance, and change their images ethically. They are already doing a service by bringing the outside in, by sharing what people may not ever want or be able to see. At the same time, photographers inherently put the lens of their own eyes, beliefs, and technologies into every image. It seems that while images could be labeled, it is a dual responsibility of artist and audience to discern what would be appropriate. Since the audience is already adept at interpreting and critiquing bias in printed text, the combination of photographs and text might be a way to communicate beauty and manipulation, an opportunity to explain and to discourse over the pattern and process in place through technology. Even the simplicity of a brief caption, where the image still dwarfs the text, could be beneficial in contextualizing the image and digital imaging process. Sontag claims that “all photographs wait to be explained or falsified by their captions” (p. 10). More text would allow for a more honest relationship between the photographer/artist and audience.

“The relation between photography and writing is functional,” states Hunter in his introduction (p. 2). But what exactly are the limits, reliances, and discourses between or among the “fragments” whose final collection is somehow greater than the sum of its parts? We find the true relationship lies within the inherent limits of *both* tools. In language, all expressions and experiences are approximated to the point of being rhetorical distortions. Words lack the accurate and acute representational quality of seeing, and in some ways, therefore, believing; the instant of life burned into light and shadow values holds more verity than any single collection of abstract sounds and letters. On the other hand, the control of subject is out of the question for photography. Even indoors, subjects react to controlled light in unexpected ways. The outdoors are a shooting experience in patience and chance. So while there is more preciseness in the

image, it is unable to be shaped by the author’s hand as much as pen to paper is. The blending of the two allows the narrative to be somewhat more controlled and exact.

Similarly, the relationship seems to have little to do with redundancy, a repetition of what the photography and writing “say,” because “the shown is never exactly the same as the spoken genre” (Hunter, p. 2). More, it is about complete stories coming together to form a full narrative. Despite noble goals, Hunter suspects that collaborators know this entering the project, as with Sartre and Henri Cartier-Bresson: “His own teaching about separation is that writing and photographing are radically different acts, at least when they address unfamiliar, potentially disturbing subjects. If this is so, then large-scale combinations of writing and photography are doomed to failure” (p. 35). Though I would argue that *if* the collaborators sense that the emotions of the subjects are similar, then the mediums through which the connections are made can be blurred, blended, and made into a conscientious and creative narrative. In this way, the textual critique can become the visual critic, and simultaneously better understand the environment from which the image was produced.

For my own work, I have decided for myself that if the work shares the extraordinary in a way that is possibly part of the everyday, I will feel comfortable placing my images in the eyes of the public so that they might see what is beautiful and real enough. My hope is to provide a digital image that can be shared, sent, replicated, and seen so that it might help people believe in other possible experiences of place: “In the end...the work alters its own context” (Vincente, p. 195).

At the bottom of the Grand Canyon, a man painted large landscapes while working for the National Park Service. Actually, he first photographed them, projected them on a canvas, penciled in the outlines and then painted the image of the land. Now famous, he has removed the stresses of ambient light, shifting shadows and falling stones, for in “painting by numbers,” every color has a value, every value is relative. The audience can read this as a painting, and therefore unreal. It is temporary, falsified, painted in a certain exposure, color corrected by a specific gamut or palette of paints. There is no replacement for the real experience of place or plant or animal.

What then is the place of the photographer? As poet Alphonse de Lamartine claims, the role of the artist is to “collaborate with the sun” (qtd. in

Arnheim, p. 54). The photographer can only share with others what has already been created in the imagination or reality. Their function lies within the bounds of credibility, of beauty, and of possibility. If the document requires honesty, no visual or verbal medium can provide it totally. As photographer Galen Rowell advises, "Don't do anything you wouldn't feel comfortable having fully revealed in a caption" (Roberts, p. 30). Savedoff would encourage the audience to look beyond the caption as well. Just as digital images "cannot be understood outside the context of the complete interactive system in which they occur" (Binkley, p. 13) the photographer and their responsibility to their subjects cannot be understood outside the complete interactive system of the more than human world of wonder, disbelief, and physical possibility. While much scholarship has

brought to discussion the social affects of digital manipulation of the human body, I would hope that as our place on the planet reveals itself as increasingly tenuous, that communication and art scholars would further examine how we might best deal with digital landscapes, as this paper only just begins to explore.

By sharing images, photographers change the expectation of a place. By critically examining the images, given extra information about digital alteration, the audience erodes their faith in the image's honesty. By reforming our expectations of both, we allow for more lands to capture our gaze, our attention, our care.

Notes

¹A reference to Eliot Porter's "Chipping Sparrow, Great Spruce Head Island, Maine, June 16, 1971".



² A reference to Eliot Porter's "Pond, Grass and Lily Pads, Madison, New Hampshire, October 1, 1952".

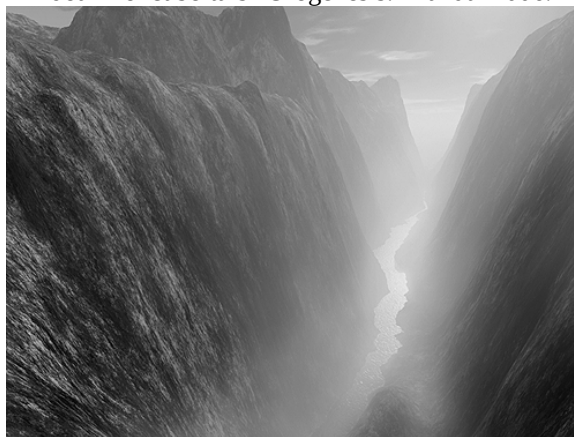


³ Noriko Furunishi's "Untitled (Grey Stream Bed)" 2005 digital composite.



⁴ Ecotopia was an exhibit that broke many of the traditional modes of environmental or nature photography. Most of the artists featured there would have been appropriate for discussion in this paper. For more information, see ICP webpage: www.icp.org/site/?c=dnJGKJNsFqG&b=2031117.

⁵ Joan Foncuberta's "Orogenesis: Brandt" 2006.



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Signs, Symbols, and Communication: Reaching mutuality at a chemical manufacturing site

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Abstract

The chemical manufacturing industry creates intentional and unintentional nonlinguistic cues and visual images that can be analyzed as visual rhetoric because the communicative artifacts feature symbolic action, human intervention, and were designed for specific audiences. XYZ Chemical Corporation and the community in which it operates serve as rhetors in this analysis. Through exploration of multidimensional influences and conventions, it was determined that communicative artifacts designed to persuade employees to “think safety, work safety and live safety” are successful and meet the requirements to be visual rhetoric. However, these symbols haven’t been interpreted in the same manner by members of the community, creating a lack of mutuality or both communication participants encoding and decoding signs and symbols accurately.

Context of XYZ Corporation

Peering over the guardrail on the highway leading to the big city, a passenger notices that nestled deep in the valley, cutting through the towering evergreen trees protrudes a flapping and billowing bright orange nylon cloth. Keenly sheltered and unnoticeable to passers-by in the spring and summer months, the wind sock juts through the skyline as the fall foliage bursts and the lush vegetation is gently peeled away to reveal dreary gray and brown bark. The barren landscape attracts the attention of even the most uninterested drivers.

In the cold of winter, a white billowing steam spews from the spout of a tower and the white hue trails across the starry sky. Bright white lights illuminate the mammoth structures that the community has commonly referred to as “the chemical company down the road.” At one point in time, it was one of many manufacturing operations in the community’s Industrial Park: a proverbial “little fish in the big sea.” Today, it is the second largest employer in the community as globalization, consolidation, and environmental regulations baked the big fishes, leaving behind shattered and barren skeletons of manufacturing operations that once poured money into the pockets of its dedicated and skilled workers and local coffers.

Anytime there was an odor or a fish kill in the river that runs gently through the quaint town and borders most of the manufacturing sites, the only suspect was “the chemical company down the road.” Ironically, Department of Environmental Protection (DEP) investigations didn’t conclude that the chemical company down the road was guilty of

illegal discharges to air, water, or ground sources very often. However, community residents’ perceptions of business operations and practices have been impacted by the images they view on a daily basis and the meaning they ascribe to those images. Ehninger (1972) identified rhetoric “as the ways in which humans may influence each other’s thinking and behavior through the strategic use of symbols” (p. 3). Foss (2005) and others enhanced the notion of a symbol serving as rhetoric and explained that visual rhetoric “is a product individuals create as they use visual symbols for the purpose of communicating” (p. 143). This area of study has grown to include a second meaning for visual rhetoric, which is “a perspective scholars apply that focuses on the symbolic processes by which images perform communication” (p. 143). For the purposes of this discussion, Foss’s (2005) definition of visual rhetoric will guide this discussion.

[It] is the purposive production or arrangement of colors, forms, and other elements to communicate with an audience. It is symbolic action in that the relationship is designates between image and referent is arbitrary, it involves human action in some part of the visual communication process, and it is communicative in its address to an audience (p. 145).

In this essay, I argue that the XYZ Corporation in concert with the American Chemistry Council acts as a rhetor generating a series of communicative artifacts that constitute visual rhetoric. The data

created and interpreted for this discussion include general images of a chemical manufacturing plant, and specific signs posted on an area providing plant access to chemical employees. The specialized creation and individual interpretation of these symbols is in response to past business practices and a mechanism to achieve future goals. To achieve my goal, I have provided background regarding the chemical manufacturing industry and the community in which this company operates and their perceptions of the company. The next section focuses on the influence of the chemical industry broadly and the relationship between the American Chemistry Council and the rhetor, XYZ Corporation when designing visual symbols to promote communication with employees. I then focus on specific symbols for analysis.

Chemical Manufacturing Industry's Quest for a New Image

The trade association representing 190 chemical producers in the United States is the American Chemistry Council (ACC), which publishes an annual "Guide to the Business of Chemistry." The industry profile data reported in the 2004 publication state, "The business of chemistry involves problem-solving companies providing solutions to improve the world. It is a knowledge-based industry that is key to a sustainable world economy and a brighter tomorrow" (www.americanchemistry.com). For every job in this industry (900,000 total), five additional jobs are created elsewhere in the U.S. economy bringing the head count to 5.8 million or 4% of the United States workforce. This industry generates more than half a trillion dollars for the U.S. economy and is known as the "innovation industry." Considered a "transformative" segment of American life because through its annual investment of billions of dollars in research and development, new products are created that alter the very products, services, and lifestyles we enjoy on a daily basis. This \$516 billion dollar business produces 27% of products consumed by the world and exports 10% annually.

The magnitude of market penetration and the increase in supply and demand that supports chemical production and distribution is big business; however, the market position and industry accolades come with a price that has prompted society to question the credibility of the industry. While modern civilization is built on this industry, it hasn't demonstrated the same innovative tendencies regarding safety, environmental practices, and disposal of its waste. There are far too many images of barren trees, brown fields, thick smog, mutated animals, dead fish, and still streams. The majority of Americans are

concerned about the health impact, safety, and environmental repercussions of chemical manufacturing. Media coverage of industry crises fueled global public awareness of the impact associated with manufacturing operations, while quaint communities struggling to survive wrestled with allegiance to paychecks, health and safety concerns, and the environment, which often got the last punch.

Based on past practices, the industry found itself in a state of crisis and nowhere to go because they had never communicated with audiences outside of their supply and demand chain. However, on a daily basis, passers-by observed daily work practices that influenced their perceptions of the industry in general or plant specifically.

Chemical manufacturers realized that the communities in which they operated and society in general needed an explanation. The public's response was to demand legislation that required companies to be accountable and share information in the late 1970s. Simultaneously, the chemical industry launched a comprehensive public relations campaign to improve its image called Responsible Care® and is still wrestling with public opinion regarding its business practices today (ACC, 2005).

Changing an Image

The first image campaign, "Responsible Care®" was designed to appeal to the logic of member companies and was launched by the Chemical Manufacturers Association (CMA) in 1988. It focused on the "public concerns about the manufacture and use of chemicals" (CMA, 1996). The initiative was designed to improve performance in six key areas of chemical manufacturing (process safety, employee health and safety, pollution prevention, distribution, community awareness and emergency response, product stewardship, and after 9/11, safety) and promote ten management practices (CMA, 1996). If the industry could reposition itself as a safe and trusted business in the minds of the public, it would be granted the esteem and credibility it sought.

In October of 2005, the public education campaign "essential₂ life" was launched by the ACC (formerly CMA). The campaign draws attention to the benefits the industry provides to mankind and now refers to Responsible Care® as

[M]ore than a set of principles and declarations. It is implementing

world-class management systems, verified through independent auditors; tracking performance through established environment, health, safety and security measures; and extending these best practices to business partners through the industry supply chain” (Rhoderick, 2003).

From coast to coast, a series of billboards, magazine four color one- and two-page ads, and other electronic media buys are promoting the benefits of chemicals. Children in incubators, fresh red tomatoes, fire fighters wrestling a mammoth blaze—these utilitarian images are designed to appeal to us logically and emotionally; as a developed nation, we need chemicals to survive and thus, we must support chemical manufacturing. ACC working as the rhetor designed these communicative artifacts with the explicit purpose of altering public perception of the industry.

Responsible Care® is now a global initiative and the Codes have been folded into a management system. According to Campbell (2002), “The codes have served our industry well, but many of them are showing their age. We can derive more business value and better performance by adopting a modernized system” (p. 2). There has been a concerted effort to modernize the effort as evidenced in the essential₂ life effort. The analysis would be incomplete without acknowledging the counterarguments regarding the industry’s initiatives, which can be viewed at Environmental Working Group's Chemical Industry Archive at <http://www.chemicalindustryarchives.org/dirtysecrets/responsiblecare/2.asp>. The verdict is still out on the success of the essential₂ life campaign.

Visual Rhetoric

The study of visual images has evolved more dramatically since the 1970s when Sloan, Gregg, Nilsen, Rein, Simons, Stelzner, & Zacharias (1971) called for the study of rhetoric to include verbal and nonverbal discourse. After intense debate within the field of speech communication (Braden, 1970; Hart, 1976; Patton, 1979) regarding the inclusion of nonlinguistic symbols as artifacts for rhetorical analysis, the field of visual communication has evolved to include myriad perspectives, methodologies, and definitions of how to approach the study of that which is visual (Howells, 2003; Smith, Moriarty, Barbatsis, Kenney, 2005). Ehninger (1972) linked human behavior and cognitive

processes of message decoding and encoding to both discourse and images through his definition of rhetoric as that which “may influence each other’s thinking and behavior through the strategic use of symbols” (p. 3).

Foss (2005) cautions that a communicative artifact or “a symbol that communicates and can be studied as rhetoric must have three markers to quality as visual rhetoric: symbolic action, human intervention and presence of an audience” (p. 144). Symbolic action involves the use of arbitrary symbols to communicate and is more than a simple sign. For example, budding flowers are a sign of spring whereas observing a rectangular placard on which numbers have been written and assigning meaning to that information is visual rhetoric. Human intervention means that a human is involved in the process of creating the visual rhetoric, such as the essential₂ life campaign images; the human is involved in the process of interpreting the visual rhetoric, such as the open hands balancing a molecule being associated with Responsible Care®. The last marker necessary for a visual to be identified as visual rhetoric is the presence of an audience. An audience can be defined as the actual creator of the visual or a specific target, such as employees working in a chemical plant who see banners communicating safety success.

There are a number of visuals that impact the public’s perception about a chemical manufacturing company. In the following sections, I will describe various visual images that meet the criteria for visual rhetoric.

Community Perceptions of XYZ Corporation

Pick-up trucks and men dressed in blue work trousers carrying lunch pales mill about the town, but the peeling paint on the Victorian homes and the crumbling front porches and stoops on rows of houses suggest the owners don’t have time, or perhaps, money for home improvements. The 149 year-old town’s crumbling brick and concrete sidewalks decorated with hanging flower baskets and street lights posing as flag poles suggests it has aged gracefully. The once union-supported Republican population doesn’t seem to notice that the county buildings are in need of a fresh coat of paint. This tired little town of 5,000 predominately older high school-educated folks is still attractive to the newest retailers: The Dollar Store and Dollar General. However, this group prefers spending approximately 20% of their excess funds on recreational items, such as guns, fishing equipment, and boating supplies.

And, of course, the younger generation invests in cigarettes, beer, electronic devices, and fast food.

Heading from the hub of commerce towards the outskirts of town to the Industrial Park, tiny houses carved into the countryside boast garden plots bursting with ripe red tomatoes and yellow squash. The sagging clothes lines laden with cloud white sheets and undergarments are snapping in the wind. The road turns to expose another development in the community positioned directly across the highway from a small parts manufacturing operation. At a first glance, the mobile home park on the left side seems to be abandoned; however, assiduous observation reveals that some of the properties closest to the road are in a state of disrepair. Looking down the evenly spaced row of plots exposes properties whose owners' love of garden art and crafts is overwhelming. Young women juggle lit cigarettes and hand supports on baby strollers as they approach the highway. Could those young women be the babies' mothers? Why weren't they in school today?

A glimpse of the mobile home park fades in the rear view mirror as a new placard beckons the attention of the driver. A tall gray water tower just behind a huge fence sparks interest. Surrounded by thick-trunk towering oak, birch, and evergreen trees and fronted by a grassy lot rests the XYZ Corporation, a chemical manufacturing plant founded in the early 1970s by a local resident. A clean, crisp double-sided illuminated white sign rests on a stone and mortar slab. The bright green logo frames the left side of the sign while thick black lettering provides contrast so an observer can read the company's name, XYZ Corporation Fine Chemistry Services, at a distance. The slab was home to three kiosks in less than 15 years; the final acquisition delivered this company into a full-fledged game of corporate bureaucracy. Regardless of who owns the company and what name is posted on the kiosk, it is still known as the "chemical company down the road." The daily operations communicate one message to employers and contractors and a different message to the community.

The Banners

Just to the right of the kiosk, white banners affixed to the top rung of the steel fence boast, "First in custom chemicals, First in Pennsylvania ISO 14001 certification". Another proclaims, "ISO 9000 Quality System." These communicative artifacts were purposively produced to symbolize the accomplishments of the plant employees and are therefore symbolic in action since human

intervention was involved in their creation. This company vies to be first in attaining environmental and safety certifications and community outreach initiatives. The banners communicative function focus on organizational achievement to customers, employees, and the community and therefore were designed for an audience. Customers and employees connect the significance of the visual symbol to work operations. Regretfully, the significance of this visual rhetoric hasn't reaped duality of perspective or a state of mutuality for all audiences.

The results of a community perception study conducted by Jabro (1994) indicated that of 445 residents responding to telephone, mail, and street interviews, the majority were uninformed about the plant's operations, reporting requirements, pollution control devices, and business practices. Some considered the plant a dangerous place to work, responsible for pollution, and a threat to the community. In fact, when asked to describe the first image that came to mind when the word "XYZ Corporation" was mentioned, responses were categorized as "threats to safety" and "a threat to the environment". These images may have been conjured based on community discourse as well as nonlinguistic cues observed during everyday observations of plant activities. This juxtaposition between the images prevalent at the plant and the meaning ascribed to them by community residents supports the idea that images communicate meaning.

The Fence

In the distance, men wearing white suits and hard hats enter and leave towering yellow metal buildings with green doors and brightly painted yellow metal steps. Their animated gestures suggest they are deep in conversation as they peel off big gloves en route to a smaller brown building. Men in yellow slickers whiz around the site on fork lifts heavy with large blue steel canisters. They exchange words as they briefly intersect but appear to be in a constant state of motion. One of many long and sleek stainless steel trucks stops at the guard's building. Above the license plate, an interesting placard is affixed to its rear end. Moments later, men in gray trousers, black knee-high boots and white hard hats with goggles appear out of nowhere. They study the exterior of the truck; meticulously inspecting the tires, undercarriage, and interior. One jots down information on a clipboard while another carefully checks the pile of pink, yellow, and white papers the driver presented. The inspectors appeared content with the findings and a "thumbs up" is displayed to the guard and the driver.

After the driver finishes his coffee, he organizes his paperwork and heads for his rig. The heavy gray steel fence begins to roll open to reveal he has achieved access to the plant. He steps up into the cab and while securing his seat belt, turns on the engine. He revs the engine and slowly shifts into gear. As he lifts his foot from the clutch and engages the engine, the truck begins to cross over the metal line and make its way through the plant. Seconds after the truck's rear end cleared the meshed metal fence, screeching wheels scrolling over the metal track quickly move the steel fence back into the closed position. The security guard watched as the gate met the post; prohibiting anyone else from entry to the plant. This ceremonial ritual enhances the ethos of the company as employees observe a commitment to safe work practices by prohibiting questionable shipments or people access to the plant. The safety guard's check point and the fence are examples of visual rhetoric in that the ritual is symbolic of safety and only those affiliated with the plant understand the inspection procedure.

There was a time when this ritual wasn't a part of the organization's culture. These safety measures were in response to both industry and governmental concerns about free access to the plant by ill-intentioned individuals. While the fence has always been a visual symbol used to reinforce the preconceived notion by community residents that what occurs in the plant is mysterious and dangerous, plant management seldom saw the need to address their concerns. For those employees who work inside the fence, the ceremonial rituals are commonplace.

Swipe Cards

The diesel truck engines rattle as they creep through the opening and closing gates. Drivers with outstretched arms hold a plastic card out the window. They approach the device that records their entry and departure from the plant by gliding it through a small machine resting on a metal frame. The two-way traffic signals a shift change at the plant with each employee using a custom identification card to acknowledge her presence at or exit from the site or . In the event of an incident, the data input via the magnetic stripe on the individual employee's card generates an output sheet that verifies the number and names of the people on site at any time. XYZ Corporation's daily rite-of-passage evokes the persuasive appeals of logos, pathos, and ethos. By compiling this data, if a siren sounds, employees immediately look to the bright orange wind sock to check the wind direction and then move to a

designated safe location. A supervisor would then count the number of employees and a search would continue until all employees were accounted for. Thus, XYZ's actions communicate a desire to care for the employee, a concern about working in a safe environment, and the logical conclusion that in the event of an incident, all employees will be found and protected. The actual swipe card was designed for the employees who serve as the audience. The card is symbolic of safety and corporate accountability during crisis and features the employee's photo, name, and work area.

Placards

Carefully positioned on yet another portion of the gate that serves as the plant's port of entry and departure, other symbols with significant meaning directed to a niche audience are positioned for the purpose of communicating, which meet the criteria for visual rhetoric. Placards on a scrolling fence are the communicative artifacts about which this section focuses.

One of the key components for survival, competitive positioning, and price command is the organization's safety record. The upside of the industry consolidation is the financial and personnel resources invested in the smaller companies to enhance their operations. As a result of "cradle to grave" legislation, customers don't want to risk their profits or reputations contracting with companies that have dubious environmental, health, and/or safety histories. This data is expressed in diverse forms and reported annually to headquarters; insurance carriers; and federal, state, and local government agencies. Community right-to-know legislation provides the public access to the same data for information purposes.

Loss Time Accidents

This industry that once operated in isolation, behind the proverbial "gate," now realizes that its every action is carefully scrutinized by stakeholder groups, such as government agencies, competitors, customers, and community members alike. The Department of Labor's Occupational Health and Safety Administration was created in 1970 to oversee work conditions and work practices in the workplace. More than 1 million companies are required to follow the Recordkeeping Rules set forth in the legislation, which is available to the public for a period of three months (www.osha.gov).

At many manufacturing sites, incidents or workplace situations that have the potential to or do impact employee health and safety are categorized by their severity based on a scale of “1” to “5” or “1” to “4” contingent upon the organization’s reporting structure. The larger number “5” is associated with potential problems and is considered preventative. The smaller numbers communicate a severe problem and are likely to be reported to OSHA. Incidents requiring medical attention and time away from the job are called lost time accidents (LTA) and are reported as well. Shannon, Walters, Lewchuck, Richardson, Moran, Haines, & Verma (1996) found that lower LTFR (loss time frequency rates) were associated with the following:

[C]oncrete demonstration by management of its concern for the workforce; greater involvement of workers in general decision-making; greater willingness of the Joint Health and Safety Committee to solve problems internally; and greater experience of the workforce. Variables that were not significant included profitability and financial performance. (p. 258).

While the chemical industry vigorously promoted the Responsible Care® initiative, one Code in particular, required a total quality management approach to its execution by mandating “everyone involved in handling chemicals to do so responsibly” (CMA 1996). The Product Stewardship Code, which was adopted by the CMA Board of Directors on April 14, 1992 and established as its goal “to make health, safety and environmental (HSE) protection an integral part of designing, manufacturing marketing, distributing, using, recycling and disposing of chemical products” created a need for a systems approach to manufacturing in general, and the chemical operator to be as committed to this initiative as the management team specifically. Thus, through the successful persuasive appeals used to ignite and engage the Responsible Care® initiative, the Industry’s next persuasive campaign dealt with individual manufacturing sites and providing reasons for employees to embrace change.

While XYZ Corporation has been sold three times in fifteen years, the newest corporate owners believe that all workers must “think safety, act safety, and live safety.” This philosophy supports the research findings of Shannon et al (1996) that motivating employees to reduce accidents and focus

on safety must be top down. Corporate establishes the safety goal for the entire company and each individual site. Corporate EHS coordinates mandatory weekly telephone safety meetings attended by all plant managers and EHS personnel. As with plant operators, the constant attention to and accountability for safety is relentless on all fronts. For example, if an employee is found to be in the plant without her personal protective equipment (PPE), she is docked one day’s salary. If she repeats the behavior, she is terminated.

Plant management applies the persuasive proofs of logos, pathos, and ethos to persuade employees that their actions impact their relationship with corporate. Given that plant personnel have enjoyed autonomy for a number of years and the “corporatization” of their workplace has been met with dissatisfaction, this David and Goliath relationship motivates the employees to protect their plant manager (who started as an everyday Joe and worked his way to the star position) by performing their work safely.

“I don’t want to be hauled out of here because we can’t get it right. We have to show them what we’ve got” was recorded in the minutes of a meeting of the company’s community advisory council and reinforces that the plant manager enacts the drama for both employees and community members. He explains what happens should an incident occur at the plant. The Corporate VP of Environment Health and Safety is on the telephone interrogating the plant manager and holding him accountable for the unsafe actions of the employees. How and why the incident occurred is investigated and a plan of action is immediately designed to remedy the situation and prevent future occurrences. OSHA requires similar paperwork, but corporate demands solutions be designed and implemented immediately.

Aside from ongoing training about safe work practices, corporate management literally shuts down plant operations to observe “Safety Day,” an annual event that explores new safety techniques and persuades employees using logical arguments that adopting safe work practices is the only acceptable behavior to adopt. They revisit the corporate safety philosophy and reinforce the desire to avoid displeasing corporate. If the workplace has remained safe, the accomplishment is celebrated. It’s not unusual for the plant management to cook and serve barbecued steaks to operators when safety milestones are achieved. Another example of the persuasion proofs at work is when the key effort to achieve support for the safety initiative was introduced

shortly after the program launched. Corporate offered employees a gain-sharing incentive whereby every shipment produced from start to finish without incident was tracked. At the end of the quarter, if the plant boasted no returned shipments and no incidents, they were rewarded with a bonus check based on a percentage of sales. Employees credit their change in behavior to the company's constant focus on safety and appropriate reprimand if an employee is found to be working unsafely.

There were several level 5 and level 4 safety issues that surfaced shortly after shift change on a fairly regular basis. While levels 5 and 4 reporting incidents suggest employees are aware and attentive to safety features at the plant, the numbers should decrease with time. If they don't, employees are forgetting simple things like PPE and wearing gloves for routine sampling. Plant management attempted to draw attention to the need to work safely before an employee even changed from street clothes to their uniforms and entered the plant. The fence again served as a prominent location for persuasion.

Affixed to the scrolling fence are two bright red signs with bold white lettering informing all visitors that no smoking is permitted past the gates. Another sign reads, "Unauthorized personnel keep out." A small cluttered sign reminding employees that no photographic equipment may be used on the premises is tucked behind the recordable sign. It is barely readable; its positioning signifies its importance in relation to the other messages.

The slowly moving gate continues past the driver, conveying critical information as it glides across the windshield. Huge green banners with white lettering inform employees and the community

that "XYZ Corporation Employees have worked 769 days without a Recordable" and "XYZ Corporation Employees have worked 1177 days without a LTA" (Loss Time Accident). While the general community has limited comprehension of the significance of the sign's numbers or that the numbers change daily, these scorecards have exceptional significance to the plant operator. The rhetor designed communicative artifacts to persuade employees to work safely after entering the plant using most of the information conveyed through the safety initiative. There are three signs provoking connections to plant safety. Two of the signs appear to supply arbitrary information about recordables and loss time accidents; however, the sign becomes symbolic when the observer interprets the data contained on the sign: the daily posting of a number that communicates successful or harmful safety practices at the plant. To an uninformed audience member, the meaning ascribed to the posted signs is limited and not connected to the referent of plant safety success/failures, bonus salary, and corporate reprimand/accolades.

As the numbers continue to increase, the posting communicates to the employee that another shift worked without incident. "Our trick [shift] has to hold up our end of the deal," commented an operator. "It's a lot of responsibility working here. I mean if we mess up, sure, we cost the company, we lose money, but we can blow up our kids and our friends. That's why working safe is on our minds all the time." In short, these visual objects crafted by the rhetor, XYZ Corporation, persuade the employee that another shift has worked without incident and they need to comply. "Safety first" is the objective of the shift.



The last visual object to slowly approach the employee is created in a much different design and color scheme. The vertically displayed black bold letters S-C-A-N against an orange background attract attention. In short, SCAN identifies the behavior the rhetor wishes the employee to perform. The “s” is for “survey”, the “c” represents “consider”, the letter “a” represents “act” and the letter “n” represents notify. SCAN is a visual cue to employees that before they react, they must consider the consequences of their actions. In the chemical manufacturing industry, every day that XYZ’s employees leave work the same way they came to work is a milestone for the company and its employees. XYZ Corporation lives by the motto, “safety first” and has designed elaborate information campaigns to train and modify behaviors of their employees to work, think, and act safely. The orator performs an audience analysis prior to engaging in dialogue. The chemical operator performs SCAN before managing a situation. The employee surveys a situation to ascertain the chemicals involved, the location of other processes and people, and the need to act. The consideration component prompts the employee to explore the options available at the time. After surveying the situation and considering the options, an action is warranted. The action must be communicated to a supervisor so that if the situation needs attention, a record of potential solutions can be devised.

A closed meeting (no management was in attendance) between the members of the advisory council and plant operators was held in July 2005. The advisory council wanted an opportunity to meet with employees to ask them questions about plant operations. Employees commented, “Even after a

hectic day, we get reminded about the importance of working safely the second we drive up to the plant. The banners are out there reminding us of what we need to do.” Another stated that he “no longer separates safety practices. I do everything safely whether I am home or at work. It just makes sense.” An advisory council member who was concluding her three years of service commented, “Whew, we thought all this safety stuff was just stuff. You folks are believers!”

This analysis focused on visual objects that were found to be communicative artifacts and met the criteria to be visual rhetoric. The American Chemistry Council launched two initiatives to alter industry and public perception about chemical manufacturing. This information has been internalized by member companies who have devised different written and visual messages to persuade employees to perform work tasks in a safe manner. XYZ Corporation created and positioned visual objects (banners, a fence, swipe cards, and placards) to persuade employees to begin their work shift thinking, acting, and living safety. The employees observed the increase or decrease in the symbols that linked to safety success or failure and triggered their attention to the goals of their work shift: SCAN (survey, consider, act, notify). Employees sustained more than 3.5 years of no loss time accidents and 2 years of no recordables. While any employee can explain the corporate philosophy on safety and the different banners and placards associated with safe work practices, not all community members interpret these visual images in the same manner. This lack of mutuality suggests that XYZ Corporation needs to explain their work practices to the general public.

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Victims ‘in’ and Protectors ‘of’ Appalachia: A Frame Analysis of *Missing Mountains: We Went to the Mountaintop, but it Wasn’t There*

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Abstract

This paper examines the role played by two cognitive frames through which audiences approach discourse related to the practice of “mountaintop removal” in Appalachia. A brief review of Appalachian coal mining history is followed by an introduction to a pair of perceptual lenses—the “Appalachian Justice” and “Grounded Faith” frames—that are reflected in the language advocates may employ, placing their identities into the physical and social context of a particular landscape. This analytic approach is then used to examine a text crafted by Appalachian environmental activists opposed to mountaintop removal practices so as to illuminate potential problems in how environmental communication may be processed when conflicting frames are present in discourse.

Part and parcel of our domestic drive towards energy independence in the United States over the past several decades has been a major emphasis on the mining of bituminous coal. Currently, in the trans-Appalachian region, the landscape is festooned with the scars and remnants of various mining operations and the ghosts of once-intact mountaintops. Land once geomorphically diverse and sheltering varying species of flora and fauna is now a flat and largely featureless terrain littered with coal trucks and bulldozers. Considering that the coal in this region contains minimal amounts of sulfur, thereby compatible with dictates of the federal Clean Air Act, it is not surprising that Appalachian coal is a highly sought after resource (Burns, 2005).

As a process, “mountaintop removal” is a simple and cost-effective approach to extracting coal from the Earth. First, the overburden of rock comprising the crest of uplifted ridges is fractured with explosives and draglines are used to transport the broken rock into valleys through a process known as “valley-fills.” Then the coal is easily extracted from the now exposed seams. Of course, the mining procedure would not be much of a concern if it was devoid of negative environmental or community-related consequences. However, as the USEPA reports, “the impact of mountaintop removal on nearby communities is devastating” (Williams, 2005, p. 26). Concerns such as a general lack of reclamation and contaminated streams are ever-

present in the minds of the regional citizens (Fox, 1999). Consequently, it is not too hard to imagine that the opposition to mountaintop removal is strong in Appalachia and, in the recent past, a nascent environmental consciousness has been on the rise (Jones, Fly, & Cordell, 1999; Jones, Fly, Talley, & Cordell, 2003).

Traditionally, Appalachia has been characterized as a home for hillbillies and sloth-like, impoverished human beings. Mann (2003) sums it up accurately:

Moonshine swillers and feuding hicks – these are the images that most people hold. “Hillbillies,” despite today’s politically correct climate, are regular objects of mockery. City dwellers have been alternately demonizing country dwellers since Greek and Roman times, and American popular culture’s relation to Appalachia is our version of it. (p. 26)

Mann proceeds to describe the representations of Appalachians in popular culture, such as the Beverly Hillbillies, or the characters from the film *Deliverance*: “the inbred banjo player and the toothless rapists” (p. 26). Such stereotypes serve to obliterate the social legitimacy of the Appalachians in the public sphere. As in the past (e.g., Weaver, 1996), the cultural stigmatism of

being from the trans-Appalachian region hampers citizens' abilities to take control of their local environment. In Senecah's (2004) terms, these people are largely bereft of voice, standing, and legitimacy in the land use decision-making context. And we contend that the plight of those living in the region is all the more compounded by the nature of the discourse Appalachians use to describe their situation and advocate for change.

In the following paper, we begin by briefly discussing the history of Appalachian mining, with special consideration given to the extent to which disputes between industrialists and the local workforce developed along side advances in mining technology. The second section provides a general explanation of what we take to be an important element found in discourse opposed to the practice of mountaintop removal: cognitive frames *vis a vis* an advocate's identity as embedded in that specific landscape.¹ And finally, we turn to a proto-typical text crafted by Appalachian environmental activists opposed to mountaintop removal practices in order to demonstrate a problematic clash among two cognitive frames embedded in that text.

A History of Conflict

As with elsewhere (e.g., Cantrill, 1996a; Schwarze, 2006), mining-related conflict is not a novel experience for Appalachia. From the dangers of underground coal mining, to the specter of mountaintop removal, Appalachian citizens have been battling bourgeois coal company executives for many generations. In the early years of the twentieth century, coal companies began purchasing land and mineral rights from the local population upon discovering that substantial coal deposits lay buried in the mountains of Kentucky, West Virginia, and neighboring states. With promises of economic prosperity for a generally underprivileged people, the coal companies succeeded in purchasing the land they desired at bargain-rate prices from local units of government and private landowners (Caudill, 1971). Promises of wealth, however, were not the only influential element supporting the acquisition of land. As Weaver (1996) illustrates, the developers of the trans-Appalachian region also characterized locals as both "the active, wily animal of the wilderness, dangerous," and clever as well as the "dull, lazy, slothful, and unwashed degenerate" (p. 168). If the Appalachians stood

in the way of developmental progress, then they would be extirpated one way or the other. It was only a matter of when.

Upon selling-out, citizens were displaced into coal towns, and poor worker treatment was a catastrophic problem. Battles emerged between the mine workers and the owners of the mines who presided over largely unhealthy working conditions. These confrontations hastened unionization, thereby influencing the passing of health and safety acts for workers (Nyden, 2004). However, by mid-century, the use of surface mining techniques greatly reduced the need for a large local workforce. Machines now did the work humans had normally done inside the underground mines. Instead of having workers extract coal from underneath, the companies simply stripped the land from the top to reach the seams. With the exception of the select few running the bulldozers, the long-developed mining abilities of most workers were no longer in demand. In addition, more land was requisitioned to properly carry out surface mining procedures (Fox, 1999). In turn, some enraged citizenry even resorted to armed defense of the countryside in order to oppose corporate interests (Caudill, 1971).

Compounding a decline in employment, surface mining began to cause innumerable health and safety problems as well. Drinking water contamination, landslides, and floods became commonplace (Nyden, 2004). For example, in 1972 the flooding of the Buffalo Creek Dam killed 124 people (Fox, 1999). The federal government was forced to implement legislation which controlled surface mining, and promised to mitigate conflict. The result was the Surface Mining Control and Reclamation Act of 1977 (SMCRA). SMCRA provided the first major opportunity for activists to litigate against surface mining (Nyden, 2004). However, the Act also offered coal companies the opportunity to permanently leave the landscape and associated ecosystems forever changed, provided industry could claim that the alteration resulted in creating "better" economic conditions or recreational uses" (Rusk & Gardner, 2004).

Throughout the past two decades, technological advances and the depletion of traditional coal deposits have increasingly favored mountaintop removal as the preferred form of extraction. SMCRA still applies to mountaintop removal, but has not been properly

enforced by officials. The federal government claims it is the state's job to enforce the act due to geographical diversity. However, state officials often have ties to coal companies and act as wingmen for coal lobbyists. This has exacerbated the environmental and social problems of the region, including the destruction of 1200 miles of streams, and numerous instances of aesthetic vandalism (Fox, 1999). Thus, it remains incumbent upon those living in the trans-Appalachian region to effectively argue their own case against mountaintop removal, and thus offers communication scholars a venue for analyzing the potential worth of the discourse.

Cognitive Frames

One approach to understanding the extent to which discourse opposed to mountaintop removal may or may not hasten the demise of the practice focuses on the role played by cognitive frames within the minds of an audience. As a theoretical concept, the idea of a "frame" is well-entrenched in the field of social and cognitive psychology (e.g., Mervis & Rosch, 1981; Neisser, 1992; Taylor & Crocker, 1981; Tversky & Hemenway, 1983). For Lakoff, a leading cognitive scientist and linguist, cognitive frames are "mental structures that shape the way we see the world" (2004, p. xv). Similarly, Goffman has defined frames as "schemata for interpretation" (1974, p. 21). Contained deep within our minds, they are present in every cognitive interpretation, including the reception of communication. Different semantic and syntactic aspects of a word or sentence evoke one or more frames in the mind of a person attending to any instance of communication.

In the literature associated with environmental communication, one variant of the cognitive framing principle could be considered Cantrill's (1998, 2004; Cantrill & Senecah, 2001) "sense of self in place" construct. This position embraces the relationship between an "environmental self"—the part of self-concept that develops in relation to experiences within the external environment (cf., Bragg, 1996; Cuba & Hummon, 1993; Gergen & Gergen, 1988)—and a "sense of place"—the idea that people have special appreciation for, and feel they *belong in*, certain landscapes (cf. Bott, Cantrill, & Meyers, 2003). In particular, if one's environmental self matches their sense of place, then their identities become more—or less dependent upon that place much like a tree gains

nourishment from its surroundings. House (2005), for instance, in reference to the underground coal mines of Leslie County, Kentucky, sums this idea up with the simple phrase: "Coal mining is a part of me" (p. 3).

Given their presumptive power to mediate perception, cognitive frames have the ability to enhance a communicator's message greatly. Depending upon how one's mind organizes the world, different appeals are going to be either consistent or inconsistent with the values and beliefs contained in a frame. If consistency occurs, influence is easier; if inconsistency occurs, influence will become much more difficult. When a target interprets communication under the guise of a cognitive frame, she or he will tacitly heed frame-consistent and inconsistent aspects of an argument. Thus, if the proper frame is not initially evoked, or if contradictory frames are in the offing, then important claims in the advocacy may be obscured by the audience.

One of the areas in which cognitive frames have been extensively studied centers on social movement theory and collective action (Goffman, 1974; Benford & Snow, 2000). Within a social movement perspective, frames are used to identify, interpret, and communicate social concerns. In terms of environmental communication, for example, the idea of "environmental justice has emerged as a master frame used to mobilize activists who want to link racism, injustice, and environmental activism in one frame" (Taylor, 2002, p. 7). Through the use of language, "master" frames allow people to connect experiences and events surrounding them to their personal lives. The environmental justice frame provides a unifying cognitive package allowing the apprehension toward environmental degradation to extend beyond humans harming their environment to humans harming other humans (cf. Bullard, 1993; Pezzullo, 2001).

Extending the notion of environmental justice to the practice of Appalachian mountaintop removal allows us to further specify the role of cognitive framing as it relates to the discourse of affected citizens. *Missing Mountains: We Went to the Mountaintop, but it Wasn't There* is a text written by Appalachians, more specifically, the Kentuckians for the Commonwealth. This anthology ostensibly conveys the voice of Appalachian exigence to

those beyond the immediate region. Through short stories, poems, and personal statements, the writers attempt to evoke a special appreciation of their land and culture, and provoke a national outcry to eliminate mountaintop removal mining in Appalachia.

The frame that is being evoked by *Missing Mountains* revolves around the concept of “protection.” Following Lakoff (2004), Morgan (2004) has discussed the structure of the master protection frame. This frame’s composition is similar to a typical conflict narrative. Consisting of different roles played by different actors, the frame serves to highlight the benevolence of certain players in a conflict, and the malevolence of others. The various parts of the frame are the victim (whose life has somehow been adversely affected), the attacker (who is affecting the life of the victim), the means of attacking (how the attacker is threatening the victim), the protector (who steps up in support of the victim), and the means of protection (how that protector is helping the victim). In essence, the attacker acts as the protector’s foil. Presumably, by contrasting these two players and their relation to the victim, support for the protector’s case is galvanized.² In *Missing Mountains*, we surmise that two specific manifestations of the master protection frame—“Appalachian Justice” and “Grounded Faith”—implicitly influence readers’ processing of the assembled text.

The Appalachian Justice Frame

We have coined the frame “Appalachian Justice” in regards to *Missing Mountains*; its purpose is to organize and clarify the specific protection frame utilized by the Kentuckians for the Commonwealth. There is a recurring theme throughout the stories and poems of *Missing Mountains*, which describes who the victims, protectors, and attackers are in this conflict. This recurring theme focuses on the plight of Appalachians in response to social and environmental exigence that surrounds them.

The focal, and possibly most important, aspect of the Appalachian Justice frame is the role of local citizens as victims. Throughout the text, references are made to the Appalachian people as an oppressed population. The function here is to evoke certain patterns of thought normally attached to a victim: empathy, desire to help, and outrage at an externalized attack. An immediately recognizable reference occurs in

“Blasted Away,” by C. B. Flood. Flood is discussing his perceptions of the citizen comments he heard after completion of a tour of mountaintop removal sites organized by Kentuckians for the Commonwealth: “It was somewhere during the evening that my shock turned into anger. These were American citizens, effectively being deprived of all potential for a decent life. They are victims, their rights blasted away as surely as the contours of the hills in which they live” (p. 17). Not only does Flood discuss victimization in general terms, but he specifically labels the people who live in the area of mountaintop removal as “victims.” Flood’s “Appalachia Extinct” contains another, more indirect, reference that places the Appalachian citizens in the role of the victim: “We drove up to a lookout spot, where passing coal trucks flung dust at us” (p. 11). When the coal companies “fling dust,” they are connotatively attacking the helpless citizens. Thus, once again the citizens are victimized.

Considering that *Missing Mountains* is a text opposing the destruction of landscape *per se*, we would also expect that throughout the text the mountains would also be portrayed as victim. Repeatedly, for example, Bates references the “destruction of mountains” (p. 38). When violence against mountains is mentioned, it is most often closely associated with the people who live there. To understand this, consideration should be given to the sense of self-in-place construct. In other words, the destruction of landscape amounts to the oppression of those who live among them precisely because their identities are wed to that environment.

The union of landscape and self identity is established copiously in *Missing Mountains*. The writers’ memories are based in the Appalachian environment – they are place-specific. When these memories are used as the autobiography of a person’s life, the physical environment is the setting in which the narrative takes place. A good example is in “Appalachia Extinct.” Flood writes about Daymon Morgan, who took the writers on a tour of removal sites. Describing one of these sites, Morgan says, “I used to hunt back in here. We tended corn in here, too” (p. 11). The memories Morgan has of his life depend on the Appalachian environment; they depend on the well-being of this “place.” Another example of an implicit sense of self-in-place in *Missing Mountains* is in “All That We Have” by Shelby. Her poem is based upon her

place-based identity, as highlighted in the first two verses:

I was born in these mountains
Lived here all my life
And I thank the good Lord
Every day I'm alive
For these tree-covered hillsides
And clear rushing streams
That come down off the mountain
And run through my dreams

My family, they've been here
For two hundred years
Watered these hillsides
With their sweat and their tears
Working together
Working this land
For this land and each other
Was all that they had (2005, p. 163).

When Shelby mentions her ancestors "watering the hillsides," she is using a metaphor to access a rich sense of self-in-place. The human is actually contributing to the well-being of the environment, which in turn nourishes the human. Consequently, the human depends upon that environment, and the environment depends upon that human.

In both the case of Morgan and Shelby, when destruction to the mountain occurs, it destroys their "place." Consequently, the environmental memories that compose their environmental self no longer coincide with the landscape around them. Thus, through the loss of their sense of self in place, when the mountains are destroyed, the people are actually the real victims. Consider how Flood highlights this in the passage previously mentioned: "they are victims, their rights blasted away as surely as the contours of the hills in which they live" (p.17). Notice how the Appalachian victim is equated with the mountains that are blown apart. The text refers to the mountain and human victims as synonyms. And victimization is a primary cognitive trope within the "Appalachian Justice" frame.

For a more prosaic elaboration, consider the first two paragraphs of "Solomon's Trees." The story exemplifies the role of the citizen as a victim, a citizen who is a victim because he lost his sense of self-in-place:

It killed me when they cut down
those trees. It did. I can't go

beyond saying that. I spent the next ten years of my life just trying to get over it, to get well, to get better, but here I am in the tenth year and I'm not over it yet. It killed me. I don't know how else to put it. It's like you spend all of your every day right out under those trees, or looking up at those trees, or just knowing the trees are there. Or it's like you go to school in town and then you go to work in town and you can't wait to get back home so you can walk out under those trees. It's like the trees were you. It's like you were the trees. It's like while they were there you were there and when they were gone you were gone. It's like you wake up and you're gone, everything you were or thought you were. And there's nothing to go out to or to walk under (Cope, p. 110).

The attacker is the next player in the frame. As anticipated, coal companies are the attackers. Certain recurring symbols are discernible in this text, which describe the coal companies committing acts of terror. Bates, in "Red Raspberries" for instance, summarizes the perceived villainous nature of the industry: "One surprising day in the late 1960s, I came home from high school to see two men in suits sitting in our living room with a broad form deed spread out on the table. Daddy was no match for those rouges with dollar signs in their eyes" (p. 35). The "men in suits" with "dollar signs in their eyes" are the attackers; they are rich coal company men overcome with a lust for wealth. In contrast, the workers are the Appalachians. Thus, they cannot be the attacker because they are already victims. Consider Stacy's personal statement: "Companies that treat the environment terribly and get away with it often turn around and treat their workers poorly, too. Coal miners aren't as well off as they used to be" (p. 81). Thus, the employers personify an attacking industry and the employees the victimized workers.

The means of attacking is the practice of mountaintop removal. The speeding trucks, floods, blown away mountains, and lack of employment are all side-effects of mountaintop removal.³ These side effects are the causes of harm, and they wouldn't exist if it was not for

the use of a specific mining method. To evidence this, we turn again to Stacy's personal statement: "Coal companies don't have to do these things to mine coal. They can mine coal and follow the law. But they chose to cut corners because they are greedy" (2005, p. 81). Consequently, if mining companies still used safe underground methods, they would not be attacking the citizens, but because of their villain-like nature (after all, they *are* greedy), they must use mountaintop removal, which victimizes the citizens.

So, who will protect the victimized workers and families living among the ruined hills and valleys? The protector in the "Appalachian Justice" frame is actually somewhat nonexistent. Yes, it could be argued that the writers are the protectors. They are getting the issue out to the larger public, and, consequently, are defending fellow citizens who lack the voice to convey their own miserable circumstances due to pervasive and stigmatizing stereotypes. However, this interpretation is problematic. As has already been established, *all* Appalachian citizens are portrayed as victims and, too often, the writers establish themselves as any other victimized local denizen. For instance, consider Daymon Morgan's personal statement: "Horizon Resources, the coal company that works near my home, has trespassed along one of my property lines. They have done damage to the land..." (p. 108). Thus, Morgan himself is one of the victimized citizens and, if he is a victim, how can he be a potentially vanquishing protector?

The reader of the text, then, must fill the role of being a protector in the Appalachian Justice frame. This seems to be the textual intent in *Missing Mountains*. Indeed, the concluding paragraph of a joint statement of purpose in the text is illustrative: "Mountaintop removal is not right, it is not acceptable, and it is an act we will fight. We call for the abolition of mountaintop removal, and urge our fellow citizens to pressure elected officials in every way to stop this criminal desecration of our common wealth" (Bates et al., p. 22). Yet, to be a protector, one must have agency and motive. When the writers appeal in such a manner, they are requesting that *the reader* become a protector, and perform the desired means of protection. However, the text is mute regarding just what that desired means may be. More importantly, perhaps, these writers seem not to grapple with the thorny issue of their Appalachian stigmatization; they

presume that the audience would want to protect the victimized despite pervasive negative stereotypes. Consequently, the reading of the text through the master protection frame is compromised, and the cause of Appalachian Justice becomes somewhat quixotic.

The Grounded Faith Frame

The Grounded Faith frame is the second variant of the master protection frame relevant in *Missing Mountains*. Unlike the Appalachian Justice frame, which is very specific to *Missing Mountains*, the Grounded Faith frame is part of a much larger movement. Christian churches are becoming quite influential in discourse on the environment. Reverends, for instance, are beginning to use spiritual messages to advocate environmental stewardship (Motavalli, 2002), and increasing numbers of Americans are interpreting environmental degradation from a spiritual vantage (Boyd, 1999).

Missing Mountains represents such a spiritual turn in the discourse of environmental advocacy. A good majority of the personal statements demand (implicitly and explicitly) the readers to be stewards of the Earth. And in doing so, the writers themselves are being stewards – prophets, so to speak. Cox (1992) has discussed stewardship in terms of religious advocacy. He claims, when using the Bible as grounds for evidence, an argument develops regarding man's role of dominion or stewardship. The first argument, which was originally proposed by Lynn White Jr., claims that Genesis' account of the creation of humanity ultimately encourages a myth of human domination over the environment. The creation story informs believers that the physical environment, and the non-human creatures that inhabit it, have no other purpose "save to serve man's purposes" (p. 378). The second argument Cox focuses on is owned by Wendell Berry (ironically, Berry is also a contributor to *Missing Mountains*). Berry implicates the story of God giving the Israelites the "gift of good land" in claiming that the tale encourages the idea that the citizens who inhabit God's land must use it well, or else they will lose it. They have to be righteous and good stewards.

In order to advance the argument for stewardship, the writers of *Missing Mountains* appeal to Grounded Faith by placing God as another victim. The mountains are God's creation, so when they are destroyed, God is

victimized. Bates references this idea when exclaiming, “The destruction of the Appalachians by mountaintop removal is the ultimate lack of respect for the Creation” (p. 37). A good steward would respect God’s creation. Woods, in her personal statement, reiterates the role of God as a victim: “The good Lord put the mountains there for a reason. He didn’t put them there so we could cut them all down and make it wide open” (p. 43). To cut them down, it seems, is disrespecting God’s desires, thereby exploiting the “gift of good land.” Dominion over the environment is destroying God through the desecration of His great life-sustaining creation.

There are stories in the text that indirectly claim that God is a victim, as well. An extended vignette from *Missing Mountains* illustrates the role of religion in framing the mountaintop removal controversy:

My mother said later that, to the shovel operators, we must have looked like some delegation from out of town that couldn’t find the picnic. Or else the funeral. Not so bad my brother and me jumping the fence, and my father, but then my mother, and all of us helping my grandfather over, and finally my grandmother deciding she wanted to see to. Then all of us standing together at the rim of the pit in our Sunday clothes, sun reflecting off my grandmother’s black patent purse, a few trees still hanging on nearby, roots exposed, like tentacles, like the earth was shrinking under them. The smell of sulphur. . . . Years later, I will remember my grandfather saying that they strip away the land but all they put back is the dirt. Maybe plant a few scrub pine. “Good for nothing anymore,” he says now, turning to go back to the car, “except holding the rest of the world together.” (Crunk, 2005, p. 91)

As if the sundry allusions to Sabbath and sulphur are not enough to evoke the Grounded Faith frame, the title “Visiting the Site of One of the First Churches My Grandfather Pastored” certainly primes the passions of religious fervor. The removal site the narrator and his family visit

is the site of an old church. The coal companies are officially tearing apart the land where God was worshiped. God’s house is thus vandalized as well.

By performing acts such as desecrating the ground where churches once stood, the coal companies again fill the role of attacker. If God intended humans to be stewards, then mountaintop removal is anathema. A collective statement by all the authors of this text examines this idea: “Coal can be mined in a more responsible way that respects the spirit of the land and its people. Out of greed, we have forsaken moral, aesthetic, and spiritual values” (Bates et al., p. 22). It is greed that causes the coal companies to act in such a negative manner. Of course, greed is one of the seven deadly sins. “The Ghosts of Mountains” further distinguishes victims and attackers through the redemptive possibilities of faith: “Greed is always with us, God knows, but greed that tries to pass itself off as public-spirited beneficence deserves to be hooted off the stage” (Hall, 2005, p.46). The author speaks of mountaintop removal, and how the coal company owners fall prey to their greed when they engage in this mining technique. Thus, they are the attackers, and their means of attacking is mountaintop removal.

In the Grounded Faith frame, the protectors are the activists who are warning us, delivering the prophetic message of doom. They are saving God by announcing the destruction of His creation. As Hall observes, “This is how the Earth will look at the end. It will look like what we did to it” (p. 45). She issues a faith-based challenge regarding the looming doom of our own destructive behaviors. Alternatively, consider the final biblical reference in Jones’s “God and Mountaintop Removal”:

The wolf also shall dwell with the lamb, and the leopard shall lie down with the kid; and the calf and the young lion and the fatling together; and a little child shall lead the. . . . They shall not hurt nor destroy in all my holy mountain: for the earth shall be full of the knowledge of the LORD, as the waters cover the sea. – Isaiah 11 (p. 85).

Whether it was Jones’s decision to include the passage, or that of the editor, by reciting

scripture for us the text becomes the dialogue of a modern day prophet. In a modern twist to the jeremiadic tradition in the Old Testament, the prophet now reminds us what God has told us to do with the Earth: to be benevolent stewards.

A bridge between place and identity is also implicit in the Grounded Faith frame. In *Missing Mountains*, Jones writes, “So, behind the persistent stereotype about Appalachian people, there is a strong culture. Its values put a priority on religion...” (2005, p. 84). This passage attempts to give the Appalachians the identity of a prophet; the identity of a person who is closer to God. Another instance occurs in “Red Raspberries”: “At first, practically no one knew about them, so I had them all to myself, as if God had treated me alone” (Bates, 2005, p. 35). The story tells of how the raspberries bring the narrator happiness in a place that has been mined beyond recognition. The mining companies are gone now, and everything is quiet. The narrator uses the raspberries as a symbol of God’s reward to those who are patient with human behavior – the special people such as the writers of the text.

As with the Appalachian Justice frame, the Grounded Faith frame is not without its perceptual deficits. In light of the dynamic tryst between dominion and stewardship, this frame may be lost on those who believe that God intended humans to have dominion over the natural environment. And it is likely that the writers would have to communicate to receivers of this mindset. Consider the traditional teachings of the jeremiad, a religious convention used in colonial American rhetoric emphasizing the importance of dominion over the environment. Advocates of old used the book of Jeremiah to ground many manifest destiny-like arguments. It is important, they claimed, to utilize natural resources in order to worship God. God wanted us to log forests in order to build churches. God wanted us to extract coal in order to have power to fuel those churches. Thus, the value of anthropocentric superiority was instilled in the American culture (Opie & Elliot, 1996). And those values have not subsided for they remain rooted in the dominant social paradigm most Americans use when interpreting information about the environment (Cantrill, 1996b; Cox, 2006). Because of this, it would be hard to influence anyone who more-or-less buys into the cultural backbone of our country that mountaintop removal is victimizing God rather than acting at His behest.

Conclusion

The passion contained in *Missing Mountains* is admirable. A group of concerned citizens have joined together to announce their distaste for the environmental destruction occurring in their backyard. Even though their stigmatization given the label “Appalachian” has been formidable, they have nonetheless produced an impressive piece of environmental advocacy.

Certainly, *Missing Mountains* contains some problematic elements in the way the issue of mountaintop removal has been framed. On the one hand, the Appalachian Justice frame foregrounds Appalachians as victims. As mentioned in our introduction, these victims are all too often regarded as poor drunks, whose poverty is a product of their own low intelligence. Given our nation’s rapacious appetite for bargain-priced energy resources, it is questionable that most readers would conclude that protection of the victimized was worth more than the use of modern technology to maintain the current culture of consumption. On the other hand, the Grounded Faith frame is predicated on an enlightened interpretation of the relationship between humans, God, and the management of natural resources. The frame only aides and abets the cause of the agent to the extent the target audience eschews allegiance to the dominant culture of human dominion over the Earth. As noted, we suspect this is an unrealistically optimistic expectation.

The greatest problem in the framing of *Missing Mountains*, however, may be when both of the Appalachian Justice and Grounded Faith frames are juxtaposed, as they necessarily are when treating the anthology as a coherent whole. In both frames, the attacker and the means of attacking are the same: coal companies engaging in mountaintop removal. Yet, the victims and protector are different, and therein lays the problem. In the Appalachian Justice frame, the writers place themselves, and other Appalachian citizens, in the role of victim. They use the frame to claim that they need protection. However, in the Grounded Faith frame, they are the protectors. And they are not just any protectors, they are God’s protectors. This raises a number of significant questions for cynic and skeptic alike. For instance, if they can protect God, then why are they unable to protect themselves? Why do they need the reader to protect them? And if they do need the reader’s protection, then what

makes them think they can protect God? Thus, the frames tend to negate one another. One frame disproves the other frame's argument and, if Lakoff (2004) is to be believed, a call to action is rendered somewhat incomprehensible at a deep cognitive level.

If both the Appalachian Justice and Grounded Faith frames have problems when used on their own and in conjunction with each other, then which frame should have been turned to in order to strategically oppose the practice of mountaintop removal? Perhaps neither. Maybe God should not be the victim, nor should the Appalachian citizens. We might suggest that nature should be the victim – the nature that belongs to all United States citizens. The Appalachian Mountains are the oldest, most biologically diverse mountains in the United States of America. Here are victims that can capture the imagination; their streams adversely affected by valley fills are being victimized.

To be sure, there are certain selections in *Missing Mountains* that do draw attention to the destruction of America's nature. For example, "The Impact of Mountaintop Removal," identifies the biophysical environmental harms attending the use of the preferred mining technique. As well, Kendrick writes of moving to Eastern Kentucky and enjoying the ecological aspects of the landscape:

Later I learned I was living on the edge of the only mixed mesophytic forest in North America. Ecologists call it the "Mother forest." All I knew was that I was finding plants I had never seen before and more

kinds of trees than I thought could exist in one place. (p. 113).

Alternatively, Wendell Berry, in his afterword, makes a case for stopping destruction of the natural environment: "And so we need, right now, to start thinking better than we ever have before about topsoils [sic] and forests and streams" (p. 199). He goes on to note that the argument is not about preserving *how* we live, but the mere fact *that* we live: ". . . we are not talking here about the preservation of the 'American way of life.' We are talking about the preservation of life itself" (p. 201). This is something that can be embraced independent of one's identification with places or persons, and thus would more likely be cognitively processed as comprehensible though the master protection frame. In the end, however, the appeal to broader, less place- or faith-based rationales for resisting mountaintop removal practices is obscured by the dominance of the Appalachian Justice and Grounded Faith framing of the present narrative mosaic.

In our analysis, we hope to have pointed out the importance of a careful consideration of cognitive frames when engaging in environmental advocacy. There is a need to examine how one's appeals will be processed in terms of a receiver's cognitive tendencies. Frames are always there, interpreting information, and environmental advocates must be wary of the metaphors used to evoke those frames. *Missing Mountains*, though an enjoyable read, as a text of advocacy may fail in the grander scheme of protecting landscapes and, arguably, the breath of life and identity itself.

Endnotes

¹ At the onset, it is important to make a distinction between cognitive frames and media frames. Researchers have distinguished between media frames, as external frames—the methods for organizing a story—and individual frames, as internal cognitive schema used for interpreting messages (e.g., Scheufele, 1999; Schlechtweg, 1996). Here, following a well established tradition in cognitive psychology (e.g., Cantrill, 1992) we will be focusing on the mental representation of material conditions and social forces that gets reflected in the way people describe exigencies in discourse.

² Any scholar of environmental communication who is familiar with the work of Kenneth Burke (e.g., 1969) will likely note the similarities between Morgan's (2004) approach to decoding cognitive master frames and Burkean pentadic analysis. Yet, whereas Burke's dramatic method is a lens through which the critic can discern, say, rhetorical motives, cognitive frames are mental structures whereby laypersons represent the life world. One is a conceptual diagnostic tool whereas the other is a perceptual structure.

³ In this instance, *Missing Mountains* represents a series of what Cox (2006) has termed "voices of the side effects," though arguably not we would hear in the typical forum for environmental public participation.

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**ESTABLISHING DIALOGICAL SPACES BETWEEN LOCAL AND SCIENTIFIC
KNOWLEDGE – EVALUATING METAL CONTAMINATION IN THE SÃO
FRANCISCO RIVER, BRAZIL.**

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Abstract

The increasing public recognition of environmental degradation and inequitable use of natural resources drives the search for environmentally sustainable and socially equitable resource utilization and livelihood options. This search necessarily considers various spheres that make up a complex environmental problem – including ecological, social, economic and cultural questions. This recent change in perspective and paradigm allows scientific knowledge to authoritatively trump other types of knowledge, such as traditional knowledge developed from the culture and way of life of traditional extractive communities of professional fishermen of the São Francisco River. We developed this work from an action-based research perspective with a goal of developing scientific research that considers popular knowledge. What resulted was the establishment of dialogical spaces in which the fishing community had a voice during the consideration of information created for this action research. By providing scientific research that is beneficial to these community members, they will be given an opportunity for advancement on the road to sustainable livelihoods and culture.

Background

The São Francisco River, one of the most important Brazilian rivers, extends about 2,700 km from the Canastra range in Minas Gerais, passing through the states of Goiás, Bahia, Sergipe, Alagoas and Pernambuco before emptying into the ocean. The watershed drainage area is greater than 630,000 km².

The artisanal fishing communities on the São Francisco River in Minas Gerais have pursued this form of livelihood in the region for over 100 years. The understanding of the natural world by these traditional communities is based on a combination of legends and knowledge derived from empirical experience of their immediate environment.

Artisanal fishermen of the Mid to High São Francisco river depend directly upon and are

intimately connected to the environmental cycles and ecology of the fished resource. As such, they have developed knowledge and comprehension essential for the survival of the fishery (Thé, 2003), but live in complete dependence on the natural resources and carry a sentiment of responsibility and care of the resource from which they get their sustenance.

The current development model based on neoliberal idea promotes the establishment of an unequal relationship between different users of natural resources, thus favoring a conflict relationship between the different social groups competing for its use. This results in profits for large industry and it compromises the traditional use of these unequally appropriated aquatic resources (Acsehrad, 2005).

The increase of environmental problems is recognized globally as they spread across several

spheres, including ecological, social, economic, and even cultural ones which make up the complex dimensions of environmental discussion (UNEP, 1999; Leef, 2003).

Industrial and hydro-electric development, pollution, and deforestation are the principal factors that have affected fish populations in the São Francisco River basin. Results of these endeavors include reduced catch levels, conflicts in the management of the fishery and allocation of resources, as well as many difficulties in the fishing communities that depend directly on a healthy environment in order to maintain their extractives livelihoods. (PBHRSF, 2005).

Concomitantly with the increase in environmental problems, we see a progressive increase in the desire for sustainable environmental practices. The active participation of different social groups involved needs to be promoted as a principal requirement for the development of these practices.

Agreeing and contributing to these practices of environmental sustainability and traditional livelihoods, in March of 2003, World Fisheries Trust (WFT), a Canadian NGO, together with the Federal University of São Carlos (UFSCar) and the Federation of Artesanal Professional Fishermen of Minas Gerais, initiated the Projeto Peixes, Pessoas e Água (PPA – “Project Fish, People and Water”), through a bilateral cooperation between Brazil and Canada, with financing by the Canadian International Development Agency (CIDA) for a four-year project in the Mid to High São Francisco River.

The above-cited project created a space where the fishing community could express their concerns in the search for an improved and more sustainable fishery in the region. In this context, the fishing community identified the unequal access to the resources of the São Francisco River, principally related to the metal refinery of Votorantim Metais Zinco S/A (VM) as the principal source of environmental problems of the region, creating a demand for studies evaluating the potential environmental contamination by metals due to the zinc refining practices.

In response to this demand, a research project was initiated in March of 2005, with the participation of the Environmental Biogeochemistry Laboratory of the UFSCar (LBGqA), for a preliminary diagnostic of the

contamination and environmental impact of metals on this portion of the São Francisco River. This was done with the principal partners in the fishing community of the Tres Marias region, PPA project research groups, and government and non-governmental groups interested in the question to be studied. Funding was provided by the Canadian group IDRC (International Development Research Center).

The context in which the environmental problem was raised created a demand for research development that included the active participation of the different actors in the complex contamination question. This was done not only to obtain the knowledge identified by the research, but also so that an action to resolve the environmental conflict over the unequal natural resource use could be initiated. This would be carried out while attending to the principals of action research, which according to Thiollent, we understand as conceived and realized in direct association with an action or resolution to a collective problem in which the researchers and representatives of the group are involved in a participative manner (Thiollent, 1985).

Active participation is directly related to the communication of information between different actors and groups that interact in the different spheres that make up the socio-environmental picture, as also recognized by official documents, such as Chapter 40 of Agenda 21 (1992), entitled “Information for decision making”, which states: “the necessity for information is present at all levels, from the upper level decision making of national and international plans to the community and individual levels” (World Commission on the Environment and Development, 1992).

The discussion defined by this document, Agenda 21, presents a model for sustainable development in which participation is considered essential, and information is assumed to be the motivator of action as a promotional agent of society that is capable of changing behavior (Macnaghten, 1997).

According to Furnival et al. (2005), information is a pre-condition for the creation and growth of forums or spaces for the construction of collective consensus, if possible, on programs, principles, actions, and strategies developed to achieve sustainability, but are not an end in itself.

When approximating this necessity to communicate information with the purpose of promoting attitudes and sustainable environmental actions, it is necessary to recognize that comprehension of the question addressed is essential, but doesn't guarantee the participation of the different social actors. This participation is created out of empowerment and the creation of a sentiment for the potential to act and change the environment.

This process occurs in a vertical manner, establishing a relationship directly between an individual and the knowledge of the importance and efficiency of an action, and also horizontally between the individual and institution (Macnaughten, 1997). In other words, action is achieved only when the actors involved have confidence in the institution that is promoting the action, since knowledge alone of the cause being worked on is not enough.

This discussion creates a picture in which there is a recognized necessity for the participation of the various social actors in the search for and implementation of sustainable behaviors in different environments. Communication and knowledge are essential but not sufficient by themselves for establishing these practices. This is due to the intrinsic necessity of legitimizing the knowledge of the actors participating in the different spheres that make up the larger picture of the environmental question.

As expressed by Welp et al. (2006), science traditionally has had the authority to define what the relevant social problems are and what the appropriate pathways to investigate them are. However, it is important that science opens itself up to new pathways based on dialogical processes established with actors involved in the problem under study (Welp et al., 2006). In this fashion, the scientific knowledge plays its role in the construction of sustainability in partnership with other types of knowledge that are equally important, and that together are able to consider various perspectives – i.e. from a multidisciplinary point of view.

The current project proposes an exploration of strategies that contribute to these objectives, working specifically in the context of the preliminary diagnosis of the environmental contamination by metals, utilizing the tools of action research as a method to integrate the different actors involved.

Diagnosis of the environmental contamination by metals

This study consisted of the quantification of potentially toxic metals from natural or anthropogenic sources in different environmental compartments (surface water, surface sediment layers, and fish). The levels were determined with standardized methods and compared to the national or international guidelines considered acceptable for the different situations.

Environmental contamination in the High São Francisco

The data presented indicate that the waters of the São Francisco River in the area influenced by VM are primarily contaminated by zinc and manganese, at levels that violate the resolution 357/05 of the Brazilian National Environment Committee (CONAMA) in two points during the dry season.

These points are most directly influenced by activities of the company, being situated at the discharge of treated water from the refinery and at the mouth of the Consciencia Stream, which historically received untreated refinery tailings directly and continues to receive infiltration from an old tailings pond.

In the rainy season, contamination is more serious, as more violations of the CONAMA Resolution 357/05 are found for a variety of metals. This is probably due to run-off from soils with residual deposits, increased percolation from retention ponds, and increased quantity of suspended material in the water with potential to aggregate metal contaminants.

For sediments, there is no Brazilian legislation that regulates on its quality while in the natural environment, though Resolution 344/04 of CONAMA considers dredging and the disposition of the dredged sediments. Thus adopted international guidelines for sediment quality developed in association with a variety of bioassays (Burton, 2004).

In the study area, there are worrisome metal concentrations that exceed this tabulated Severe Effect Limits (SEL) by up to 16 times, indicating a strong probability that the sediments are causing an adverse effect on the biota and contributing significantly to the degradation of water quality. With respect to contamination of fish, of the 54

fish analyzed, only one showed concentrations of metals above the limits for human consumption established by decree 685/98 of the National Agency for Health Vigilance (ANVISA). It was very important to analyze the muscle tissue of fish to respond to the fishing community's concern about the safety of fish consumption, but this is not very informative data with respect to potential impacts on the fish themselves. Ideally levels in other tissues, such as the liver, would be measured as well, but this was not possible in this project. Nevertheless, this need was registered with the community and other participants of the research process and in the discussion of results.

Sharing knowledge through participative methodologies

The project followed the principles of action research, that includes the production of knowledge, educational action, and the participation of those involved in the situation, that is, creates knowledge on the reality to be studied and at the same time realizes educative and participative process to improve the situation (Tozoni-Reis, 2003).

The principal subjects participating in the process of the knowledge sharing and generation that were most directly related to the problem being studied were the fishing community of Três Marias and Beira Rio, due to the proximity of their residences and the VM industry, as illustrated in Figure 1.

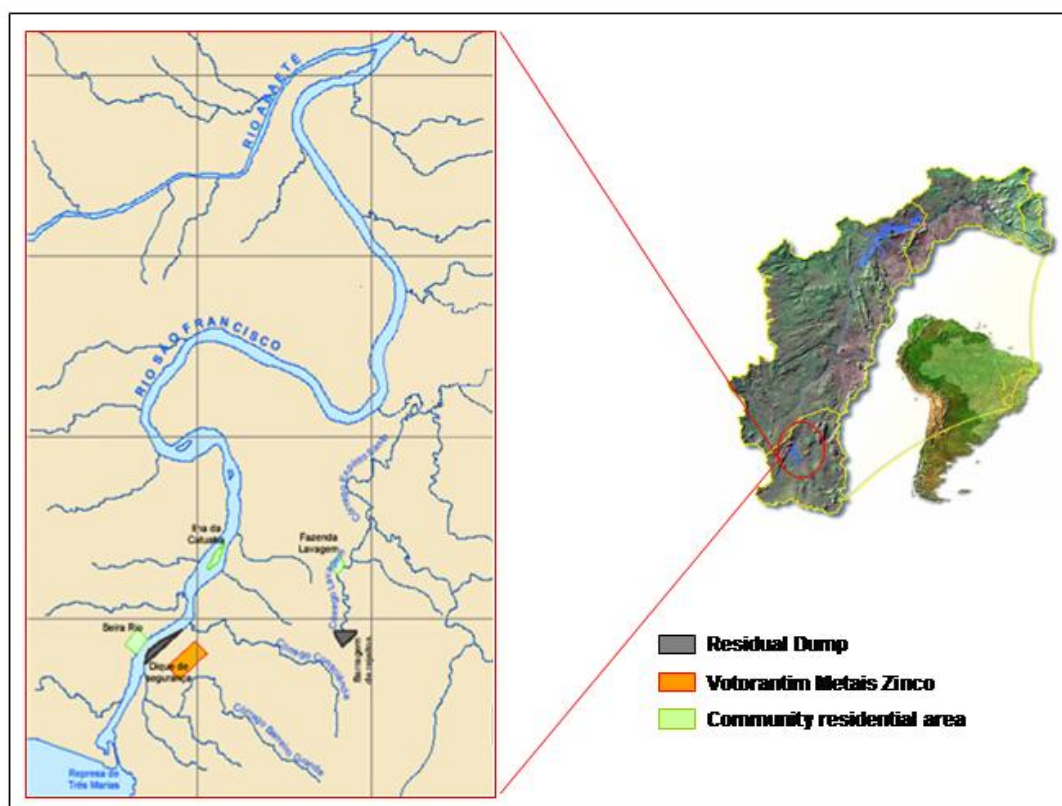


Figure 1: Map showing the locations of Votorantin Metais Zinco installations and the residences of the fishing community.

During the diagnostic of the environmental contamination the research group prioritized community knowledge that thus had an important role in the development of the research. This input came during the determination of sampling sites and subsequently in the process of discussion, contextualization, and pertinent follow-up to the research results.

The tools used for promoting the dialogue between popular knowledge and scientific knowledge were the following: a field reconnaissance visit, participative sample collection, and workshops (Table 1)

Table 1: Activities used to promote the exchange between community knowledge and scientific knowledge generated by the research project

Activity	Specific Objectives
Reconnaissance visit March 2005	• Establish first contact with the community • Definition of sampling plan
1st Workshop June, 2005	• Sensitization of project members to the extent of the project • Discussion of questions relevant to environmental quality within the context of the project • Formation of the volunteer sampling team
Participative Sample collection June 2005 & February, 2006	• Collection of representative samples from the dry and rainy seasons with the participation of the fishing community.
2nd Workshop November, 2005	• Presentation and discussion of preliminary results with the fishing community and subsequently other interested groups • Discussion on the method for publication of results.
3rd Workshop June 2006	• Presentation and discussion of final results • Develop follow-ups to project • Publication of results
Information pamphlet	• Participative and multi-stakeholder reflection on results and their implications • Dissemination of understandable information participatively prioritized

Each of the activities was developed using action research concepts, methodology that allows for the construction of new knowledge through dialogue between scientific knowledge and popular knowledge to overcome problems, but also allows the results to be developed jointly and shared (Andaloussi, 2004).

A critical description of the activities and a subsequent evaluation of the role of each stage is presented below.

Reconnaissance visit

The reconnaissance visit consisted of the presentation of the research group to the fishing community, starting the partnership that was developed between these players.

The introduction of the research group to the community was done with the intermediation of other researchers that were already active in the area through the PPA project. Due to the participatory nature of the PPA project, a relationship of mutual trust and partnership between researchers and the fishing community of Tres Marias and Beira Rio had already been established and was extended to the LBGqA group of researchers. In the eyes of the community, the activities proposed by the LBGqA were thus part of the PPA project.

Establishing trust and partnership between the fishermen and the research group was extremely important for the development of the whole process of participatory research that followed. As expressed by Macnaghten (2007) this participation develops from empowerment and the creation of a sentiment of potential to act and change their situation.

This process occurs in a vertical fashion, establishing a relationship between the individual and the knowledge, its importance and efficiency of its action, and in a horizontal fashion between the individual and the institution (Macnaghten, 1997). In other words, the action is achieved only when the actors involved trust the institution that is promoting the action: knowledge of the cause to be addressed is not enough.

Participative sampling

The participative sampling envisioned the integration of the community into the process of intervention and research, through the

participation of the community of fishermen in the determination of sampling sites and the sampling itself.

With the integration of the community in these aspects, we hoped to promote dialogue between technical and popular knowledge, enabling the study to respond to the needs of the community while also taking into consideration the technical necessities of the work. .

The participation of the fishing community in sampling occurred in three instances: in the definition of the sampling locations, realized in one boat trip on March 10, 2005; in the first workshop, during which there was a specific module on discussion and presentation of sampling procedures; and finally in the sample collection itself, where volunteers identified themselves and organized themselves into two groups: one to work on the collection of water and sediment and the other on collection of fish.

The participation of fishermen in the identification of sample points was technically very important, as their in-depth knowledge of the region allowed the study, even with very few sampling points, to arrive at a reliable diagnosis of contamination levels.

During the collection of water and sediment, fishermen loaned a boat, piloted, and participated to some extent in the actual sampling – this last was limited due to limited familiarity with this particular sampling process. The moment was thus an additional opportunity for learning and interaction.

The collection of fish, on the other hand, was organized, divided between the sampling points, and implemented autonomously by the fishermen. Input from technicians was basically limited to recommendations on storage and labeling of the samples.

The participative sampling contributed to the process of exchange between popular and scientific knowledge, valuing the community knowledge acquired empirically through the intimate dependence of the artisanal fishermen on the ecological processes that regulate the fishery, and re-enforced the importance to science of considering other knowledge in its search for sustainability.

Workshops

Three participative workshops were held to help integrate the community and other actors into the research creating dialogical spaces recognizing those involved in the different facets of the same socio-environmental problem.

Action research methodology was followed, with instruments that facilitated and promoted the effective exchange between scientific knowledge (researchers) and popular knowledge (fishermen and other members of the community). Resolution of problems, gaining understanding, and generating knowledge within the context of the project and the socio-environmental conflict were objectives of these workshops.

The proposal for the workshops was built on Freire's realization (Burton, 2002) that a definition of the problem is a necessary pre-cursor to an effective process of teaching and learning. The community's perception of the theme being worked on was thus the starting point of the workshops, such as perceptions of environmental contamination, criteria of environmental quality, and their implications and limitations. We opted to use dynamic activities to develop the concepts to be worked on, believing that this would facilitate the interaction between participants of the workshop.

In the second phase of the workshops, the proposal was to discuss the question of contamination based on the concepts and data discussed, given that the results re-affirmed the community's allegations that contamination by metals existed.

This reflective exercise allowed the emergence of a variety of worrisome questions related to the contamination and the situation of the fishing community. Two main concerns were voiced – the safety of the fish for eating, and the implication of the contamination for human health.

Comprehension of the implications and limitations of the diagnosis realized was confirmed in the context of the discussion on which topics to publicize and what follow-up should be pursued. The results of this discussion, addressed in the third workshop, were:

For water:

- CONAMA resolution 357/05 is violated, due to the high concentration of metals in the water;
- Data for the rainy season show that there is an increase in the concentration of these metals due to:
 - increased quantity of suspended particulate matter due to erosion of soils and resuspension of old sediments
 - Increased quantity of water in the retention ponds, increasing both surface spills and infiltration flows
- The criteria established by CONAMA 357 are based on the protection of aquatic life. Amongst other uses foreseen in Class 2 water bodies. However, to evaluate the water's suitability for human consumption, Decree 518/04 of the Health Ministry needs to be consulted.
- Considering that untreated water is habitually consumed by the fishing community directly from the river, we have to think of a simplified treatment that can be carried out by them, avoiding health problems due to drinking river water.
- The data generated by the project indicate that amongst the metals in the water, manganese and cadmium exceed the limits for drink (according to Decree 518).
- Studies of the Health Secretary of Tres Marias indicate that iron and manganese are elevated in untreated water consumed in the residences of the fishing community.
- Other criteria, such as bacterial contamination, still need to be evaluated before allowing the consumption of water after simplified treatment.
- Actions: the Health Secretary will continue studies to evaluate bacterial contamination.
- Suggestions: proposal of a simplified water treatment while COPASA is not providing treated water to the community of Beira Rio.

For sediments:

- The sediments of the river are critically contaminated for metals primarily at the point where effluent water is discharged from VM and at the mouth of the Consciencia Stream.

- Sediments are mobile, both horizontally and vertically, potentially being carried down-river and accumulating in different points of the river. As this sediment is contaminated, critically polluted points could be formed along the river's length (areas potentially toxic to organisms that live in the river).
- New projects to be implemented to resolve the problems caused by the historical environmental problem must be presented and discussed together with the community.

For the fish:

- Average metal concentrations encountered in the fish filets (mandi, curimba-pacu, and traíra) are below the maximum levels allowed for in decree 685/98 of the ANVISA.
- Results generated to date don't indicate risks in the consumption of filets of the species analyzed. Further analyses are needed to evaluate the consumption of other parts of the fish and of other species.
- Based on physiological indicators (metalothionein levels measured in partnership with the University of Manitoba) there are indications that the fish are responding to the presence of metals in the environment. Further studies are required to better characterize these effects and their contribution to observed mortalities.
- Monthly monitoring of the quality of fish for consumption is recommended, using a variety of species and covering the area of the dam of Tres Marias to the Pontal do Abaete.

Actions:

- VM promised to enable and fund the monthly collection and analysis of fish, in conjunction with the community.
- Development of other studies and partnerships to address outstanding questions and analyze other fish tissues, including gills, liver, and head, as well as *in situ* toxicity tests.
- Development of a local monitoring and research centre capable of facilitating rapid diagnoses.
- Training of the community to participate in environmental monitoring.

As can be observed, the summary of topics and follow-up indicated by the group participating in the workshops cover the principal topics pertinent to the research realized, which allows us

to infer that the dialogical spaces created – the workshops – satisfactorily addressed their purpose of promoting dialogue in the search of actions. This is indicated by the presence of a diverse set of actors in the workshop, with the voice of the fishing community being given adequate force. This allowed for agreements and future advances needed to achieve improved environmental conditions and allied improved living conditions for the community.

In this process, the scientific research was made available in favor of the most fragile group exposed to the problems of metal contamination (the fishermen and women and other community members that live on the river) . This was made possible through the active and participative communication during the project.

Information Bulletin

In a second step of communication and dissemination of the results, an informative bulletin was produced on the above topics, presenting the results with graphic designs and accessible language to create an information vehicle that could be used and comprehended by fishing communities that are interested in the problem.

The pamphlet was presented to the principal leaders and institutions of Tres Marias and the neighboring region that participated in the workshops to adapt the language and approve the contents, which was received positively by the fishing community, who identified with the work.

This material was carried by these actors to their place of socializing where questions of the environmental quality of the São Francisco River are discussed, including the Fisheries Working Group, which meets on a bi-monthly basis for discussion of questions which relate to the situation of the professional artesanal fishery, and the Cooperation Network (Rede de Cooperacao), created in the context of the PPA project, that fosters cooperation in research and actions related to the mortality of fish and to the environmental monitoring in the Mid-High São Francisco River basin.

Conclusions

The present environmental picture demonstrates an increased pre-occupation with sustainable livelihoods that are more appropriate for maintaining natural resources. This search is

gradually increasing the recognition that to achieve the desired sustainable relationship with the environment, it is necessary to deal with the intrinsic complexity of environmental questions, including social, ecological, economic and cultural aspects.

However, an unequal division of the benefits and the damages created by the use of the environment continues, which indicates to us the need to search for democratization of the use of these resources, this also being a step in the search for sustainability.

In this context, the project was developed as action research, believing that science needs to overcome some paradigms in relation to its perceived monopoly on defining appropriate priorities to be studied and applied in the search for sustainability in the socio-environmental context. Our diagnosis of the environmental contamination by metals was instead carried out in partnership with the professional artisanal fishing community of Tres Marias and its region, considering the traditional knowledge obtained by these actors through the fishing culture, thus giving voice to other knowledge, building the path to trans-disciplinarily.

Working with an action research project signified working with and for a community, considering community knowledge, promoting the dialogue between this knowledge and scientific knowledge, and hoping that this dialogue will be taken seriously and favorably by more powerful stakeholders. To establish dialogue between different knowledge we used participative planning, workshops, participative sample

collection, and participative divulgation of results. The effectiveness of this empowerment process for communities through the sharing of information and sharing of knowledge promoted some advances which extended beyond the greater credibility and force of argument. Other practical advances included the realization of other studies by the state triggered by the more enlightened and confident questioning by the community. These activities thus permitted the valorization of community knowledge, community empowerment, and multi-stakeholder linkages for resolving environmental problems,

This project is an example of how multi-stakeholder involvement in an environmental problem through participative tools, promotes the exchange of different types of knowledge, fosters dialogue between different actors involved in the same socio-environmental context, and promotes the insertion of research into the context of the complexity in which the demand for it developed. Science is thus applied in favor of the community in search of sustainable livelihoods and environments.

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The Power of Pointing and Naming: A Study of the Communicative Act of Whale Identification

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Abstract

Pointing and naming can be seen as the basic entry to humans communicatively identifying and discerning parts of nature, or to observing and categorizing particular aspects of nature as, in fact, particular. Whale watching is a nature-based industry centered upon pointing and naming, showing and telling. In this study, I focus on a particular case study of an international whale watch site where many credited a scientific act of pointing and naming, or identifying whales as unique individuals, with fundamentally changing human-whale relations. In ethnographically exploring historic and contemporary communication about whale identification in this site, I examine how this communicative act served in the past and present to mediate and even transform the ways people communicated about whales, as well as the ways they related to whales in perception, practice, and policy. Much of my exploration follows speakers' own metacommunicative interpretations of the ways in which labeling whales as individuals via identification served to mediate and transform human relations with nature.

Whale watching is an industry based upon pointing and naming, showing and telling. In this study, I focus on a particular case study of an international whale watch site where many credited a scientific act of pointing and naming with fundamentally changing human-whale relations. In ethnographically exploring communication about identification in this site, I particularly examine how this communicative act served to mediate the ways people communicated about whales, as well as the ways they related to whales in perception, practice, and policy.

The case study for this paper was the highest concentration of whale watching in the world, a transbordered West Coast Canadian and U.S. tourism industry that is largely focused on endangered orca whales. The study uses data gathered during 2005 and 2006 on-site ethnographic tourist season fieldwork to look at how participants characterized a particular communicative act as having helped and/or continuing to help shape human-nature relations. My research platforms as a participant observer were whale watch boats, public shoreline whale watch sites, and a marine monitoring boat that watched the whale watchers in order to protect the whales – I also attended public meetings and conducted interviews. Study participants were tourists as well as a wide range of participants who I term whale or orca insiders, who comprised whale watch captains and naturalists, marine monitors, whale researchers, whale advocates, and islander locals. Finally, there were the whales themselves, a group of three pods of culturally and ecologically

iconic orcas called the Southern Residents who have perceptually transformed, in the past 50 years, from mysterious villain, to marine park performer, to environmental symbol.

I start with a notion expressed to me by a whale watch tour company owner and boat captain as he looked out at the tourists gathered on the deck of his boat, pointing at the whales. The captain said, “I think people have this insatiable desire to point at and name things. ‘Oh, that’s a...’ or ‘What is that?’”

I began to wonder about the captain’s observation – is this pointing and naming in some ways a foundational communicative act when it comes to the human relationship with nature? Pointing and naming can be seen as the basic entry to humans communicatively identifying and discerning parts of nature, or to observing and categorizing particular aspects of nature as, in fact, particular.

I tried on this lens as a way of thinking about basic communication about the human relationship with nature. This act of discursively identifying and labeling nature, or this “insatiable desire to point at and name things,” certainly did seem to allow for, or mediate, a particular way of relating to nature in my study setting. Much of the communication I observed connected to pointing and naming, often at the very basic level of pointing at a whale and naming it as a whale. The communicative act of whale identification that I explore in the remainder of this essay can be interpreted as including more developed and complex arenas of pointing and naming, context-specific

arenas credited by many as fundamentally transforming human-nature relations in this site.

Whale Identification

The communicative act of identifying whales was originally formed and put into practice by scientists who realized in the 1970s that one could identify individual orcas by unique variations in their dorsal fins and saddlepatches¹. As such, scientists were able to label individual orcas, assigning each orca an alphanumeric term unique to that orca. According to whale insider study participants, this communicative act led to perception shifts about orcas that informed changes in both policy and daily practice of human-nature relations in this site. In addition, I observed this act inform contemporary ways of communicating in this site.

In the following sections, often using participants' words, I first relay the story of how this particularly advanced form of pointing and naming came to pass, the major shifts in human-orca relations with which this act is credited, and how this initial communicative form of identifying whales continues today in this site. I then look at how contemporary ways of communicating may be informed by the scientific communicative act of orca identification, looking first at tourist communication and orca identification and then more specifically at orca insider participant communication and identification.

Scientific Pointing and Naming: First Identifying the Orcas

A naturalist has posed a question to her boatload of tourists.

Naturalist: "So, can you imagine being out here on the water say 30 years ago and you have all sorts of whales and you need to identify them. How would you do that?"

No one ventures an answer. She continues.

Naturalist: "Dr. Michael Bigg, a Canadian researcher, figured out that you could photo identify them. In the process, he also learned things about their culture. He learned they were matriarchal. These big males you see out here are not the leaders. Their mothers are. And they have no mates. So how do they produce offspring?"

Tourist 1: "One night stands?"

Naturalist: "Pretty much, yeah. So, that would be the son there traveling with his mother. He's not a father."

Tourist 2: "So the males are loners?"

Naturalist: "No, they live with their mothers. That's a nice looking healthy boy."

The above is one version of the story I often heard told by naturalists about the scientist Bigg and his contribution of the categorizing schema of orca identification. In this example, as with many Bigg stories I heard told, the naturalist draws connections between the scientist's original identifications of the orcas and discoveries about the orcas' lives, specifically "their culture" ("He learned they were matriarchal"). Here, the speaker connects the act of identifying orcas with the perceptual act of humans coming to discern the orcas as complex cultural beings. She then switches focus to teaching tourists this perception about the orcas' culture, a teaching moment that was made possible by the act of identifying. She also directs tourists to apply this cultural knowledge to the whales in front of them ("These big males you see out here are not the leaders. Their mothers are.") She asks a question that involves tourists in figuring out the concept of matriarchy ("So how do they produce offspring?") and in the process reinforces the concept. When Tourist 2 does not seem to understand the concept of orca matriarchy, the naturalist responds by more simply stating the concept of matriarchy ("they live with their mothers") and reaffirms the status of the adult male as a son by characterizing him as a boy ("That's a nice looking healthy boy"). From the above dialogue and interpretation, we can see how whale watch insiders presently frame the act of identifying as mediating human perceptions of orcas, and how they continue to teach these particular perceptions made possible via the act of identifying.

Speakers not only credited the act of identifying with such shifts in human-whale perception; they also credited identifying with shifts in human-whale policy and practice. As mentioned earlier, in the past 50 years, human relations with orcas in this area have undergone major paradigm shifts. In particular, whale insider participants tended to credit the act of identifying orcas with allowing for the human-orca

relational shift from deadly marine park and aquarium captures of wild orcas to the US and Canadian governments declaring the captures illegal. This policy shift was also experienced, in part, as a transition in practice by some people from going to see captive whales in marine parks to the birth of a whale watch tourism industry, which allowed people to see wild whales in their natural habitat. The following is a more detailed overview of the story of the creation of the identification schema as told by orca insiders (including naturalists, orca advocates, and area authors) and the perceptual and practical shifts in human-orca relations that insider participants associated with the act.

Orcas from the Southern Resident community under study were the first orcas in the world to be captured and seen by the public in aquariums and marine parks – and the first to perform in Sea World shows under the moniker of “Shamu.” Some insider participants referred to the captive whales as, in a sense, serving as spokespeople, or ambassadors, for the remaining wild orcas. Ironically, while marine park and aquarium captures of area orcas killed and traumatized individual orcas and devastated their population, the captive whales may have helped to create an environment where the public for the first time was receptive to, and concerned about, orcas. In marine parks and aquariums, the public came close to orcas for the first time. Performances constructed the human-orca relationship often in a non-fearful and highly anthropomorphic way. Instead of fearing or hating the whales, people began to find they could relate to these whales and even care about them.

At the same time, some people in the present study’s site witnessed the area captures.

Area witness: “We all looked and went a little closer and realized that not only was there a pod of orcas but there was a big fishing boat, and a couple of smaller boats, and a sea plane that was buzzing in and out. And we realized that they were chasing these whales. We remembered that we had read in the paper that a permit had been given to Sea World to capture four killer whales in Puget Sound. They were throwing explosives off the speedboat to herd them. They drove the orcas into a shallow area where they could put the nets out and get the whales into the nets, and they were separating the family

members. You saw the mothers and calves being separated and heard them calling to each other from opposite sides of the net. And the ones who were not captured would not leave, they hung around.”

Some witnesses called the media to cover these captures, including the above capture of Southern Residents at Budd Inlet in 1976. Some also organized area protests (Hoyt, 1981). In response to these types of media coverage and public outcry, the Canadian and American governments asked scientists to identify possible impacts of the ongoing captures on the orca populations. In 1973, Bigg initiated his photographic study and census of the orcas based on their markings. Identifying the orcas allowed Bigg and other researchers to provide population counts of the orcas. Through their quantitative identification, the scientists conveyed that the orcas were dangerously and surprisingly scarce. Instead of the hundreds or even hundreds of thousands of orcas asserted to exist in the area by marine parks and largely believed to exist in the area by the public, scientists found there were only about 70 Southern Residents remaining – about 45 had already been captured or killed by the marine parks. In 1976, public response to such information, as well as to the media coverage and eyewitness accounts of the brutal and often deadly marine industry captures, led to captures first being outlawed in Washington State.

The scientists’ identification system, however, took them beyond the initial count to identify other facts that became points of connection to the whales for orca insiders and the general public. As they identified individuals, they began to notice who was swimming with whom and to deduce family relations. The scientists’ alphanumeric system identified the Southern Residents as three distinct family pods: Js, Ks, and Ls. The alphanumeric system allowed for identification of orcas both in terms of family genealogy and individual identity – e.g., He’s L57, and so he’s in L pod, which is the matriarchal family of Ls. An orca’s individual number was and remains unique to that orca; when the orca dies so does her number².

In the process of quantifying the whales through identification, the scientists learned much more than numbers: They discovered the whales had close family relations. The scientists’ messages of the orcas’ diminished numbers were packaged within this family discovery, a fact that spoke to a wide range of people. The messages were mediated via advocates (including high-ranking state politicians) who argued

the scarcity pointed to the possible destruction of an animal with whom people were internationally and regionally becoming more connected. With this new information provided via the act of identification, some audiences watching media coverage of the captures may have begun to perceive heartbreaking dramas instead of the netting of some very large fish. Today, thirty years after the captures were outlawed, these interconnected messages of unique individuality, of family connection, and of anti-capture sentiment have had staying power in this site.

The identification system itself has also had staying power and is used by many participants in their communication about the orcas. Researchers using Bigg's identification schema have compiled annual photo-identification inventories of the Southern Resident population since 1973 (The Center for Whale Research, 2007). The Center for Whale Research each year releases an updated booklet of the photo identification charts of the Southern Residents that many of the area's about 100 whale watch tour boats carry on board, and captains and naturalists often use the chart as a form of reference among one another and with tourists to identify who they are seeing. These charts of photos are arranged in family trees³. Births are marked, as are deaths.

In addition, the identification process is used in interactive educational venues in the area. For instance, visitors to the Whale Watch Park visitor center and The Whale Museum can study a quick guide on how to identify particular orcas and then can attempt to identify individuals exhibited in painted or sculpted portraits. In addition, in both these venues, one can push buttons and listen to different orca vocalizations and learn which pod that individual who made the call belongs to by letter⁴. Naturalists on whale watch boats sometimes use the identification charts to teach the more curious tourists how to identify orcas. These contemporary approaches to presenting the orcas as identifiable, and as unique individuals in family relations, are made possible by scientists' original identification methods for these area orcas.

As such, this original scientific communicative act, to point and shoot the camera and then to identify and name the individual orca by letter and number, helped to mediate communicative practice and orca-human relations in the past and continues to mediate communication and relations in particular ways today. In the following sections, I look at contemporary face-to-face and visual communication on site that relate to acts of orca identification. I first look at tourist communication. I then look more

specifically at orca insider communication, exploring participant themes that associated the communicative act of identifying orcas with mediating certain human-orca relations, including identifying orcas as helping to protect them; identifying orcas as helping to connect people to them; and identifying orcas as helping to keep track of them.

Tourists and Orca Identification

On many whale watch boats, as tourists saw orcas they also heard from naturalists who identified the orcas by name as individuals. In the process, the naturalists would often explain to tourists that they, too, could learn to identify individual whales. Many naturalists would give a basic explanation of how to identify an individual. Here is one example.

Naturalist: "The saddlepatches are unique like human fingerprints. You can also identify using the knicks on the whales' dorsal fins."

Here, in specifying that the orcas' markings are unique, the speaker makes a comparison to "human fingerprints," a comparison I heard made by many whale watch insiders teaching tourists the steps of identification. This human comparison is likely evocative for listeners who would not know orca markings as unique but who would know human fingerprints as such. In addition, the comparison is embodied, bringing the human body in line with the orca body. In this way, in teaching others how to identify orcas, the speaker brings to mind embodied similarities between human and whale.

Still, for many tourists, most of whom were one-timer whale watchers, despite naturalists' explanations, the whales still all looked the same. Here are examples of tourists on different boats responding to naturalists after they called out the identity of an orca or of a pod swimming nearby:

Naturalist: "There's J2, right behind us."

Tourist: "How do you know? They just look the same. I'm proud of you."

On another boat that is approaching the whales, but is still about 300 meters away.

Tourist: "Do you know what pod is out here?"

Naturalist: "Ls"

Tourist: "How do you know that?"

The majority of tourists did not arrive with the knowledge that orcas could be individually identified and so the information was often new to them. While tourists practiced the basic act of pointing and naming (e.g., "There's a whale!") and while they heard how one could identify the orcas by looking at them with a trained eye, the tourists often expressed surprise when a naturalist could identify a whale as an individual. The naturalists were not only looking at physical identifiers when they saw a whale. For many of the whale watch insiders, as I will describe in the following sections, the orcas they identified were unique individuals – with individual stories, familial relations, and at times special connections with the speaker. In contrast, however, for most tourists who had never encountered the whales before nor shared contextual or relational knowledge about them, "they just look the same."

Tourists appeared to derive a range of meanings about human-orca relations from the whale watch insiders' abilities to identify orcas. I illustrate these meanings with several examples.

First, on one whale watch tour, the naturalist tells tourists that if they want the orcas to come closer, they will have to "put out the love." The communicative climate on this boat is light banter when this dialogue takes place.

Naturalist: "You got to put out the love – not just me."

Tourist 1: "Yeah, but they know you better than us. You know their names."

Tourist 2: "They know you as much as you know them?"

In this dialogue, the passengers lightheartedly associate the naturalist's ability to identify the whales, or "know their names," with the naturalist being known by the orcas. This notion of the naturalist being known by the orcas is associated with him having a better ability than the tourists, who are unknown to the orcas, to affect the orcas to come closer. In both tourists' statements, the whales are situated as subjects ("they know you better," "they know you as much"). Tourist 2 also poses the question of who knows who better – the naturalist the orcas, or the orcas the naturalist. It is possible that in

this lighthearted way, Tourist 2 may be expressing the notion that while the naturalist may "know them," or identify and focus on the orcas, the knowing may not be reciprocated, or at least not to the same degree.

Another example: On a whale watch boat, two passengers show interest in the ID charts. The naturalist shows the tourists the family trees in the charts. She then shows them a larger image of an orca body and points out the saddlepatch as a point of identification.

Tourist 1: "Do they identify each other that way?"

Naturalist: "I don't know. We know they have unique voices and calls, just like you or me."

The tourist in asking the naturalist whether orcas, too, identify each other by saddlepatch, questions whether there is a similarity of this aspect of relations between human and orca and orca and orca. In doing so, the tourist also shifts the orca from object to subject, moving the conversation from how humans identify orcas to how orcas identify orcas. The naturalist, in her response, provides a possible alternative way orcas identify one another and draws upon a human comparison ("just like you or me") to explicate the unique quality of orca "voices and calls." Here, in discussing whale identification, each speaker draws upon notions of similarity between humans and whales.

I observed a good number of private boaters who were from the region and knew the letter names of the Southern Resident pods, though generally could not identify the pods if they saw them. Some also knew of specific well known individuals in the pods, though again they generally could not identify them. On the monitoring boat, when we interacted with private boaters, the monitoring boat driver would often identify which pod was in the water with us. It seemed that more than half the time, the boaters knew what the monitoring boat drivers meant when they said something like, "These are the Js." Other boaters would sometimes ask the monitoring boat first about which pod was present (e.g., "Is this K pod?"). The identification of pods to these private boaters at times seemed to affect human behavior toward the orcas.

An example: One day on the monitoring boat, we approach a private boat from Washington's Puget Sound city of Tacoma. The private boat is speeding along behind the orcas and not following the whale

protection guidelines; instead, driving aggressively to pursue the whales. We pull up to the boat to strategically slow the driver down by our presence and to inform him about the guidelines. He takes our printed information with a stern face and without talking. When the monitoring boat driver identifies which whales we are with, however, the private boater's expression and demeanor change.

Monitoring boat driver: "This is J pod in front of you."

Private boater pauses and then says: "Did you see Granny?"

Monitoring boat driver: "Yep, Granny is out here."

The private boater's stern expression transformed to a smile. After he departed, his boating behavior around the whales was less aggressive and more respectful; he kept at a distance and slowed down. It appeared likely that the identification of Granny, the 96-year-old matriarch of J pod and a whale he knew by name and pod affiliation, was influential in changing his behavior.

In sum, many tourists heard whale watch insiders teach about identification in ways that brought to mind embodied similarities between human and whale. Still, most tourists had never encountered wild orcas before, and despite identifications provided by naturalists, the orcas continued to "just look the same." Tourists appeared to derive a range of meanings about human-orca relations from the whale watch insiders' abilities to identify orcas, including notions about people who can identify the whales being known or unknown by the whales, notions of similarities between humans and whales, and notions of care and consideration for identified whales.

Whale Watch Insiders and Orca Identification

Most orca insiders referred to the practice of identifying the orcas as "IDing." Whale insiders at times expressed the notion that this particular act mediated human relations with the orcas. At other times, insiders demonstrated certain uses of orca identification. I interpreted these expressed notions and uses of identification as grouped into three themes: Identifying orcas helped to protect them; identifying orcas helps to connect people to them; and identifying orcas helps scientists and non-scientists alike to keep track of them.

Identify to protect.

Whale insiders expressed the notion that the act of identifying the whales helped to protect the whales from capture by the marine entertainment industry. This notion was expressed in books written by local whale advocates, whale watch insiders, and orca researchers. In addition, the notion was at times expressed on whale watch boats to tourists. I provide an example from a whale watch boat and explore it in some depth.

Naturalist to tourists: "Knowing who the animals are was everything. People were claiming there were thousands, even hundreds of thousands of whales. But once we could ID them, we realized, 'Gosh, there are only about 100 whales here. We have to stop capturing them.' They had captured 50 whales already in this area. And the real sad thing is, of those 50, only one survived. They live an average of only five years in captivity. At Sea World, they call 'Shamu' all the orcas they have. And replace dead orcas with a new orca and call that orca 'Shamu' to trick people into thinking this is one whale."

Tourist 1: "Are we still capturing them?"

Naturalist: "No, it was outlawed in the U.S., so they moved the capturing to Iceland. In 1997, Japan did a capture of five orcas; only two are still alive. The last capture was in Russia three years ago – two whales died in the capture, one female survived and died two weeks later. These whales are not suited for capture for many reasons."

Tourist 2: "I didn't know they still live with their moms."

Later, after the whale trip, I walk with the naturalist back to our cars. I tell her I liked what she said about captivity – that people seemed to hear her message.

Naturalist: “It’s important they understand they are not put here to perform for us. They are not circus clowns. They’re wild animals. It’s important for people to know why we’re out here.”

In her statements to the tourists, the naturalist first frames the act of identifying as being in a causal relationship with orcas’ protection from human captures. Specifically, she equates identifying with “knowing” the whales and assigns this “knowing” the utmost importance in terms of resultant action. She characterizes identifying with a shift in human perception of the whales, from not knowing to “knowing” the whales, and as leading to a desire to shift human behavior toward the whales (“once we could ID them, we realized, ...’We have to stop capturing them’”). She asserts that former human perceptions about the whales, in particular claims about the orcas’ numbers, were effectively dismissed with the identifications.

The naturalist follows this explanation of how the act of identifying orcas shifted human perception and practice with additional numerical descriptors – e.g., 50 Southern Residents captured, 1 survivor, 5 year mortality rate in captivity, multiple Shamus. In addition, she characterizes the Sea World practice of naming the orca Shamu as a deception. These numbers of captivities and deaths of local wild orcas who the naturalist has explained are identified as unique individuals are juxtaposed with the marine park practice of naming a succession of captive orcas Shamu. As such, this juxtaposition evokes a human-caused whale morbidity and a human disregard for individual whales at marine parks. The practice of replacing dead captive orcas simply by naming the next orca Shamu, put in contrast with identifying wild whales as unique individuals, mediates a particular perception of human-whale relations that not only informs tourists about such practices but allows tourists to view Sea World’s identifying practices as a “trick” to fool people “into thinking this is one whale.”

While in many cases I did not hear tourists respond with questions to naturalist information that was sad or depressing in some way, here tourists respond. The first tourist asks, “Are we still capturing them?” She uses the pronoun “we,” communicatively including herself in this human practice, and questions whether the practice is ongoing – or, in contrast, are the orcas protected?

The naturalist explains the orcas are protected in the US, but that the captures have moved to other countries where they are still often deadly for the orcas even before they are in captivity. Here, she numbers and gives the sex of captured and killed whales who tourists have just learned can be identified as individuals. She closes with a statement that, in effect, is an argument that “these whales are not suited for capture for many reasons.”

A second tourist responds by saying, “I didn’t know they still live with their moms.” This response is likely informed by on-site communication related to the act of identification. Naturalists, and other whale insiders, often communicated the notion that without identification scientists would never have been able to identify orcas as being in matriarchal familial relations. Here we see this information mediating the tourist’s stated response to the naturalist’s contemporary capture information about orca captures: the tourist frames these captured and killed orcas as individuals who “still live with their moms.”

The naturalist appears to use the story, in part, to show tourists how identifying the orcas changed human-nature relations in these waters from capture to protection (“Knowing who the animals are was everything”). She also contextualizes her information and argument about contemporary captives and captures by first describing this initial identification act and its implications for human perception and practice (“People were claiming there were thousands, even hundreds of thousands of whales. But once we could ID them, we realized, ‘Gosh, there are only about 100 whales here. We have to stop capturing them’”).

At the same time, in her explanation to me after the trip, she associates additional goals with her statements – in particular, to frame tourists’ views of the wild orcas they see in front of them (“It’s important they understand they are not put here to perform for us. They are not circus clowns. They’re wild animals. It’s important for people to know why we’re out here.”) As such, we can see in this example an ongoing protective framing of orcas contextualized via the act of identification both in protecting orcas from the human act of capture and in protecting orcas from the human perception of being seen as “circus clowns” “put here to perform for us.” Identification, thus, is framed as not only relating to the realization of the scarcity of the local orcas, the regional halt to captivity, and the ongoing captures and marine park practices, but also to the ongoing

negotiation of human perceptions while whale watching of the orcas as “wild animals.”

Identify to connect: Feeding a connection that already exists.

For some insiders, the act of identification was part of an existing personal relationship with the whales. I first focus here on Kent, an orca researcher who was known by many insider participants for his superb ability to identify orcas quickly and accurately. One research assistant described the following scene of Kent identifying orcas.

Research assistant: “Last night, the sun was setting and the whales – the hydrophone was on – and they were filling the house. It almost brings you to tears. It was amazing. So, Kent’s on the porch calling off the letters for the logs <laughs *kindheartedly*> – just like they’re his children. He wouldn’t go to a party the other day because he was worried there was a chance he was going to miss a chance to ID some whales.”

Kent is introduced by this speaker as using the act of identifying the individual orcas in a way that communicates a certain close familial relationship with the orcas. The speaker also describes Kent as choosing the possibility of IDing orcas over socializing with people.

Kent already had been identifying the Southern Residents for the good part of two decades when I was doing my fieldwork.

Kent: “The times have changed since I began, but the whales are still the same. It’s fun seeing the kids get born and I have to stick around to see what they grow up to look like, how they turn out. And now, the babies I knew have kids of their own. It’s fun seeing how everyone’s doing every year. You know the big male who came by so close? When I first saw him he was 2. It’s fun to see him grow up.”

Here Kent expresses far more relationally than just the identification of individual whales by alphanumeric term. He talks about the whales he identifies the way many people talk about their

friends or family members. He also points out an individual who he first “saw,” or identified, when the orca was 2 years old. Kent describes a personal sense of connection with the orcas in describing his experience of identifying them for years, one that appears to be strengthened through the act of identification over time and following the whales as they “grow up,” become adults, and “have kids of their own.”

Other whale insider participants also talked about identification in personally connected terms. Here is an example of a naturalist discussing other orca insiders’ abilities to ID.

Naturalist: “Some people can look at the whales and go, ‘There’s so and so, and so and so, and so and so,’ as they come out of the water. For them, looking at the fins and patches is like looking at friends’ faces.”

Here, the speaker characterizes other orca insiders’ experience of identifying whales as particularly personal in terms of friendship. The simile of “fins and patches” as “friends’ faces” positions these parts of an orca as especially familiar, as parts that signify a particularly close and positive relationship the humans feel with the whales.

Relatedly, early in my fieldwork when I was learning how people identified orcas, I was still oriented to wanting to see whales’ faces and thinking it would be easier to identify them this way. I had mentioned to one monitoring volunteer that the orcas’ fins and saddlepatches were not a place my eyes were trained to look, as I was used to more terrestrial identifying when one could see an animal’s face, human or otherwise. One day on the monitoring boat, we were near the J and K pods as they swam by Whale Watch Park. J1, or Ruffles, surfaced nearby, his 6-foot-tall dorsal fin, which by its wavy pattern is distinctive to those in the know, rose grandly out of the water. Immediately, the others on board said, “J1,” in unison. Then, the volunteer I had spoken to turned to me.

Volunteer: “Tema, I was thinking about what you said – that we ID by fin. It seems impersonal compared to the eyes or face, or seeing what they are doing under water.”

Me: “Does it seem impersonal?”

Volunteer: “Well, no, not to me.”

The parts of an orca that to tourists, or to newcomers like myself, might have appeared to be just another orca fin or a smudge of gray color behind that fin, to the volunteer were inextricably connected to unique individual orcas. In particular, to the volunteer, these ways of identifying whales were not “impersonal.”

On another day, a Whale Museum staff member told me that the fact that some people can identify the orcas “is important.” I asked her what she meant.

Museum staff member: “Because the idea is that identifying them allows us to understand them more and to then care about them and their surroundings more, because we know their stories, we know who’s whose brother or mother.”

Here, the speaker expresses the notion that identifying “allows” people to better appreciate the orcas and, consequently, to be concerned more about the orcas and their environment. Identifying and understanding are also explicitly related in this statement to knowing the whales “stories,” and knowing their familial relations. As such, the importance of identification as an act is expressed as mediating different senses of connection with the orcas, connections that involve knowing their stories, knowing their relationships, increasing human understandings of orcas, and increasing human concern.

Identify to connect: Seeding a connection

The notion of the act of identifying actually allowing for new human connections with whales was especially evident in the interactions of orca insiders with non-insiders. While insiders often expressed the notion that the act of identification was associated with ongoing personal relationships with orcas, they also expressed the notion that IDing could help create personal connections in visitors.

Indeed, The Whale Museum and other educational forums for tourists in the area feature the identification process in a format meant to be accessible for visitors. For instance, The Whale Museum displays family trees of orca ID photos, which generally pictures each individual orca’s fin and saddlepatch and lists alphanumeric identifiers as well as individual names. In addition, the museum

gift shop sells laminated ID charts that could be used as placemats. The museum family trees and placemats add an additional visually discursive element not found in the official chart booklets used by whale watch insiders, that of gender-specific colors. Museum charts and placemats use pink, blue, and non-gender specifying colors (green and yellow) for the letter/number/name plates below the photos to illustrate whether an orca respectively was female, male, or pre-puberty and sex still unknown. This addition could be interpreted as a way to use human cultural codes relating to gender to make identification in the charts more accessible to tourists and, in turn, to increase the possibility for forming connection. At the same time, the use of the colors could be seen as anthropomorphic.

At times in response to insiders identifying particular orcas, tourists expressed certain human-based cultural descriptors. Here is an example from the monitoring boat where the driver has just handed private boaters Be Whale Wise guidelines.

Monitoring boat driver: “These two nearby whales are of L pod. One is a female in her 50s and the other is a male in his 20s.”

Private boater: “A December-May romance.”

The private boater tourist, a woman in her mid-50s, responds to specific details that are accessible because of identification of the individual orcas, the age and sex. The monitoring driver did not provide relational information to the tourist, which would also be available via the identifications. In turn, the tourist uses the details available to inform her own interpretation, or story, of the relationship between the two whales, accessing a human cultural filter for an explanation that may or may not be accurate for the whales.

Anthropomorphism, in certain forms, can be used to help humans find points of connection with nature and wildlife. The two above examples provide insight into how certain forms were used in tandem with whale identification to mediate human-whale connections. In these examples, such human-based descriptors were used both in communication texts provided for visitors and by a tourist herself to interpret identification information received.

Other tourists responded to information given with identifications in other ways that revealed different types of connection points. Here is one

example from a whale watch boat. Two orcas swim nearby.

Naturalist: “This is K11 and K7, Lummi and her daughter, Georgia, born in 1910 and 1933.”

Three tourists: “Wow!”

Tourist 1: “She’s nearly 100 years old.”

Here, the tourists appear to respond especially to the age information associated with the identifications. Their exclamations may show they are surprised, impressed, or awed. One tourist does the math of how old Lummi would be. In the process, the tourist makes Lummi the subject of her sentence and uses a gendered pronoun. As such, of the information the naturalist provided with the identifications – genders, names, alphanumeric IDs, familial relation, and dates born – tourist 1 picks out two details, age and gender. In her phraseology, tourist 1 characterizes the individual orca in a way she would not have been able to before being exposed to the identification, illustrating an increased understanding and, perhaps, connection.

Other visitors who learned identification information while on site, sometimes spoke of wanting to see particular orcas. On one whale watch boat that carried Earthwatch volunteers, the naturalist identifies three nearby orcas by name and relationship, a mother and her two offspring.

One Earthwatch volunteer turns to another: “You have to run to the back of the boat to tell Sam that they are swimming by! He’s been saying he’s wanted to see these three all week. *<the other volunteer goes to find Sam and the speaker turns to me>* We all have certain ones we really want to see.”

Here, the Earthwatch volunteer discusses “all” the Earthwatch volunteers, whose main task is to help the Center for Whale Research complete its annual update of the orca photo identification chart. The speaker expresses the notion that all the volunteers have goals to see particular orcas. Because of the context of Earthwatch, one can assume the understandings the volunteers have gained about the orcas have largely been through their involvement in updating the identification charts and perhaps via the accompanying stories of insiders. In this case, the

orcas are first known by these visitors as a result of acts of identification – the charts and stories themselves – often before they are experienced on the water in their living and breathing form. This particular way of knowing first via identification appears to feed a type of connection to orcas as unique individuals, in that the visitors have desires to see particular orcas in person that they have never actually been around.

Identify to keep track

At times during my fieldwork, listening to whale insider participants talk about the orcas they were identifying sounded to me like people catching up on mutual friends or acquaintances. Such talk at times reminded me of moments when one might discuss other people nearby, such as at a party where two people might talk about someone just across the room. In such communication acts about humans, there are frequently certain people who are more often the topic of conversation than others. I observed a similar phenomenon in discussions about the 80 or so Southern Resident orcas – some whales were more regularly the topic of conversation.

L57, or Faith, was one such whale. L57 was a young adult male, who during a period of the summer of 2005, was traveling with the K and J pods instead of his own L pod. This was unusual for orcas, who usually stay with their own pod. L57 also was of the age where he could be reproductively viable, a fact that was of utmost importance on site where orca numbers were dwindling and many adult orca males were suspected by scientists to be sterile or dying due to exposure to human pollutants. Perhaps in relation to whale insiders’ perception of L57’s status as a hope for the reproductive future of the orcas, insiders often remarked on L57 being a particularly handsome whale and some whale insiders discussed having a “crush” on L57. The following are examples of communication I observed during the time L57 was traveling with K and J pods.

Orca researcher: “At first we were joking and giving L57 a hard time that he was getting some. But then we noticed that he was hanging out with the other males consistently [*she lists who he was with and I don’t catch the IDs*] and having guy time. He has no family members. His mother died and he doesn’t have an uncle or siblings.”

Here, identification is used to keep track of a particularly popular whale. In the process, an insider talks about orca insiders engaging communicatively about or with the orca (“giving him a hard time”) and theorizing about what he might be doing swimming with the other pods (“getting some.”) The speaker also talks about insiders picking out details of L57’s social behavior and identifying reasons for this particular orca’s behavior. In discussing the details of L57’s actions, she also talks about his familial background. In this way, identification is used to keep track of L57 in a particularly social way, both social among the speakers, and social in terms of the framing of L57’s experience.

Here are two other examples of talk about L57.

Whale watch tour boat captain 1 over the marine radio: “It’s weird that L57 is hanging out with them.”

Boat captain 2 responding on the radio: “That looks like a new baby. Did you see that one with K [*I don’t catch the number*].”

Boat captain 1: “[*Orca’s name I don’t catch*] just had her little one up by the surface again.”

Later that week, I’m on the monitoring boat and we are with the L pod. A whale watch captain floating with us in a group of boats and whales says over the marine radio that he has just identified L57. The monitoring boat driver turns to me and the other volunteer.

Monitoring boat driver: “That’s good – L57 is back with the Ls.”

Another captain on the radio: “It’s good to see L57 back.”

Another captain: “That’s good, yeah, he was with Js for I don’t know, a week and a half.”

In the above examples, again the act of identification is used to keep track of L57, as well as other whales, in particularly social ways. Operator 1 comments on L57’s behavior (“It’s weird that L57 is hanging out with them”). The dialogue between operators then shifts to the subject of orca babies: who might have a new baby and who just had her baby at the surface. In the second example, multiple whale watch insiders on and off the marine radio

express feeling good about L57 being back with his pod. Here, not only is keeping track through identifications especially social, but speakers also express a sense of shared relief at L57 being reunited with his pod, a shared sense of relating with whales that is mediated through the act of identification and of knowing L57 through this act.

Instances of using identification to keep track of orcas were not only limited to orcas who were of particular interest to speakers. Insiders used the act of identification to also keep track of the range of orcas who traveled in the area, discussing particular groups or discussing individuals often as they came into view. Here are some examples.

On a whale watch boat a naturalist in the presence of tourists identifies a small family subgroup of the Ls, identifying the individual orcas by name. She then says: “Look who they’re traveling with – the L5s. That’s the matrilineal group, their matriarch is L5. These are the guys who are known to harass the marine mammals.”

Here, the speaker, as with the commentary about L57 above, comments on the social nature of how the whales are grouped, on who is with whom. She then provides the nearby tourists some context for this social grouping: that the L5s are a matrilineal group, and L5 is the matriarch, and that the other whales are not of this matrilineal group. She also socially characterizes the L5s in a particular way (“the guys who are known to harass the marine mammals.”) As such, the first orcas she identifies are characterized as “traveling with” the L5s, a group that has a reputation among whale watch insiders for a somewhat infamous, and often characterized as somewhat distasteful, recent harassment behavior of smaller marine mammals. Tourists likely did not have the contextual knowledge they would need to follow all of meanings of the naturalist’s communication – and no tourists responded to the naturalist’s statements. As such, the naturalist may be speaking in some ways for her own keeping-track edification.

During one event with whale watch insiders, an orca researcher gave a slide show largely focused on what to look for to identify health problems in the Southern Resident orcas. At times, he stopped to discuss individuals as they were pictured. At one point, a whale who was hitting puberty was pictured.

Researcher: “J27 is looking really good. He’s going to be a good looking whale.”

Here, contextual knowledge again is important to understand the layered meaning of the speaker's communication. The speaker refers to a male orca who is reaching sexual maturity in a pod where only one sexually mature male currently survives. The meaning of his statement about J27's looks is loaded with such contextual knowledge, as well as the contextual knowledge that for the Southern Resident orcas' population survival the young males must reach sexual maturity, that many males are dying before they are sexually viable due to human-introduced pollutants, and that these orca insiders are all keeping on eye on J27 because he represents hope. In this case, in referring to J27 as "looking really good" with a roomful of whale insiders, the researcher identifies the orca to collectively keep track of the orca's health, as well as to share the multi-faceted meaning associated with this particular orca's well being.

Another day at Whale Watch Park, two volunteers, Tom and Sally, who take part in officially IDing the orcas are taking photos and recording IDs as K pod passes by. A first group of about five orcas travels past. Tom speaks out loud, IDing the orca at the front of the group as Lummi, the oldest matriarch among the residents. Tom takes Lummi's photo and Sally writes down the ID. The orcas are moving very fast with the current. As I look at them approach, they come so far out of the water that I see the white undersides of their necks. Tom and Sally's voices are excited and happy. I can tell they are having fun. Several times, I hear them say to one another statements like, "Do you know who that is with so and so?" and "That's interesting."

It struck me on this day for the first time that the IDing of the orcas may serve multiple purposes of keeping track. There are the official important scientific and regulatory purposes IDing serves, which is in part to keep track of how many whales are alive, as well as their states of familial organization and other clues that might point to their state of well being as an endangered group. But there are also other important purposes IDing may serve, including providing a way for insider participants to check in with the lives of individual orcas and groups of orcas, a way of story telling about the orcas' lives, and a way of socializing with one another about the whales – a living element of nature with whom speakers share a particularly deep connection. As mentioned above, sometimes to me this particular kind of IDing sounded like a conversation between people exchanging knowledge or trying to figure out together what's going on with other people they mutually know at the party (e.g., "Do you know who

that is with so and so?" "That's interesting.") In other words, the communication around this kind of IDing was often distinctly personal, enjoyable, and clearly centered on familiars.

This use of IDing to keep track was at times commented upon by outsiders and insiders. One visitor, who sat in a pub listening to orca researchers, naturalists, and advocates discuss individual orcas by ID numbers and tell details about their lives, chimed in to say, "It's like a soap opera." One of the insiders responded, "It's whale porn." Other insiders at times used this same term, "whale porn." For instance, when I asked a kayak guide how he happened to know exactly where the whales were the day before even though he was on land, he answered, "I'm down with the whale porn." "Whale porn" was a metacommunicative term used by some whale insiders to refer in part to keeping track of the orcas on the internet. Orca Network, a listserv in which orca insiders and the public emailed in daily reports of orca sightings, often included IDs, and details about who was seen, who they were with, and what they were doing. While the metacommunicative use of "soap opera" was used by a visitor to reflect on the way face-to-face keeping track communication sounded to him, the term "whale porn" was used by insiders at times to reflectively – and humorously – consider their own internet-mediated keeping track communication. The characterization of IDing-to-keep-track communication as a "soap opera" evoked a certain following of a day-to-day interpersonal drama conveyed by the communication, whereas "whale porn" evoked a certain voyeuristic quality, one that was both pleasurable and perhaps embarrassing when shared in public with outsiders, to keeping track of the whales.

One naturalist framed the process of IDing to keep track as less of a dramatic or a voyeuristic experience and more of a playful experience. In this example, the naturalist addresses a whale watch boat full of tourists at the start of the trip. She holds up the ID chart booklet.

Naturalist: "This is how we identify whales. When the whales come, the other naturalist and I will get out these ID charts and we like to play the name game and figure out who we're seeing. <pause> These whales are matriarchal, meaning that the whales stay with the moms for life, forever."

A tourist with her baby on her knee: "I love it!"

Again, the focus of the act of identifying by insiders is on knowing who one is seeing, and here the act is characterized as playful. The "name game" is also the phrase used to describe a communicative act people at times play when first meeting each other and knowing they share some social context, a communicative act that has as its goal to figure out if people have similar acquaintances and also simply as a way of socializing with a new person. In this way, the speaker characterizes the act of identifying orcas as both a way to keep track of individual orcas ("figure out who we're seeing") and as a communicative act, or game, the two naturalists "like to play." Here, as with some of the above examples, we see the integration of a person-to-person social meaning in the act of IDing to keep track.

Here, too, as with previous examples, we see the juxtaposition of the act of identifying the orcas with a statement about orcas' relations with one another ("These whales are matriarchal, meaning that the whales stay with the moms for life, forever"). IDing to keep track is, thus, again also connected to the social relations of the whales – in this case, the ongoing social structure. As with many responses I observed to such statements about orca matriarchal relations, one tourist responds very positively to this information, likely identifying her own desires as a new mother with the orcas' experiences.

Discussion: Identification as Transformative

In exploring the ways people discursively identified whales in this case study, I interpreted certain notions about the power of this communicative act to mediate human-nature relations. Speakers associated this act of whale identification as fundamentally changing practice, policy, perceptions, and ways of communicating about human-whale relations in this site. Fairclough (2000) argues that one goal of studies that explore the discursive nature of social reality is "to specify emergent practices of resistance, and to discern possibilities for change" (p. 148). In this study, participants were first to specify a communicative practice that both resisted and changed existing human-whale relations.

Whale insiders associated the original act of identifying individual orcas and assigning each a unique alphanumeric term with a paradigm shift in human-whale relations in this site. In further discussing the policy change that accompanied this

act of identification, orca researcher Alexandra Morton wrote, "A wondrous thing happens when an animal moves from population status to individual standing: it can no longer be treated with impunity" (Morton, 2002, p. 148). Similarly, whale insiders credited scientists' act of identifying orcas as mediating perceptual shifts about orcas' numbers and lives, and as allowing for changes in human-whale practice and policy from deadly industry captures to governments declaring captures illegal. In the process of IDing orcas, the scientists learned much more than the fact that they were dangerously and surprisingly scarce: They also discovered orcas had close matriarchal family relations and scientists framed their scarcity findings within this family discovery, a fact that spoke to a wide range of people. The messages were mediated via advocates (including high-ranking state politicians) who argued that the scarcity discovered by scientists pointed to the possible destruction of an animal to whom people were internationally and bioregionally becoming more connected. At the same time, some human perceptions of captures shifted from viewing captures as the netting of some very large fish to seeing heartbreaking, violent dramas.

A nature inclusive approach to communication as a mediating force in human-nature relations is that an exploration of environmental communication must include a questioning of both how "the verbal is instrumental in knowing nature" and "how nature 'speaks'" (Milburn interview with Donal Carbaugh, 2007, p. 1). While study participants characterized the act of identifying orcas as instrumental in knowing nature, they also characterized nature as "speaking." Whale insider participants characterized the first captive orcas in marine park shows as mediating human perceptions, helping to allow the public, for the first time, to be receptive to and concerned about scientists' concurrent messages of wild orca scarcity. In marine parks, the public came close to orcas for the first time, and the shows constructed human-orca relations in non-fearful, often highly anthropomorphic ways. People found they could relate to these whales. In the process, some also were moved to protest captures. Many participants in my study, who continue to fight for the release of captive orcas, argued that the early captives served as highly effective ambassadors, or spokespeople, for their wild counterparts, in effect "speaking" to humans via their embodied interactive presence.

Thirty years after the captures were outlawed, messages of unique individuality, of family connection, and of anti-capture sentiment that were

once human-whale relationally transformative have had staying power in the contemporary whale watch site. Whale insiders continued to use the act of identification to shape contemporary communication, perceptions, and practices of human-nature relations. Whale watch tour staff and visitor centers taught identification to convey messages about orca scarcity, matriarchal cultures, and the ills of captures, often comparing orca markings to “human fingerprints” and evoking embodied human-whale similarities of uniqueness. While many tourists thought orcas “just look the same,” many also derived meanings about human-whale relations after their exposure to whale identification. Some responded to the mix of attributes shared or unshared between humans and whales that were often introduced via identification, such as individuality or family relations, or orca matriarchal culture. Some perceived people who identified orcas as “knowing” the orcas, assumed similarities in how orcas and humans identified one another, and drove their boats more considerately around identified whales and gave them increased space. Some whale watch insiders introduced identifying to tourists in part to encourage ongoing protection from marine park captures and to mediate views of orcas, negatively framing contemporary captures and marine park practices and negotiating tourist perceptions of orcas as individual “wild animals” and not as a collection of “circus clowns.”

Swidler (2001) argues that even within a common culture, communicative resources can be used in very different ways. In this way, “effective cultural explanation depends on understanding how culture is put to use” (p. 6). Just as Swidler speaks of culture as working like a repertoire from which people draw cultural meanings and cultivate skills and capacities that they integrate into larger, more stable “strategies of action,” study participants put IDs for whales to different uses, mediating meanings and larger “strategies of action” for human-whale relations.

In their own use of IDs, some whale insiders appeared to mediate ongoing feelings of connection with whales by communicating close, even familial, relations with orcas; by comparing orcas’ unique dorsal fins and saddlepatches with “friends’ faces,” and by using IDs to tell orcas’ “stories,” know their relationships, and care increasingly for orcas and their environment. Communication associated with the act of identification also appeared to help seed human-whale connections in visitors – insiders and tourists used selective anthropomorphism in tandem with identification to connect with whales; tourists derived points of connection from ID information such as orcas’ ages or matriarchal relations; and visitors at times desired to see individual orcas they had only seen in ID photos. Many whale watch insiders used the act of identifying to keep track of orcas, both for scientific and regulatory purposes, as well as for high context social purposes that allowed insiders to check in with lives of orcas, story tell about orcas, and socialize with one another about whales with whom they shared a deep connection.

Much of my exploration of the ways people discursively labeled whales followed speakers’ own metacommunicative interpretation of, or commentary about, communication and the ways in which labeling whales served to mediate human relations with nature. I found that speakers’ uses and interpretations of whale identification revealed a range of ways that communication mediated perception, practice, policy, and communication about human-whale relations in this site. I found it especially interesting how speakers themselves credited this communicative act of identification with doing different types of substantial work in mediating human-nature relations. In speakers’ metacommunicative interpretation of, and uses of, identification, they illustrated a range of ways in which this communicative act of pointing at and naming parts of nature as particular both transformed and continues to shape human relations with whales.

Endnotes

¹The saddlepatch on an orca is the gray-colored skin on an orca's back behind the dorsal fin.

²An orca's number also generally identifies the generation of an orca, as the earliest orcas identified received the first numbers (e.g., the 96-year-old matriarch of J pod is J2, while L109 was identified as a newborn calf in March 2007).

³Marine monitoring boats also carry this chart onboard. Whale watch insiders who go to Whale Watch Park to watch orcas swim by also at times carry this chart with them.

⁴ Researchers have found that, though the orca pods often intermingle, each of the three Southern Resident pods has a distinct dialect.

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The Other Power: Tourism Agencies Use of Ecotourism Discourse and Their Ability to Shape the Western Imagination

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Abstract:

While rhetoricians have examined how scientific discourse affects public perception of natural resources and environmental issues, relatively few scholars have extended these ideas to tourism and environmental concerns. Many who examine tourism tend not to address various agencies' use of science as a rhetorical strategy to sell a destination and accompanying activities. International ecotourism is especially ripe for this analysis, because in theory it should promote ecological benefits and aid local people. Ecotourism agencies can influence tourists' perceptions of a place and culture through carefully selected representations, which illustrates the tourism agency's power via its discourse. By applying theories that address the power of science and discourse of the intellectual, I will explore why some agencies might appeal to science or pseudo-science when advertising an eco-vacation. To determine if and how science is used in advertising ecotourism, I examined one of the main advertising methods relied upon by ecotourism agencies: websites. I found three major trends regarding scientific discourse: use of scientific information; reliance on greenwashing (i.e. use of scientific/conservation buzz words); and neglect of scientific language, instead relying on naturalistic images and text. These types of advertising are sure to continue; therefore, if we hope to have responsible ecotourism, we must first be able to dissect the rhetoric and recognize the power dynamics at play.

Introduction

It was not until evening at the hill tribe village that I realized the two-day ecotourism trek was not exactly what I had expected. Until that point, Michelle and I had spent the day with our guide winding up lush Thai mountains, cruising the river, and balancing atop massive elephants that took us to a hill tribe village in Northern Thailand. We arrived amidst late afternoon activity: villagers returning with animals from the fields and women preparing the evening meal. Michelle and I walked around the village snapping pictures of the children—never the adults. We felt guilty taking pictures, but we justified that it was because children are so expressive—we would have done the same thing at home, but without the cultural guilt. However, that evening, after a dinner separate from our host family and served to us by our guide, the children shuffled onto the deck to perform for candy. My stomach turned. I did not know the candy our guide had told us to pick up in Chiang Rai was for this purpose. While the children were cute, the thought of them turning tricks for candy made me feel sick. Later, I tried to extract a piece for myself, but they heard the rustling of the bag and like Pavlov's dogs were back on the porch with hands out and open. At twenty-one, I was offered the rude awakening that ecotourism might not be the panacea it can purport to be. After this trip, I began thinking of the power dynamics involved in

ecotourism and the power I held as a Western tourist who had money to travel, peer into another's culture, and marvel at the beautiful surroundings.

I have since realized this relationship only scrapes the surface of the complex power dynamics at play in ecotourism. Thinking back to my experience in Thailand, I realized my expectations of the environment and people were shaped by glossy travel brochures, which illustrated a nature-based adventure and a memorable night with traditional hill tribe people. While it is important to acknowledge the role we played, in conjunction with numerous other tourists throughout the year, it is equally important to examine the discourse presented by travel agencies, for they can create a reality and attitude towards a place and its people.

Many scholars, such as Foucault and Said, have discussed the power of discourse and the role it plays in shaping people's opinions about others and a place. Political ecologists, such as Escobar (1996) and Stonich (2003), have extended these concepts to nature and/or tourism, but few have addressed the rhetorical techniques various agencies utilize, in particular their appeal to science's power in society. Given that ecotourism is rooted in nature travel and theoretically aims to conserve the environment, examinations of the use of scientific discourse are vital. While ecotourism scholars focus on the use of

green-washing (i.e. using science-sounding buzz words, such as “biodiversity”) (e.g. Honey, 1999), few rhetorical studies arise from the field of communication.

This paper is divided into two major parts. In the first section I engage Foucault and Said’s discussions of discourse and power to provide a detailed look at the discursive power ecotourism agencies can harness, especially scientific knowledge. In the second section, I use these theories to examine ecotourism agencies’ internet websites to determine if and how science is employed to advertise vacations, and in turn, create an image of the place and people through discursive power. A theoretical understanding of rhetoric, discourse, and power can provide a useful tool for scholars and travelers to break apart packaged advertisements of ecotourism agencies; by doing so, they then can determine if the agency meets the guidelines of responsible ecotourism.

Power structures involved with tourism

While I will provide a more detailed description of ecotourism below, for the moment it is important to realize that ecotourism, like all tourism, inherently has power ingrained in every fiber. However, people tend to focus on the dominating power a Western tourist has over the people they visit. Though a breakthrough at the time, Smith’s (1977) seminal book on power dynamics in tourism, *Hosts and Guests: The Anthropology of Tourism*, provides a limited view of existing power relations by designating only two groups involved in tourism: the guest and the host; this binary has been further discussed by many scholars (e.g. Honey, 1999). These categories involve an obvious power dynamic: the tourists often have more money to visit and enjoy the other’s culture and the hosts, who work in the service business, are there to serve. *A Small Place*, Kincaid’s (1988) diatribe against the Western tourist in Antigua, illustrates unhappiness and anger that villagers might feel towards tourists. After urging the tourist to stay home, Kincaid denounces “the Hotel Training School, a school that teaches Antiguan how to be good servants, how to be a good nobody, which is what a servant is” (p. 55). However, in other situations, hosts might hope for and then depend on tourism as a way to fuel their economy, as in the case of a small Cambodian fishing village (Conway, personal communication, 22 February 2006).

Other researchers have offered variations on the host/guest binary model of power relations. Some

have shifted their focus to the power a local community member might hold over the tourist (e.g. Maoz, 2006), but this still involves only two players. Other scholars (e.g. Stonich, 2003) add more actors (e.g. international developers) to mix, but, power remains uni-lateral: those with money gain from those without. Cheong and Miller (2000) also complicate the original dichotomous model of power. They feel the traditional binary falls short because it only presents a “mainstream view [in which] the tourist is a rational, independent, and powerful actor who initiates the touristic trip and accordingly is responsible for its consequences on locals and environment” (p. 379). In their power structure, Cheong and Miller add the additional group of brokers to the host/guest binary (re-labeled as tourist/local); by employing Foucault’s ideas on the circulation of power, the authors illustrate how power flows in multiple directions throughout this system and between each participant, rather than uni-laterally between only guest and host. By incorporating brokers into the power dynamic, Cheong and Miller show that in a desire to sell a place and culture to tourists, brokers use persuasive tactics. Therefore, the power-laden gaze towards “the other” that tourists may hold when visiting a location may have been partially shaped by the brokers; this “manipulation of imagery is important in the marketing of tourism” (Cheong & Miller, 2000, p. 383).

Given these complex power dynamics, ecotourism presents an interesting category of travel to analyze. As defined by the Ecotourism Society, ecotourism should encourage people to engage in “responsible travel to natural areas that conserves the environment and improves the welfare of local people” (cited in Honey, 1999, p. 21). The tourist is visiting primarily to engage in the natural world and culture that the broker advertises. Ecotourism has often been touted as a panacea for environmental and cultural degradation, an idea on which brokers have capitalized. However, at times ecotourism can actually exacerbate such conditions by increasing environmental and cultural degradation (Honey, 1999; Belsky, 2000). While this has received extensive criticism in the academic world, the general public might not yet be skeptical of ecotourism; tourism agencies might recognize the power in offering a seemingly ideal way of vacationing. Ecotourism brokers often present travel as a rewarding experience for all involved parties. They can also erase the guilt that a tourist might have about participating in tourism, as they imply the ecotourist’s visit is dissimilar to exploitive, conventional travel; the ecotourist’s trip can actually prove beneficial.

Discursive power

Before examining specific rhetorical techniques employed by agencies to sell a place and culture to tourists, it is necessary to comprehend the strength of power residing in discourse. This allows for an understanding of how effective these tourist agencies can be in creating representations. Weaver claims: “all rhetoric, all language, ‘is sermonic’ and the goal of human expression is to persuade an audience to accept or reject attitudes of the world” (cited in Slovic, 1996, p. 107). Foucault (1980) was one of the first theorists who voiced the power associated with discourse. It is through “the production, accumulation, circulation, and functioning of a discourse” that relations of power become “established, consolidated, [and] implemented” (p. 93). One way it does this is by producing a truth to which a certain society ascribes. However, Foucault (1980) reminds us that though “each society has a regime of truth and type of discourse it accepts and makes function as true” (p. 131), it is only one of many truths. Because power is unequally distributed, some truths dominate and perpetuate; Foucault reminds us that we must ask for whom the discourse serves.

One way people use discourse to serve their interests is by formulating an identity of another. This act displays an enormous amount of power because the naming and defining of another often robs that person of power by diminishing her ability to create and claim her own identity. DeLuca (1999) states that “through rhetorical practices, people construct, perpetuate and transform identities, discourse, communities, cultures, and world views” (p. xii). Because there are many truths, the one perpetuated might not be the identity claimed by the people themselves. For instance, Foucault claims that in naming and imposing the identity of homosexual and criminal onto people, social attitudes and resulting treatment towards these people soon followed.

Said (1978) extends Foucault’s work to examine not only the influence discourse has on creating a long-lasting image of a people, but also the place in which they live. While he focuses on the Orient, the concepts he discusses have wide application, especially in international travel. Said (1978) claims that the Orient was not created until scholars studied the region and disseminated their discourse to the West: “the Orient is not an inert fact of nature...just as the Occident itself is not just *there*... ‘Orient’ and ‘Occident’ are man-made” (p. 4-5). Acknowledging

the fact that multiple truths exist, he believes that it is the Western discourse (the dominant discourse) that reaches the Western audience; the scholars perpetuating this discourse create a reality, but “what is commonly circulated by [discourse] is not ‘truth’ but representations” (p. 21). Similarly, we see ecotourism brokers perpetuating a view of the place and people they offer in holiday packages. The creation of these people and places might not be accurate, but they are the images presented to the public. Historian Rogozinski (2000) states that many of the fourteen million tourists (excluding cruise ship passengers) who traveled to the Caribbean in 1995 were searching for “untouched natural paradises” filled with “colorful, carefree men and women, innocent and childlike” (p. 352); these images also abound on ecotourism brokers’ web sites, and do not capture the poverty and troubled state in which many of these people live. For instance, Guha (1997) mentions the environmental degradation of the Indian countryside never enters the reality of tourists.

Though the disseminated discourse illustrates only one representation, if the public views this as THE “truth,” it can become so powerful it actually creates images and beliefs that Westerners hold of an exotic place. The images we might see in holiday brochures might not represent any real place, but rather a discursive reality floating between the broker and the tourist. Literary scholar Mitchell (1990) holds that a representation only has strength through mutual consensus; both parties must agree that an object stands for something or the representation will not hold strength. However, Said illuminates that not all parties need to enter into this social agreement for a representation to appear true. Likewise, if a broker provides a representation of a place or culture the tourist agrees to accept, it has entered the discourse to stand for this place or people. Said (1978) illustrates the power involved in representation: “The very act of construction is a sign of imperial power over recalcitrant phenomena as well as confirmation of the dominating culture and its ‘naturalization’” (p.145).

Discourse and Representation of Nature

Said’s (1978) focus on the Orient as a place primarily examines location in respect to where people reside. Escobar (1996) examines the power discourse has in constructing not only a place and people, but also nature. One might wonder how nature can be socially constructed if it is something that can be seen outside a window? This is not to deny the biophysical world, but to acknowledge that people can have different definitions as to what

nature embodies (e.g., Castree & Braun, 2001). For instance, in Columbia local people were asked to help with a biodiversity plan. Whereas conservationists viewed “biodiversity” as species and ecosystem diversity, Afro-Columbians and indigenous people in the community believed “biodiversity” encompassed not just biological diversity, but also the ethnic, cultural, and social diversity of people connected to the environment (Wilshusen, 2003, p. 80).

Using a social constructionist approach to nature, we can begin to see complications that may occur with ecotourism, which heavily relies on nature to sell itself. Not recognizing different ways of viewing nature can lead Western conservation groups to promote ecotourism as an alternative to current local lifestyles, which may include practices not fitting Western views of “environmental”. For example, in interviews with sea turtle conservation scientists, Campbell (2007) found an overwhelming number heralded ecotourism as a means of protection and most were uncomfortable with the idea of locals collecting eggs or harvesting turtle meat, even if only for community use.

Ecotourism agencies may purport that the visiting tourist can save locals from their environmental crisis, which they might be portrayed as causing. This is similar to the Western attitude towards the Orient in which the West played the hero, saving the Orient from obscurity, alienation, strangeness (Said, 1978). Escobar (1996) contests, representations of poor, dark peasants destroying forests allow the blame to be shifted away from industrialization and the capitalist system. Instead, these representations allow further development and travel by proposing a way in which generated revenue can save people and their land. Similar to how sustainable development reconciles “two old enemies” (p.49) (growth and the environment), ecotourism, allows a reconciliation with tourism and respect for local people and the environment; if the ecotourist is apprehensive about his travel this can alleviate his guilt.

Escobar (1996) also makes clear the connection between nature and commodity. In sustainable development, and I would include ecotourism, “previously ‘uncapitalized’ aspects of nature and society become internal to capital” and with this there is a “further encroachment on both nature and labor, an aggravation of the ecological crisis, and an impairment of capital’s conditions of production” (p. 47). Ecotourism, though it can purport itself as a cure-all to environmental issues, is still rooted in economic systems. While it might provide revenue

for the local people or conservation plans, its focus remains on the generation of money and participating in the capitalist game. Escobar notes that both forms of capital, exploitative and conservationist, require complex cultural discursive articulations.

Brokers as experts

I have established that discourse has power in creating images and representations, but why does it have such power? There are many reasons, but one that both Foucault and Said address is the power of the intellectual. If someone purports to be the expert in an area, then people may tend to trust their word. The intellectual is meant to represent and speak the “consciousness/conscience of us all” (Foucault, 1980, p. 126). A certain faith is put in the hands of the intellectual—allowing his words to represent our thoughts and opinions about a topic—to speak our minds. In terms of ecotourism, brokers, by nature of being in the tourism business, might appear as experts in their area. They know the region better than the tourist, and therefore can present an image that the tourist might assume accurate. The intellectual is often considered “the clear, individual figure of a universality whose obscure, collective form is embodied in the proletariat” (Foucault, 1980, p. 126). However, different societies have different regimes of truths. As with Said’s Orient scholars, brokers may play into the regime of the Western tourist creating a truth that fits with tourists’ common perceptions of the place and continues to perpetuate them.

Power of experts and science

Given the focus on environment and conservation with eco-travel, I decided to examine how scientific discourse is used and functions in ecotourism advertisements. Ecotourism is assumed to have close roots to nature and science because it is linked to environmental solutions and protection of ecologically-unique areas. In addition, many people drawn to ecotourism might have an environmental conscience. They might feel guilty about the power dynamics involved in their travel and want to help local people, or they may wish to protect an area. Of course there are also people who simply want to visit a diverse and beautiful area and the prefix “eco-” implies nature is central to the trip. By utilizing the strength of a scientist and her claims about the environment, these agencies can harness a huge amount of power by appealing to another type of expert in their advertisement.

As mentioned above, Foucault (1980) addresses the power an intellectual has and claims that an expert provides some universality to a topic. Foucault continues to note that the power/knowledge relationship is incredibly prevalent in the sciences and in the 19th century a new tradition of discourse based around science was established. It not only exclaimed new discoveries, but also included a new regime of discourse and forms of knowledge. We can trace the power of science back to the Enlightenment, when it began to establish itself as one of the most powerful institutions in the Western world. Science, according to Aronowitz (1988), offers a “method of proving the validity of a proposition about objects taken as external to the knower and has become identical with what we mean by truth” (p. vii). Though there is not one truth, because of the growing role science has played in our lives—especially with the advance of technology and attitudes that science can fix our problems—there is a general trust in its authority and the strength of its knowledge. Bocking (2004) notes a scientist, especially since the Enlightenment, has the image of being a rational and logical being, not ruled by emotion—someone who bases judgments on objective facts.

However, Fairhead and Leach (2003) claim scientific knowledge is created by people and institutions with certain perspectives. Foucault notes that science cannot be extracted from the politics from which it finds itself entangled, especially since technological advances like the atomic bomb. A scientist does serve the interests of a state or capitalism and Foucault says that though we cannot discredit scientists for this, we must recognize that their claims are not so much the truth, but a truth for which institutions hope. Bocking (2004) also holds that a symbiotic relationship has been created between scientist and administration agencies. I would further this and include industry, as many companies fund scientific research.

The question remains, if science is often in a close relationship with political powers or industry, why do people place trust in scientists? Bourdieu claims that “science derives legitimization from the belief that [scientists] represent high and more worthy forms in the inventory of human endeavor than material pursuits” (cited in Swartz, p. 67). Bocking (2004) claims institutions call upon scientists to interpret problems, such as environmental issues, and with that call for their knowledge, it appears to legitimate this knowledge and their words. Some people feel that “science is the source of cognitive authority: anyone who would be widely believed and trusted as an interpreter of

nature needs license from the scientific community” (Bocking, 2004, p. 4). While some people have a distrust of science (Steel et. al., 2006), it still does hold a certain authority in our society. Part of this results from the scientific discourse itself; the language is above many people’s heads, which can cause difficulty in interpreting this new language and determining the accuracy of the information. The difficulty almost makes one feel the scientist must know what he or she is discussing. In addition, Foucault and Said claim power comes with universality, and scientists build off of each other’s work. Therefore, while scientists might counter previous studies, other times there can seem to be a consensus of the experts, providing true and unchallenged knowledge (Bocking, 2004).

Website examination

To determine if and how different ecotourism agencies employ scientific discourse, I turned to the internet. I examined websites because they are a popular method of researching travel plans and many agencies rely heavily on them for advertising. I entered “ecotourism” into Google, one of the most popular search engines, and examined the first ten websites listed, excluding two providing only definitions and general information of ecotourism¹. The first ten hits were selected because Google lists sites in order of popularity, and these are the first sites a potential tourist would encounter using the same search methods. Using this approach, the following sites were examined: The International Ecotourism Society; Ecotour-Ecotourism at Conservation International; Ecotourism Portal; Nature Conservancy’s Ecotourism site; Hawaii Ecotourism Association; Conservation International; and Ecotourism in Yahoo! Directory. Some of these websites included databases of multiple ecotourism agencies; in these cases links to several advertised agencies were followed and included in analysis. While I did not conduct a randomized study, I isolated three main rhetorical approaches in using science: use of scientific information, use of greenwashing, and relying on naturalistic images/text. In examining scientific discourse, I also considered the website’s approach to local people; local people are often connected to the environment and biology, usually through sustainable or exploitive extractions, and ecotourism’s goal is to aid these communities and encourage them to conserve their resources. Below are representative examples of the main techniques. Analyses focused on the discourse presented, and I did not try to determine the accuracy of each website’s claims; therefore, brokers might be

fulfilling ecotourism principles to a greater or lesser degree than would appear the case from their rhetorical strategies.

Scientific Discourse

Interestingly, very few sites rely on actual scientific discourse, in which detailed scientific information is disclosed. One agency that does is Conservation International (CI). For this conservation organization, ecotourism is only one approach in its attempt to conserve natural areas. It defines ecotourism as responsible travel to natural areas, which conserves the environment and improves the welfare of people. CI establishes its legitimacy by mentioning its affiliation with George Washington University and the creation of an ecotourism education program. Appealing to science and environmental concerns, the website clearly juxtaposes ecotourism with current exploitative practices that occur in these regions: "As a non-extractive activity, ecotourism offers a sustainable way of using these areas and an opportunity to promote sustainable social and economic development." Continuing to rely on science to support its claims, CI lists information on biological diversity and ecological services in all the regions where it has ecotourism projects.

CI's representations of communities illustrate poverty-ridden people who may rely on these extractive practices to support their lives. They are not to be blamed, and with the help of ecotourism projects, both their lives and the environment can be bettered. Recognizing that tourism can have negative effects on local people, CI states that these "usually occur when the values and behaviors of the local community are threatened. This threat can include changes to the family structure, community relationships, collective traditional lifestyles, and moral values." The website stresses how its ecotourism projects emphasize local participation and much of the money generated through tourist homestays and language schools provides revenue for local families.

Another agency utilizing science, but to a lesser degree is Conservation Corporation Africa (CCA), a link from The International Ecotourism Society (TIES). Initially, it is unclear how this company is an ecotourism agency, as its home page primarily focuses on luxury safaris. However, by clicking on a small side link entitled "Vision," I was brought to a web page listing numerous conservation and community projects in which this organization is involved. Included are details about their

contributions, such as returning 42,000 acres to wilderness land and reintroducing 2,000 head of game. While one might be skeptical about how local people were affected by these changes, the company lists numerous social and environmental services it has provided, including aiding in water supply and donating to the construction of local schools, libraries, and a laboratory—thereby hinting at the scientific knowledge young Africans may receive. In addition, CCA exposes local children to endangered animals, many never before seen by the children; the agency hopes this will create a conservation ethic. While one might be cautious of CCA's project representations and use of buzz words, such as "green" and "sustainable" (discussed in the next major theme), their scientific descriptions of environmental problems and detailed conservation contributions are rare among ecotourism advertisements. In addition, CCA highlights some of the negative aspects of the place and conditions in which people reside. This uniqueness will become clearer when compared with other approaches.

Greenwashing

The most popular technique is one that appears to rely on science to encourage tourism, but never provides any specific scientific information and instead appeals to buzz words, such as "green," "sustainability," and "biodiversity." These words are closely tied together with conservation, and tourism groups appear to hope using such discourse will evoke the impression that there is a scientific basis to their claims. As former director of the Kenya Wildlife Service, David Western, claims "ecotourism and biodiversity were popularized by a media hungry for a new, evocative and consoling jargon" (cited in Honey, 1999, p. 21). Honey unwraps the truth behind this representation: "Much of what is marketed as ecotourism is conventional mass tourism wrapped in veneer of green" (p. 51). Font and Buckley (2001) note ecolabeling is a subtle power. Whereas we can sometimes pick out the obviousness of eco-labeling, such as rainforest yogurt or a sea turtle run, it can be more difficult with tourism. This is because of the "intangible, perishable, inseparable, and heterogeneous nature of the products" (p. 2). In short, green sells more, especially to travelers who might be looking towards ecotourism trips.

This reliance on green advertising by ecotourism brokers can cause inaccurate portrayals, appearing to meet the strict ethical guidelines of ecotourism. For instance, Natural Habitat Adventures (NHA), another link from TIES, illustrates the WWF panda logo on its site, but there is little mention of how their agency

is involved in ecotourism². Its name calls forth images of natural, intact ecosystems, but no scientific information is provided about the locations, and trip descriptions instead focus on the sights people will see. The one major appeal to science is NHA's claim to be the first carbon-neutral operator. While this might appear scientific, the site does not provide detailed information about climate change or carbon emissions. Instead, it plays into the capitalist world of travel; by allowing people to offset their trip, the eco-traveler can be guilt-free, for as the site claims, the effects of travel should not keep people from engaging in the beneficial act of ecotourism. However, no where does it list what those benefits entail.

Greenwashing is seen in trip itinerary descriptions as well, especially to the popular Galapagos. By nature, this place cannot be discussed without science due to Darwin's revolutionary ideas that developed about these islands. Clinging to that, many tour groups, such as Bio Bio (listed on TIES), ask the tourist to imagine "a world where one can walk amongst incredible creatures in the stark and beautiful landscapes that have allowed them to remain in their most natural state." Almost every website refers to the Galapagos as a "living laboratory" and Wildland Adventures asks travelers to "explore the Galapagos Islands, a showcase of evolution, aboard a first class or deluxe yacht." However, in order to arrive in the Galapagos, oil is spent and then leaked on this fragile ecosystem. Also, a true ecotourism project, among many things, would limit the amount of people that can visit the "fragile ecosystem."

Hotel and resorts also commonly employ greenwashing to varying degrees. Si Como No Hotel and Resort (listed on TIES) portrays itself as an eco-resort and claims it "expresses the magical nature of Costa Rica's incredible bio-diversity. It creates a vacation experience deeply rooted in the culture and pace of this unique Democratic country" and paints an image of happy and carefree people; this neglects the poverty that exists in the country, which the more scientific websites acknowledge. When one clicks on the link entailing Si Como Si's eco-vision, only after mentioning Jimmy Buffet's margarita-drinking bar, the hotel's amenities, and the surrounding natural environment, does one learn it is considered a green hotel. This status requires certain certifications, but often these focus on the building's infrastructure and not the surrounding environment and people; Si Como No engages in energy conservation, such as not washing the bed linens everyday; recycling; composting; and creating a butterfly refuge.

Respecting nature is accomplished by asking guests not to touch animals or pick flowers and keeping the noise down in the night hours. While Si Como No is not as sprawling as some eco-resorts, such as Papagayo's massive spread of 1,144 homes, 6,270 condo-hotel units, 6,584 hotel rooms, a shopping center, and a golf course (McLaren, 1998), Si Como Si does have a movie theater and many other buildings.

Natural Images/Text

Some organizations, especially adventure travel or nature travel companies, may mention one or two buzz words, but these brokers primarily focus on nature and employ natural imagery and text; unlike the other approaches, they provide no detailed scientific or green language descriptions along with these representations. They are still considered by some, such as TIES, to be ecotourism groups, but their emphasis is on the beauty and natural wonders that await the tourist. Why do they not use science if there is power in science? Political ecologists, Peet and Watts (1996) note that "regional discursive formation disallows certain themes marked by absences, silences, etc. allowing some things to be mentioned in only highly prescribed, disguised ways" (p.16). These agencies ignore the environmental problems all together and instead create a location that only includes natural wonders, such as towering waterfalls and flying macaws.

While Tropical Nature Travel's catchphrase is "Conservation through Ecotourism," and they claim they "believe in conserving the natural environment through [their] travel packages," there is no mention of how they protect the natural environment or why it needs to be conserved. They do not explain how they are an ecotourism agency and instead focus on the otters, parrots and monkeys visitors will see while staying in tent camps with hot-water showers and flush toilets. Other agencies refer even less to buzz words. Adventure Life uses the word "eco-conscious" once, but it mostly relies on terms like "exotic" and "mind-blowing"; its trip descriptions focus on activities within the natural environment, such as "sea-kayaking into the untamed depth of the Amazon jungle" or discovering a "fairytale landscape gushing with turquoise lakes, green hillsides, and ice-capped mountains...includ[ing] leaping dolphins and cresting whales." Boundless Journeys, an adventure travel agency listed on TIES mentions under its philosophy that it donates to conservation organizations, but it makes no mention of ecotourism or its core principles on their webpage. Instead it

focuses on the adventure, nature, and locals whom guests will encounter.

Agencies using these techniques may include iconic people of these regions as an attraction. Adventure Life, presents the same image of an indigenous Andean for almost all its South American tours. However, there are markedly strong differences in ethnicity, clothing, physical appearance, and overall culture across this area. Whereas scientific ecotourism agencies tend to stress the uniqueness of local people, this agency presents the representative indigenous person who suffices in advertising all locals whom visitors may encounter.

Conclusion

It is not my intention to undermine these agencies, as many of them promote responsible travel and in most cases it is a vast improvement from conventional mass tourism in the area. Rather, it is my intent to illustrate how discourse analysis can and should be extended to ecotourism agencies, and in particular, how the power behind both discourse and science can be used by agencies to create a representation of people and places. Armed with this knowledge we can examine one form of power shaping tourists' views of other people and places, and employ this in future examinations of ecotourism and complications that might arise from this type of travel.

Websites³

Adventure Life: <http://www.adventure-life.com>
Bio Bio: <http://www.bbxrafting.com>
Boundless Journeys: <http://www.boundlessjourneys.com>
Conservation Corporation Africa: <http://www.ccafrica.com>
Ecotourism Portal: www.ecotourism.cc/
Ecotourism in Yahoo! Directory: dir.yahoo.com/Recreation/Travel/Ecotourism/
Ecotour-Ecotourism at Conservation International:
<http://www.conservation.org/xp/CIWEB/programs/ecotourism>
Hawaii Ecotourism Association: www.hawaiiecotourism.org/
Natural Habitat Adventures: <http://www.nathab.com>
Nature Conservancy's Ecotourism site: www.nature.org/aboutus/travel/ecotourism/
Si Como No Hotel and Resort: <http://www.sicomono.com>
The International Ecotourism Society: [http:// www.ecotourism.org](http://www.ecotourism.org)
Tropical Nature Travel: <http://www.tropicalnaturetravel.com>
Wildland Adventures: <http://www.wildland.com/>

Endnotes

¹ The sites were still the top ten as of June 22, 2007.

² All TIES members must sign a code of conduct, but the guidelines are rather broad:

We agree that ecotourism is responsible travel to natural areas that conserves the environment and improves the well-being of local people, and further agree that we will undertake to adhere to the principles of ecotourism as outlined below:

Minimize impact

Build an environmental and cultural awareness and respect

Provide positive experiences for both visitors and hosts

Provide direct benefits for conservation

Provide financial benefits and empowerment for local people

Raise sensitivity to host countries' political, environmental, and social climate

³ All websites were last accessed June 22, 2007. Web addresses for home pages are listed, as many of the links within each home page were included in analysis.

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Perceptions of climate change risks and mitigation behaviors: understanding inconsistencies between representations and actions

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Abstract

Citizens' awareness of risks and responsibilities regarding climate change suggests that they can see themselves as agents of social change both in their daily lives and as part of a knowledgeable public opinion. However, research has shown that individual behavior to mitigate greenhouse gas emissions is not consistent with such awareness. A survey study with a sample of Portuguese university students investigated the relation between knowledge of climate change and perception of risks, attributions of responsibility for performing mitigation actions, and individuals' behavioral intentions and reported behaviors. Results show a moderate level of knowledge, a moderate-high level of concern and a moderate-high level of risk perception. Responsibilities are attributed to different agents, including the individual respondent, but there is resistance to some measures and a low level of reported individual behavior. This study has also aimed to analyze practices of media consumption, as well as the use of other sources of information, and people's perception of those sources. The news media, especially television, are reported to be the main sources of information on climate change and respondents make a positive assessment of their credibility. Inconsistencies between social representations and behaviors are discussed in relation to the communication of climate change in Portugal both in conventional media and the internet.

Introduction

The assumption that having an accurate knowledge of issues is a requirement for displaying attitudes and behaviors aimed at the resolution of specific environmental problems, as well as for being able to engage in informed discussions on scientific and policy aspects of such problems, has been quite influential in the study of lay representations (e.g. Dunlap, 1998). This perspective has also underpinned much of the research of lay representations of climate change. In fact, most studies have assessed people's level of knowledge on the issue and whether they show congruent perceptions of risk and responsibility, as well as congruent behaviors (e.g. Bord, Fisher, & O'Connor, 1998; Brechin, 2003; Dunlap, 1998; Stamm, Clark & Eblacas, 2000).

Previous research has shown that on the whole the level of knowledge of the causes of climate change is low (e.g. Brechin, 2003; Dunlap, 1998), that people often mention air pollution as a cause of climate change or global warming, and often confuse ozone depletion with climate change (Bord et al., 1998; Brechin, 2003; Dunlap, 1998; Stamm et al., 2000).

People's level of concern for climate change is rather high but not as high as concern for other environmental problems, such as air and water

pollution (e.g. Brechin, 2003). It has been suggested that external factors such as weather and media coverage influence public concern for global warming – people show more concern under bad weather conditions (Ungar, 1992) and extended media coverage (Krosnick, Holbrook & Visser, 1998). Studies of risk perceptions have shown that people associate climate change with a moderate to high risk. The public tends to see the impacts of climate change as stronger in distant places and in the future rather than in the spatial and temporal proximity of the respondent (Leiserowitz, 2005). In the case of a Portuguese sample (Cabecinhas, Lázaro & Carvalho, 2006), impacts were viewed as strong both in distant places (hurricanes, tsunami) and locally (draughts, fires).

The surveys that have looked at perceptions of responsibility for mitigating and adapting to climate change have included questions about people's intentions to adopt individual measures and about the responsibility they assign to the individual and to local, national and international entities in promoting ways to deal with the problem (e.g. Bord et al. 1998; Nave & Schmidt, 2002). Some studies have shown that respondents portray themselves as willing to make some effort to mitigate emissions (e.g. acquiring domestic appliances and cars that are more energy-efficient) but do not support policies that interfere greatly with the convenience of their daily life (e.g. using the car less, carpooling, decreasing

the use of heating and air-conditioning; Bord et al. 1998). However, more recently, Nave & Schmidt (2002) have found that Portuguese respondents said they were willing to change car-related behaviors (e.g. carpooling, using the car less, reducing driving speed, and acquiring less pollutant vehicles) and were even more willing to make changes in their homes (e.g. acquiring more energy-efficient light bulbs and appliances, even if they were more expensive, installing thermal insulation). These behavioral intentions are congruent with attributions of responsibility – respondents think that citizens, and local, national and international institutions (e.g. city councils, government and government departments related to environmental issues, environmental groups, corporations, universities and research centers, European Union, United Nations) are equally responsible to search for solutions for climate change.

Some studies have also reported a gap between attitudes towards the environment and willingness to act on environmental problems (e.g. Bord et al., 1998; Nave & Schmidt, 2002). For instance, Nave and Schmidt (2002) found that most respondents in their study viewed climate change as a worrying problem and agreed that a solution was needed. However, they failed to recognize the importance of causes such as the use of fossil fuels and consumption of electricity, and no one reported using the car less in order to mitigate climate change. Overall, people attributed more importance to institutional solutions (e.g. increase of forested area, investment in renewable energies, use of more energy-efficient technologies) than to individual solutions that interfered with their lifestyle (e.g. reducing the use of the car, air-conditioning and domestic energy). Socio-demographic variables such as sex, education, age and place of residence have not been shown to affect systematically lay representations of climate change (Dunlap, 1998). For instance, Bord, O'Connor and Fisher (2000) found that the level of concern for climate change depended on perceptions of risk of environmental pollution in general rather than on educational background.

The media have been considered a key source of information for the public about science issues (e.g. Nelkin, 1987). For most individuals, unobtrusive environmental issues, such as climate change, also acquire meaning mainly through the media (Wilson, 1995; Corbett & Durfee, 2004). However, there is a clear lack of studies about the influence of media coverage of climate change on audience perceptions, attitudes and behaviors. Corbett & Durfee (2004) have reported interesting results regarding the impact of controversy and contextual information in news representations of scientific knowledge of climate change on reader's perceptions. In their

study, the presence of controversy in media discourse reduced people's perception of scientific certainty while the inclusion of information about scientific context – a feature typically absent from the media – increased perceptions of certainty.

In some of the earliest studies about media and climate change, Bell (1994a; 1994b) pointed out various forms of misreporting (scientific/technical inaccuracies, as well as non-scientific ones, misquotations, omissions and overstatement) and a mix-up or 'blending' of information about ozone depletion and the greenhouse effect. Studies of US media discourses on climate change have highlighted the over-representation of the so-called 'contrarians' or 'skeptics,' who refute the idea that current climate change is anthropogenic and/or that it is at all taking place (e.g. Boykoff & Boykoff, 2004; McCright & Dunlap, 2000; 2003). Scholars have claimed that this can lead to confusion amongst the public about the significance and the causes of climate change. Wilson (2000) found that US reporters' knowledge of the enhanced greenhouse effect and climate change is rather deficient.

Research on media and climate change has also shown that the volume of coverage has fluctuated dramatically over the last two decades, with peaks and troughs associated with national and international political agendas, economic growth and editorial interest, amongst other factors (e.g. Mazur, 1998; McCommas & Shanahan, 1999; Carvalho & Burgess, 2005). However, since 1997, coverage has, in general, remained at very high levels in countries such as the United States and the United Kingdom. That is also the case of Portugal.

In this paper we report results from a survey study with a sample of Portuguese university students. The study aimed to investigate the relation between knowledge of the causes of climate change and perceptions of risk, attributions of responsibility for actions of mitigation, and individuals' behavioral intentions and actual behaviors. We expect the level of knowledge to affect perceptions of climate change but, based on results reported in the literature, do not expect socio-demographic variables to affect those perceptions. The media are expected to be the main source of information about climate change.

Portugal is an interesting case study because it has experienced a significant economic growth since 1990, the baseline year of the Kyoto agreement, and a transition from a low-energy economy to a more energy-dependent one, which is the current or foreseeable situation of many developing countries. Exceptionally, the country has been allowed by the European Union to increase its emissions of greenhouse gases by 27% until 2008-2012 but has gone largely beyond this limit. Most of the increase is in car use.

This preliminary study used a sample of university students mainly for reasons of convenience. Nevertheless, it is relevant to examine the views of the two groups of students that were involved in the study – Media Studies and Computer Engineering students – given the professional responsibilities that they are likely to hold in the next few years.

Method

Participants: 144 undergraduate students (59 students of Media Studies program, 40 women and 19 men; and 85 students of Computer Engineering program, 5 women, and 80 men). Mean age was 20.84 ($SD = 2.81$) and it was not significantly affected by sex and degree program.

Materials: Questionnaire covering the dimensions analyzed in this paper – knowledge of climate change, concern, risk perceptions and attributions of responsibility, behavioral intentions and practices, such as attitudes towards information sources and consumption of mass media – as well as other dimensions, such as perceptions of relative justice.

Procedure: The questionnaire was administered collectively in classrooms in October 2006. Individual participation was voluntary. Response durations varied from 15 to 35 minutes.

Results and Discussion

Knowledge of causes of climate change

Respondents were presented with nine items and asked to rate the level of contribution of each one to climate change with the following scale: ‘contributes very much’, ‘contributes moderately’, ‘contributes a little’, ‘does not contribute’, ‘I don’t know’ (see table 1). A knowledge index was calculated by adding one point for each correct answer. It ranged from 0 to 9. This index allowed the formation of two groups of respondents – above-the-median (high knowledge) and below-the-median respondents (low knowledge). This new variable was used as a factor in the analysis of other dimensions such as concern, responsibility and risk perceptions and attitudes towards sources of information on climate change.

In the participants’ answers, the most important contributor to climate change was the ozone hole, which was rated as contributing highly to the problem (see table 1). However, the ozone hole is not considered a cause of climate change by experts and our results suggest that respondents confused two phenomena: the depletion of the stratospheric ozone layer and the enhanced greenhouse effect/climate change. This is a finding commonly reported in the literature (Bord et al., 1998; Brechin, 2003; Dunlap, 1998; Stamm et al., 2000).

Industrial processes were correctly rated as an important cause for climate change. Causes rated as moderately important were the loss of rain forests, car use, and the functioning of coal and oil power plants, which are causes also identified by experts. However, participants considered that agriculture and animal husbandry, which are significant causes of greenhouse gas emissions, were not very important and awarded a higher importance to the use of chemicals in farming, which, in fact, has a lower contribution to climate change. The functioning of nuclear power plants, whose contribution to climate change is quite low, was, nonetheless, rated as a moderately important cause of climate change. Most interesting is that the functioning of nuclear power plants and of coal and oil-fuelled power plants obtained similar ratings, which indicated poor knowledge of the issue and maybe some confusion around the risks usually associated with nuclear energy and the risks of climate change. This pattern is similar to results from the Portuguese sample of the 1992 Gallup survey (Dunlap, 1998) – by then the major causes for global warming chosen by respondents were loss of rain forests (89%), nuclear power plants (85%), coal and oil power plants (83%), automobile exhaust (77%), aerosol sprays (67%) and refrigerators and air conditioners (45%). On the whole, knowledge of the causes of climate change is inconsistent as it combines correct and incorrect causes and does not seem to have changed significantly between 1992 and 2007.

Participants’ degree program did not significantly affect knowledge of each of the causes mentioned. Participants’ sex only affected significantly two of the causes – the use of chemicals in farming and the functioning of nuclear power plants. Women rated the contribution of these sources as higher than men did [respectively: $F(1,133) = 6.65$, $MSE = 0.46$, $p = .01$; $F(1,132) = 4.43$, $MSE = 0.82$, $p = .04$].

The knowledge index that we constructed shows that, overall, people demonstrate a moderate knowledge of the causes of climate change ($M = 4.76$, $SD = 1.34$), a result apparently slightly better than the low level reported by previous studies (e.g. Brechin, 2003; Dunlap, 1998). This index was not significantly affected by sex and degree program.

Despite this moderate level of knowledge, people continue, as noted above, to show some confusion in relation to the causes of climate change. Most importantly, as shown in table 1, they view the ozone hole as the main contributor to climate change, a result that may be worse than the one of the 1992 Gallup survey.

Table 1. Mean contribution of several factors to climate change

	Mean (SD)
Ozone hole	1.39 (0.64)
Industry	1.40 (0.60)
Car use	1.60 (0.70)
Loss of rain forests	1.65 (0.70)
Functioning of coal and oil power plants	1.99 (0.93)
Functioning of nuclear power plants	2.01 (0.94)
Use of chemicals in farming	2.14 (0.71)
Agriculture and animal husbandry	3.05 (0.79)
Functioning of hydroelectric power plants	3.20 (0.83)

Note: 4-point scale (1= contributes very much, 4 = does not contribute)

Respondents self-assessed their level of knowledge about climate change in a 5-point scale ranging from 1=very good to 5=very bad or inexistent. Overall, they considered that they had an average level of knowledge ($M = 2.91$, $SD = 0.76$) and this perception did not change significantly as a function of sex and degree program.

Concern with climate change

Respondents were asked how concerned they were with a set of environmental issues, including climate change, and answered in a 5-point scale ranging from 'very much worried' to 'not worried at all'. Respondents reported a moderate-high level of concern about climate change ($M = 2.60$, $SD = 0.80$) and said they were very or moderately concerned with all the other issues presented to them. The exception was genetically modified organisms, for which participants' concern was situated between the moderate and low levels. Issues such as pollution of rivers, lakes and oceans, air pollution and forest fires attained the highest levels of concern; the ozone whole was slightly above climate change. Concern ratings were not affected by levels of knowledge (high or low, that is, above or below the median), sex and degree program. Interactions were also non-significant.

Contrary to our expectations, higher-knowledge respondents were not more concerned about climate change than lower-knowledge respondents. This result suggests that participants in this study are reacting more affectively than

cognitively to the problem of climate change (cf. Lorenzoni et al., 2006).

Risk perceptions associated with the impacts of climate change

Respondents rated a set of possible consequences of climate change according to level of perceived risk (5-point scale ranging from 'very serious' to 'not serious'; see table 2). All but two of the possible consequences were viewed as very serious or as moderately serious (see table 2). The exceptions were 'increased social unrest' and 'increased forced migrations', which were rated around the mid-point of the scale as neither very serious nor unserious.

Perceptions of climate change impacts were not significantly affected by levels of knowledge, sex and degree program. Interactions were also non-significant. Sea-level rise was the only exception – women rated it as more serious than men [$F(1,144) = 4.66$, $MSE = 0.63$, $p = .03$].

A risk index was created by calculating the arithmetic mean of the risk ratings for all the factors for each respondent. Overall, respondents rated possible consequences of climate change as serious ($M = 1.88$, $SD = 0.49$). This index was not significantly affected by level of knowledge and degree program but changed significantly as a function of the respondents' sex [$F(1,144) = 6.60$, $MSE = 0.22$, $p = .01$] – women rated possible impacts of climate change as more serious than men.

Table 2. Mean risk perception for possible impacts of climate change

	Mean (SD)
Water shortages	1.19 (0.46)
Increase of hunger around the world	1.42 (0.75)
Health problems	1.50 (0.66)
Fires	1.63 (0.73)
Loss of animal and vegetable species	1.69 (0.77)
Hurricanes and storms	1.73 (0.80)
Increase of extreme temperatures	1.81 (0.80)
Floods	1.81 (0.84)
Draughts	1.87 (0.79)
Sea-level rise	1.88 (0.80)
Heat waves	2.02 (0.77)
Increased inequity between rich and poor countries	2.04 (1.00)
Desertification	2.17 (0.96)
Changes in agricultural production	2.24 (0.81)
Increase of forced migrations	2.43 (0.97)
Increase of social unrest	2.59 (0.98)

Note: 5-point scale (1= very serious, 5 = not serious)

Attributions of responsibility

Participants were asked to indicate the main agent responsible for implementing possible measures of mitigation of climate change (see table 3). Decreasing consumption of domestic energy and use of the car, acquiring more energy-efficient domestic appliances, and reducing consumption of material goods were seen as the individual's main responsibility. Respondents also saw themselves as the agent mainly responsible for recycling, but some responsibility was also attributed to the government, corporations and local authorities.

The government and, in a lesser degree, local authorities were seen as responsible for fighting deforestation and improving public transport. The government and, in a lesser degree, corporations were considered responsible for implementing the use of renewable energies and for introducing energy-efficient technologies. Local authorities were rated as the main responsible agent only in the case of tree plantation, which was also viewed as a responsibility of governments and Non-Governmental Organizations (NGOs).

Our results show that, contrary to what was found by Nave and Schmidt (2002), respondents do assign different responsibilities to different agents depending on the specific action. However, the difference could be due to the fact that we measured attributions of responsibility towards specific actions rather than towards solving the problem of climate change in general, as Nave and Schmidt (2002) did.

Attributions of responsibility did not vary significantly and systematically with sex, degree program and level of knowledge of the causes of climate change. Media Studies students and women assigned greater responsibility to corporations than to the government in the introduction of more energy-efficient technologies while Computer Engineering students (almost all men) and men showed the inverse pattern [degree program: $\chi^2(1) = 8.54, p < .01, \phi = -.26, p < .01$; sex: $\chi^2(1) = 3.84, p = .05, \phi = -.18, p = .05$]. Lower-knowledge respondents assigned similar responsibilities to the government and to local authorities in improving public transport while higher-knowledge respondents assigned more responsibility to the government than to local authorities [$\chi^2(1) = 5.23, p = .02, \phi = -.20, p = .02$].

Table 3. Agents considered to have the main responsibility for implementing mitigation measures (percentages)

	Respondent	Government	Local authorities	Corporations	NGOs
Decreasing car use	82.1	6.2	7.6	1.4	1.4
Using renewable energies	4.8	57.9	5.5	21.4	4.8
Planting trees	4.1	18.6	49.0	3.4	18.6
Decreasing consumption of material goods	69.7	10.3	2.1	7.6	2.1
Introducing more energy-efficient technologies	5.5	47.6	2.1	38.6	2.8
Reducing consumption of domestic energy	85.5	6.2	2.1	2.1	1.4
Acquiring more energy-efficient domestic appliances	76.6	5.5	0	12.4	2.1
Fighting deforestation		54.5	20.0	1.4	16.6
Improving public transport networks	0.7	53.1	34.5	4.1	
Recycling	53.1	16.6	9.7	12.4	2.8

Attitudes towards mitigation measures

Participants were asked about their agreement towards a set of possible measures to fight climate change using a 5-point scale ranging from ‘totally agree’ to ‘totally disagree’ (see table 4).

Overall, measures that interfere with car use (reducing speed limits and increasing petrol prices) were negatively rated. In light of the fact that individuals tend to attribute responsibility to themselves for decreasing automobile use, this result suggests that individuals are still very resistant to specific actions (at least externally-imposed ones) to decrease what is probably one of the main causes of greenhouse gas emissions under their control.

There was moderate agreement in relation to the other proposed measures – respondents agreed partially with introducing compulsory energy-efficiency norms for all buildings, and neither agreed nor disagreed with increasing taxes for high-energy spending automobiles, with building nuclear energy power stations and with decreasing investment in the construction and maintenance of highways and increasing investment in public transport. This lack of attitude strength suggests that participants do not feel very engaged with the climate change issue.

Attitudes towards these measures were not significantly and systematically affected by levels of knowledge of the causes of climate change, respondents’ sex and degree program.

Table 4. Mean ratings of possible measures to fight climate change (standard deviation in parenthesis)

	Mean (SD)
Increasing petrol prices	4.04 (1.18)
Reducing highway speed limit	3.59 (1.22)
Building nuclear power plants to produce electricity	3.08 (1.15)
Decreasing investment in highways and increasing it in public transport	2.98 (1.30)
Increasing taxes for high-energy consuming automobiles	2.52 (1.22)
Introducing compulsory energy standards for all buildings	1.54 (0.77)

Note: 5-point scale (1= totally agree, 5 = totally disagree)

Behavioral intentions to fight climate change

Respondents were asked to select three actions of mitigation of climate change that they would be

willing to adopt within three months (see table 5). Most respondents said they intended to separate waste for recycling. Two other behaviors were chosen by almost half of the respondents – to

replace conventional light bulbs by low-consumption ones and to use public transport as much as possible. Given that this was a sample of undergraduate students it is understandable that actions related to improving a house from an environmental point of view were not planned for a near future.

Behavioral intentions were not significantly associated with level of knowledge of the causes of climate change – none of the qui-square analysis was significant. Some of the behaviors were significantly, but not systematically, associated

with sex and degree program. Regarding respondents' sex, women intended to use public transport more than men [respectively, 65.2% and 38.1%; $\chi^2(1) = 9.18$, $\phi = .25$, $p < .01$] and also intended to take environmental aspects into consideration when acquiring high-budget items more than men [respectively, 21.7% and 9.2%; $\chi^2(1) = 4.31$, $\phi = .25$, $p = .04$]. Media Studies students intended to use public transport more than Computer Engineering students [respectively, 65.5% and 34.5%; $\chi^2(1) = 13.23$, $\phi = .31$, $p < .01$].

Table 5. Behaviors that respondents would be willing to adopt within three months to fight climate change

	Percentages
Separate waste for recycling	81.4
Replace conventional light bulbs by low-consumption bulbs	49.7
Use public transport as much as possible	46.2
Use less heating and air-conditioning	22.1
Install solar panels	17.9
Acquire more energy-efficient domestic appliances	16.6
Reduce waste by buying bigger packages, concentrated products, avoiding over-packed products, etc.	13.8
Take environmental aspects into account when acquiring high-budget items (e.g. a car, a house)	13.1
Reduce use of domestic appliances	9.0
Not to own a car	8.3
Reduce consumption of material goods	6.9
Improve insulation of home walls and roof	4.8
Pay more taxes for environmental protection	2.1

Participants were also asked to state whether they had done anything to help fight climate change. 44 participants (31%) did not answer the question or answered 'no'. Of the remaining respondents, most mentioned only one or two measures. The most commonly stated actions were related to domestic uses of energy and to the use of public transport (to be expected in this population).

Use and perception of various sources of information on climate change

Respondents were asked to rate how often they gathered information on climate change from different sources (5-point scale ranging from 'very often' to 'never'; see table 6).

As expected, the media topped the information sources on climate change. Overall, the most used source was TV news (see table 6), which was reported to be used frequently and significantly more often than the other sources [e.g. mean difference in relation to use of newspapers: $t(143) = 6.03$, $p < .01$]. The next most used sources of

information were newspapers, internet and TV films and documentaries, which showed similar levels of use [non-significant differences among them; mean difference between films/documentaries and conversations with family and friends, for instance: $t(142) = -2.47$, $p = .02$]. These were followed by conversations with family, neighbors, friends or colleagues, and by magazines and school or university [non-significant differences between magazines and school/university; mean difference between magazines and conversations, for instance: $t(139) = 2.74$, $p = .01$]. Radio, books, and publications and leaflets came in the fifth place, followed by events such as conferences and exhibitions [mean difference between publications/leaflets and 'events', for instance: $t(140) = -4.87$, $p < .01$].

Women reported to use some sources of information significantly more often than men: TV news [$F(1,144) = 9.77$, $MSE = 0.77$, $p < .01$], TV films and documentaries [$F(1,143) = 7.36$, $MSE = 1.02$, $p = .01$], publications or leaflets [$F(1,140) = 6.01$, $MSE = 1.00$, $p = .02$], books [$F(1,141) = 6.75$,

$MSE = 1.05, p = .01]$ and ‘events’ [$F(1,142) = 10.62, MSE = 1.02, p < .01]$.

Media Studies students reported to use some sources of information significantly more often than Computer Engineering students: radio [$F(1,140) = 4.74, MSE = 1.16, p = .03]$, school or university [$F(1,141) = 5.76, MSE = 1.12, p = .02]$ and ‘events’ [$F(1,142) = 4.42, MSE = 0.90, p = .04]$.

Respondents with less knowledge of the causes of climate change reported to use two sources more often than respondents with more knowledge: radio [$F(1,140) = 4.49, MSE = 1.16, p = .04]$ and ‘events’ [$F(1,142) = 6.36, MSE = 0.90, p = .01]$.

Male respondents with higher knowledge of the causes of climate change reported to use ‘events’ as a source of information for climate change issues more often than male respondents with less knowledge while all women, regardless of knowledge levels, reported to use them rarely [2-way interaction: $F(1,142) = 3.91, MSE = 0.90, p = .05]$. Media Studies respondents with higher knowledge used ‘events’ as a source of information for climate change issues more rarely than Media Studies respondents with lower knowledge; this pattern is reversed for Computer Engineering students [2-way interaction: $F(1,142) = 5.78, MSE = 0.90, p = .02]$.

Table 6. Use of sources of information on climate change

	Mean (SD)
TV news	1.86 (0.94)
Newspapers (printed or online)	2.39 (1.00)
Internet (excluding sites of newspapers, radios and TVs)	2.39 (1.07)
TV films and documentaries	2.40 (1.03)
Family, neighbors, friends or colleagues	2.69 (1.03)
Magazines	2.99 (1.08)
School or university	3.00 (1.07)
Radio	3.38 (1.11)
Books	3.53 (1.09)
Publications or leaflets	3.56 (1.04)
Events (conferences, exhibitions, expositions, etc.)	3.98 (0.98)

Note: 5-point scale (1= very often, 5 = never)

Participants were asked to rate the trustworthiness of sources of information about climate change in a 5-point scale ranging from ‘trust very much’ to ‘do not trust at all’ (see table 7). Overall, respondents expressed a significant degree of trust towards information coming from scientists and experts, followed by information from health professionals, environmental or consumer associations and the European Union (see table 7). Respondents had some trust on mass media sources and people they know (family, friends, neighbors and colleagues) and they expressed mistrust of information coming from sources such as government, local authorities and corporations.

In general, the level of knowledge of the causes of climate change and the degree program did not affect trust in sources of information. The exceptions were that Media Studies respondents reported to trust information from journalists more than Computer Engineering respondents [$F(1,140) = 4.31, MSE = 0.40, p = .04]$ and respondents with higher knowledge reported to trust teachers more

than respondents with lower knowledge [$F(1,138) = 4.48, MSE = 0.34, p = .04]$.

Women respondents reported to trust the following sources of information more than men: teachers [$F(1,138) = 11.47, MSE = 0.34, p < .01]$, television [$F(1,142) = 3.81, MSE = 0.49, p = .05]$, radio [$F(1,134) = 10.56, MSE = 0.51, p < .01]$, newspapers [$F(1,142) = 6.48, MSE = 0.52, p < .01]$ and family, friends, neighbors or colleagues [$F(1,142) = 9.85, MSE = 0.46, p < .01]$.

The fact that the Portuguese media have given less emphasis to the ‘skeptics’ than the media of the United States and other countries and have, in general, represented scientific claims regarding climate change as consensual may help understand that people award scientists a high level of trust. Mistrust in relation to the state is culturally ingrained in Portugal and may, together with the fact that the country has not been able to meet its Kyoto Protocol’s commitments, help explain the results of this survey in what concerns trust in government and local authorities.

Table 7. Trust in sources of information

	Mean (SD)
Scientists/experts	1.42 (0.58)
Health professionals/doctors	1.81 (0.77)
Environmental/consumer associations	1.91 (0.79)
European Union	2.01 (0.72)
Teachers	2.06 (0.63)
Newspapers	2.21 (0.75)
Internet (excluding sites of newspapers, radios and TVs)	2.26 (0.78)
Television	2.31 (0.73)
Journalists	2.36 (0.69)
Radio	2.36 (0.77)
Family, friends, neighbors or colleagues	2.48 (0.70)
Government	2.79 (0.77)
Local authorities	2.85 (0.75)
Corporations	2.91 (0.79)

Note: 5-point scale (1= trust very much, 5 = do not trust at all)

Participants were also asked to rate the medium they used most frequently in terms of clarity of explanation of the climate change issue, accuracy of scientific and technological information, and quality of analysis of policy and economic options to fight climate change. A 5-point scale ranging from 'very good' to 'very bad' was used.

Overall, the mass medium most used by each respondent was assessed as providing clear explanations of climate change issues and accurate scientific and technological information (see table 8). The analysis of policy and economic options to fight climate change was seen as neither good nor bad [non-significant difference with accuracy of

information but significant difference with clarity of explanation: $t(138) = -0.89, p < .01$].

Clarity of media explanations of climate change was rated higher by women than men [$F(1,139) = 3.81, MSE = 0.51, p = .05$]. Accuracy of scientific and technological information on climate change was rated higher by women [$F(1,139) = 6.47, MSE = 0.55, p = .01$] and by Computer Engineering students [$F(1,139) = 7.77, MSE = 0.55, p = .01$] than by men and Media Studies respondents, respectively. Perceptions of the analysis of policy and economic options to fight climate change were not significantly affected by level of knowledge, sex and degree program.

Table 8. Assessment of the most used mass medium

	Mean (SD)
Clarity of explanations of climate change	2.21 (0.71)
Accuracy of scientific and technological information on climate change	2.31 (0.75)
Analysis of policy and economic options to fight climate change	2.40 (0.834)

Note: 5-point scale (1= very good, 5 = very bad)

The level of alarmism in the news about climate change was rated in a 5-point scale ranging from 'very high' to 'very low'. Overall, participants rated it as neither high nor low ($M = 2.60$, $SD = 1.02$) and it was not significantly affected by level of knowledge, sex and degree program.

Conclusion

Knowledge of the causes of climate change seems to have increased slightly in the past 15 years – the Portuguese sample in Gallup's 1992 survey showed a low level of knowledge (Dunlap, 1998) while knowledge is moderate in our sample, despite confusion about the role of the ozone hole and the relative contribution to the enhanced greenhouse effect of nuclear power plants and agriculture. A higher level of knowledge of climate change, particularly of its causes, did not lead to changes in concern towards climate change, attitudes towards measures to fight it and attributions of responsibility. This finding does not support the notion that more informed people have more congruent attitudes and behaviors (e.g. Dunlap, 1998). Nonetheless, this lack of coherence between knowledge, attitudes and actions has been acknowledged in social psychology since 1934 (e.g. LaPierre, 1934). The distance between people's values and attitudes, on the one hand, and their behavioral practices, on the other hand – the 'value-action gap' (e.g. Blake, 1999) – was also found by Nave and Schmidt (2002).

One important aspect is that participants did not exclude themselves from actions to fight climate change that can be under their control, even if their actions lag behind. Such awareness may work as a positive attitudinal basis for communication campaigns geared towards the adoption of given practices related to uses of energy. Widening social awareness of climate change and promoting positive behaviors will require the identification of specific areas of resistance and finding ways to counter it. For instance, respondents are aware that reducing car use is mainly their responsibility but showed resistance to measures interfering with that.

In the last few years, climate change has been much more salient in the media than other environmental issues, such as the ozone hole and air pollution. Yet, our survey indicates that, despite considering the impacts of climate change serious, individuals express lower levels of concern with this issue than with the above-mentioned ones. Crucially, this finding challenges the agenda-setting model and suggests that some issues remain ingrained in the 'public's agenda' over long periods of time. The metaphorical power of the concept of 'ozone hole' may be part of the explanation and

Ungar's (2000) point that climate change never captured the public imagination may be a valid one. We should emphasize that this survey was taken in the Fall of 2006, soon after Al Gore's movie 'An Inconvenient Truth' opened in Portugal and before the attribution of the Nobel Peace Prize to Al Gore and the IPCC. It is possible that these events, together with a more intense media focus on climate change, may have contributed to some recent changes in public perceptions.

The fact that in an ongoing study of media discourse we have, in several occasions, detected confusion between climate change and ozone depletion in television news – the most important source of information for the participants in this study – may help understand the fact that people continue to view the latter as a cause of the former. Yet, people appear not be aware of these problems as they said that they trust the media and gave a positive rating to accuracy and clarity of news coverage. This appreciation is at least consistent with the fact that climate change 'skeptics' have not been put under the limelight in the Portuguese media (cf. Corbett & Durfee, 2004).

Part of the explanation for the inconsistencies between people's representations of climate change and their inclination to act upon the problem may lay in the discourse of a variety of social actors on the politics of climate change and the re-construction of such discourses in the media. Our analysis of the Portuguese conventional media and of internet sites has led us to conclude that there is a prevalent techno-managerial discourse on climate change, which suggests that international and national market regulation will be the adequate response to the problem. Most of the information made available by the state – and typically reproduced by the media – concerns either rather technical policy analyses or decisions on investment in renewable energies. This is a discourse that tends to construct the citizen as consumer rather than someone that can actively participate in the debate and decision-making process regarding greenhouse emissions (Carvalho, 2007).

As the voices of experts and politicians appear to be the only authorized ones, citizens may develop a weak sense of agency in relation to climate change. People do not believe that they can make a significant difference in deciding the course of the issue and expect that governments will find a way out. This form of political subjectivity, cultivated by various organizations and by the media, may be rather detrimental to finding socially sustainable solutions to climate change. The expectation that the state will solve the problem, on the one hand, and the declared suspicion of that same agent as a source of information, on the other, is in itself another inconsistency in the public's positions.

Similarly to other studies (e.g. Dunlap 1998), our results did not show any systematic influence of socio-demographic variables (sex and degree program) on concern about climate change, perceptions of risk associated with possible impacts, attributions of responsibility for mitigation, attitudes towards possible measures, and intentions to change behaviors. We had hypothesized that the level of knowledge of the causes of climate change could affect some of the results, but we did not obtain any systematic difference between perceptions of people

with high and low knowledge. This questionnaire is currently being applied to a bigger and more heterogeneous sample, which is more diverse in relation to other socio-demographic variables such as age, schooling and occupation. We hope to test a complex model relating these and other variables and contribute to understanding important aspects in lay representations and behaviors associated with climate change. The relation between people's consumption of media and their views and dispositions regarding climate change will continue to be an important focus of the analysis.

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Global Climate Change: An Issue of Legitimacy in the Media

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Abstract

In the last half of the 20th century, climate change has been a topic of much global debate. Though the issue has waxed and waned, Hurricane Katrina was an event-based driver for further deliberation on environmental concerns in the United States. Since news media have been the primary source of information on Katrina and global warming, it has contributed to the issue of scientific and social legitimacy. This study therefore sought to determine how climate change is being viewed by the communications industry. Using Luhmann's theory of modern function systems, I analyzed 107 articles from four leading U.S. newspapers over a two year time period surrounding Katrina's devastation to New Orleans, Louisiana (August 29, 2005). Each sample period lasted two weeks. I found that articles changed emphasis from predominately science, to one of politics and economics over the two years. Though science, with the addition of law, still received attention, it was no longer the main focus or how society viewed the situation. The articles also showed a lack of consensus on the reliability of scientific findings as well as whether or not climate change is the driving force behind increasing natural disasters such as hurricanes and tsunamis.

Introduction

In the last half of the 20th century, a startling scientific discovery was made: rather than simply exhibiting “normal” fluctuations or an occasional solar flare or volcanic eruption, the earth's climate was changing due to human impact (Pearce 2001). Atmospheric levels of carbon dioxide alone have risen from pre-industrial levels of 280 parts per million (ppm) to present levels of 375 ppm (DOE Office of Science 2004). According to McMichael and Haines (1997), researchers have determined that global impact due to humankind has for the first time exceeded the physical and ecological limits of the biosphere. Since this time terms including ozone layer, carbon dioxide, global climate change¹, global warming, greenhouse effect², global environmental change³ and sound science have become a normal part of the public's vernacular. Recent events have kept this environmental lexicon in use. In October 2006 the Stern Report, a report by Sir Nicholas Stern of the U.K. government, stated that carbon emissions have already increased global temperatures by half a degree Celsius, and if no action is taken, there is more than a 75% chance of global temperatures rising between 2 and 3 degrees Celsius over the next 50 years or a 50% chance that temperatures could rise by 5 degrees Celsius (Stern 2006).

In 1988, after strange weather patterns were experienced throughout the U.S., the global warming issue became one of government concern and investigation (Killingsworth & Palmer 1992; Pearce 2001). Since then, global climate change has been a source of conflict between the Bush administration, government agencies, industry, states, environmental groups, scientific researchers, and other private interests. In more recent years, global climate change has received some, though rather weak, legitimacy within government agencies as well as industry and the general public. Even this fragile authority has not been achieved without its challenges. Industry and private interests have used “tropes of uncertainty” to cause various levels of doubt about the severity of the situation and its need for a quick response (Cox 2001). Methods to produce this skepticism include discrediting scientific methods employed by government, public, and privately funded researchers as well as reframing information and arguments and providing research that contradicts original findings.

Even with pressure from interest groups on both sides of the issue, agencies such as the Environmental Protection Agency (EPA) and Department of Energy (DOE) have taken steps to combat climate change by enforcing stricter air, soil, and water pollution standards. DOE in particular has initiated programs including the Voluntary Emission Reduction Registration Program, the Climate VISION Program, and the Climate

Change Technology Program (DOE 2006). The Climate VISION Program (voluntary innovative sector initiatives) is intended as a “public-private partnership designed to pursue cost-effective strategies to reduce the growth of greenhouse gas emissions,” whereas the Climate Change Technology Program (CCTP) focuses on research and development of energy and carbon sequestration technologies (DOE 2006). Carbon sequestration is defined as the capture and storage of atmospheric carbon dioxide (CO₂) in a terrestrial, underground, or ocean system.

Environmental groups have also contributed much to climate change action through the use of grassroots campaigns, lobbying, and lawsuits. Many of these groups put out green literature on how to become carbon neutral; offsetting the emissions of an activity by various methods including, but not limited to, using less energy intensive electronics, participating in a carbon sequestration projects, or giving money to parties (businesses or other non-profits) that sequesters carbon. Many of these environmental organizations are also involved in lobbying efforts to raise emissions standards, as well as lawsuits holding government agencies responsible for not upholding their mission (example described below) or industry for violating current emission standards.

Hurricane Katrina as a Driver of Climate Change Perspectives

Climate change has now been a hot topic nationally as well as internationally for almost two decades. During this time, concern for the problem has waxed and waned. Discussion heightened again as the city of New Orleans was nearly destroyed by Hurricane Katrina on August 29, 2005. While Katrina was not unusual in power or scope, its effortless destruction of a large American city initiated new and wider discussions of a future where more frequent, powerful, and unpredictable weather events become a “norm” instead of a rarity. The tragedy shattered long-held perceptions of invulnerability and led to the uncomfortable realization that climate change could precipitate a more uncertain future.

Following the 2005 hurricane season, which had a record breaking 27 named storms (15 hurricanes, 7 of which were ranked major by the NOAA Satellite and Information Service), climate change has received almost daily coverage in the media (NOAA Satellite and Information Service 2006). Since the hurricane, the Bush Administration and federal government have come under increasing fire from national interests (displeasure in the

government’s handling of Katrina relief efforts) and international sectors (fellow United Nations member-states pressure on the United States to join the Kyoto Protocol, an international treaty designed to limit global greenhouse gas emissions). The scientific community in particular has revolted against the dismissal of their research and findings by the administration (e.g., NOAA and NASA) by signing petitions and speaking out to the media. In the same vein, a Supreme Court case, *Massachusetts, et al. v. Environmental Protection Agency, et al.*, was recently heard to determine: “1) whether the Environmental Protection Agency administrator may decline to issue emission standards for motor vehicles based on policy considerations not enumerated in section 202(a)(1) of the Clean Air Act, 42 U.S.C. 7521(a)(1)? 2) whether the Environmental Protection Agency administrator has the authority to regulate carbon dioxide and other air pollutants associated with climate change under section 202(a)(1)?” (Medill Journalism 2006). These examples of societal discord illustrate the socio-environmental impacts of increasingly unnatural natural disasters.

Media’s Role in the Global Climate Change Issue

With the increase of natural disasters (e.g., hurricanes and tsunamis) and the global warming issue once again causing uproar in the legislature, there has been an upsurge of climate change in the news. Media tends to be event-driven, either in the form of an unexpected occurrence such as Hurricane Katrina, or a planned event like the Supreme Court case mentioned above (Corbett 2006). But what is media’s role in this environmental issue? According to Mobilization theory, media intervenes with public interests, thus directing their attention to issues of concern and needs for reform (Protest et al. 1991; Manning 2001). In this model, journalists are a trigger to the agenda building process, interacting with the public on a micro-level and political elites on a macro-level to place issues of concern in the political and public domain (Bardoel 1996). The micro-level is the general public’s interactions and discussions amongst themselves, whereas the macro-level is government decision-making by the political elites. Journalists operate on the meso-level, “sensitive to the currents of opinion and interest circulation among the public at the micro-level but as the term ‘meso-level’ also implies, they are positioned hierarchically above the public as they exercise a greater capacity to control information flows and shape agendas” (Manning 2001:3). Though this model assumes social responsibility on the part of journalists, it fits with media’s approach on climate change.

Media, as a necessary part of society, is not without bias. News media is often influenced by economic constraints. They are dependent on advertisements (e.g., from big business) to provide their financial backing, and so will avoid reporting on stories that would discredit or impact their advertisers (Corbett 2006). On the opposite end, they can receive pressure from government entities to avoid sensationalizing events or issues (though the First Amendment protects freedom of speech in the United States, limiting the government's ability for censorship). One recent example of this attempt at force was Senator James Inhofe's effort to prove in the last hearing of his term that media has dramatized global warming in an effort to scare the public into supporting environmental policy (refer to December 1, 2006 article in the *Greenwire* entitled "CLIMATE: Media coverage to face spotlight in Sen. Inhofe's final hearing"). Senator Inhofe, the outgoing chairman of the Senate Environmental Committee (term ending in January 2007), is skeptical that global warming can be linked to man-made emissions, and believes that media is to blame for this policy issue.

Understanding the important (and somewhat controversial) role news media plays in political and environmental arenas, this study seeks to determine, through the examination of newspaper articles from 4 major papers, how the global climate change issue is being viewed by media, and thus by its readership. Hurricane Katrina will be the event in focus since it is considered a driver in the global warming issue.

Methods

According to the Yahoo News Directory (2006) and Audit Bureau of Circulations (2006), The Washington Post, New York Times, Los Angeles Times, and USA Today are considered the 4 most popular and 4 of the top 7 highest circulated newspapers in the nation. They are also generally considered neutral in their political persuasion, though The Washington Post tends to lean slightly to the left and USA Today slightly to the right. No limitations were put on the types of articles chosen from these papers.

I obtained newspaper articles using the LexisNexis Academic search guide. In order to determine Hurricane Katrina's impact as a catalyst for climate change in the media, I conducted a search for articles one year before, directly after, and one year after the hurricane. These articles either contained the words global climate change or global warming in the headline, lead paragraph, or list of terms. To prevent inflated numbers in

the second and third data collection periods, articles with Hurricane Katrina in the headline, lead paragraph, or term list were excluded from the search. Searches were limited to a 2 week period for article analysis. August 29th was used as the starting date for each search (Hurricane Katrina hit New Orleans, LA on this date) and September 13th was used as the ending date, therefore roughly splitting a 31-day month (16 days). Numbers of articles starting with 8-29-04 to 9-29-04 (one year before Katrina) were collected for every month until 8-29-06 to 9-29-06 (one year after Katrina) to ensure consistency between months picked for analysis and other months within that year or time period.

For purposes of analysis, I examined articles using Niklas Luhmann's theory of modern function systems. In his 1986 book *Ecological Communication*, Luhmann described late modern society as defined by six function systems that use binary codes that form when information obtains a value and a respective counter-value. These function systems include economy (payment/non-payment), law (legal/illegal), science (true/false), politics (in/out of office), religion (good/bad), and education (better/worse). The focus of communication in late modern society generally falls into one or more of these systems (Peterson and Peterson 1996). The resulting inclusion/exclusion of social spheres impacts how an issue is perceived by media and the public.

Results

Examination of newspaper articles on climate change during the months between 8-29-04 and 8-29-06 showed a slight dip in number from year zero to year one (the year Hurricane Katrina hit), and then increased 4 fold by the next year (Table 1). The slight decrease from 2004 to 2005 was due to a large number of reports on the 2005 hurricane. Table 2 demonstrates this large jump in articles (minus the Los Angeles Times, which could not be determined by a LexisNexis search) on Katrina in relation to the number of articles on either global warming/climate change only or the combination of global warming/climate change and Hurricane Katrina.

Exploring the average number of articles by year (staying within the temporal limits of one year before and one year after Hurricane Katrina), 2004 and 2005 were found to have similar means whereas the 2006 average was roughly double those numbers (Table 3). Averages calculated for the

number of newspaper articles before and after Hurricane Katrina show a similar trend, with almost a doubling from the year before to the year after (Table 4.).

In the analysis of articles for the 2 week periods the year before Hurricane Katrina (8-29-04 to 9-13-04), the 2 weeks after the hurricane (8-29-05 to 9-

13-05), and one year after (8-29-06 to 9-13-06), I found the number of articles to fall slightly from the first period to the second, and then climb steeply between the second and third periods (Table 5). This was a similar pattern to the monthly counts from Table 1 and yearly averages from Table 3.

Table 1. Articles on climate change/global warming by month starting with 8-29-04 to 9-29-04 (one year before Hurricane Katrina) and ending with 8-29-06 to 9-29-06 (one year after Katrina). Months highlighted in gray are months used for analysis.

Month	Number of Articles
08-29-04 to 09-29-04	52
09-29-04 to 10-29-04	59
10-29-04 to 11-29-04	60
11-29-04 to 12-29-04	59
12-29-04 to 01-29-05	40
01-29-05 to 02-29-05	60
02-29-05 to 03-29-05	37
03-29-05 to 04-29-05	47
04-29-05 to 05-29-05	51
05-29-05 to 06-29-05	76
06-29-05 to 07-29-05	83
07-29-05 to 08-29-05	41
08-29-05 to 09-29-05	39
09-29-05 to 10-29-05	50
10-29-05 to 11-29-05	55
11-29-05 to 12-29-05	91
12-29-05 to 01-29-06	59
01-29-06 to 02-29-06	87
02-29-06 to 03-29-06	64
03-29-06 to 04-29-06	108
04-29-06 to 05-29-06	148
05-29-06 to 06-29-06	163
06-29-06 to 07-29-06	107
07-29-06 to 08-29-06	158
08-29-06 to 09-29-06	167

Table 2. Articles during the month of 8-29-05 to 9-29-05 (directly after Hurricane Katrina) about climate change/global warming without mention, with mention, and only about the hurricane (results did not include the Los Angeles Times).

Article Topic	Number of Articles
Without Katrina	39
With Katrina	36
Only Katrina	2,570 w/o LAT

Table 3. Average number of articles on global climate change/global warming by year (2004 represented 4 months of articles, 2005 had 12 months, and 2006 had 9 months).

Year	Average
2004	57.5
2005	55.8
2006	117.9

Table 4. Number of articles on global climate change/global warming before and after Hurricane Katrina (both represent 12 month periods; 08-29-06 to 09-29-06 was removed from the calculations because it exceeded the 12 month period).

Year	Average
Before Hurricane Katrina	55.4
After Hurricane Katrina	94.1

Table 5. Number of articles within a 2 week period one year before, directly after, and one year after Hurricane Katrina.

Time Period	Number of Articles
8-29-04 to 9-13-04	21
8-29-05 to 9-13-05	15
8-29-06 to 9-13-06	71
Total	107

Using Luhmann's function systems to determine the focus of 107 news articles, I found that the majority of articles from the 2004 period (8-29 to 9-13) centered primarily on the science related to climate change, and less so on the politics and economics of the issue (Fig. 1). Law, including proposed environmental laws and policies on climate change, received little to no attention in comparison, but was mentioned in one paper. Education and religion were not mentioned in any articles during this period. Two examples, one from The Washington Post and one from The New York Times (USA Today and Los Angeles Times were not represented during this period), demonstrate this emphasis on science, particularly in relation to recent hurricane activity in Florida and how it relates to climate change (key words in bold):

The Washington Post: Storms In Florida Not Seen As Trend; Experts Don't Fault **Global Warming** (9-3-04)

Bad luck, not **global warming**, is the best explanation for the arrival of two severe hurricanes on the Florida peninsula in three weeks, several experts said yesterday. The warming of the atmosphere -- if indeed that is happening -- may lead to hurricanes with higher winds and more rain than is generally seen now. But even if that happens, the change will take so long and be so subtle that the chance of detecting it in a single hurricane season is essentially zero... "I wouldn't read too much into a couple of individual events like this," said Thomas R. Knutson, a research scientist at the National Oceanic

and Atmospheric Administration, whose mathematical models predict that hurricanes are likely to be slightly more intense a century from now... "The hurricane activity that we are having right now is quite adequately explained by [normal] variability and Atlantic sea-surface temperatures," said Stanley B. Goldenberg, of NOAA's hurricane prediction office in Miami.

New York Times: After the Storm (9-8-04)

Some people argue that **global warming** may lead to storms of greater strength and volatility in the near future. Florida cannot afford to wait to find out. It has already faced two hurricanes this year, and a third, Ivan, could be headed its way at the moment, with the potential of more storms to come. Damaging hurricanes have historically been intermittent enough in Florida to create an illusion of at least temporary safety, especially for a population that includes regular infusions of new residents who may never have experienced one. But it is not residents' responsibility alone to recognize that it is no longer good enough to rely on the illusion of safe enough for now. It's time for the authorities in Florida to start building for sooner or later.

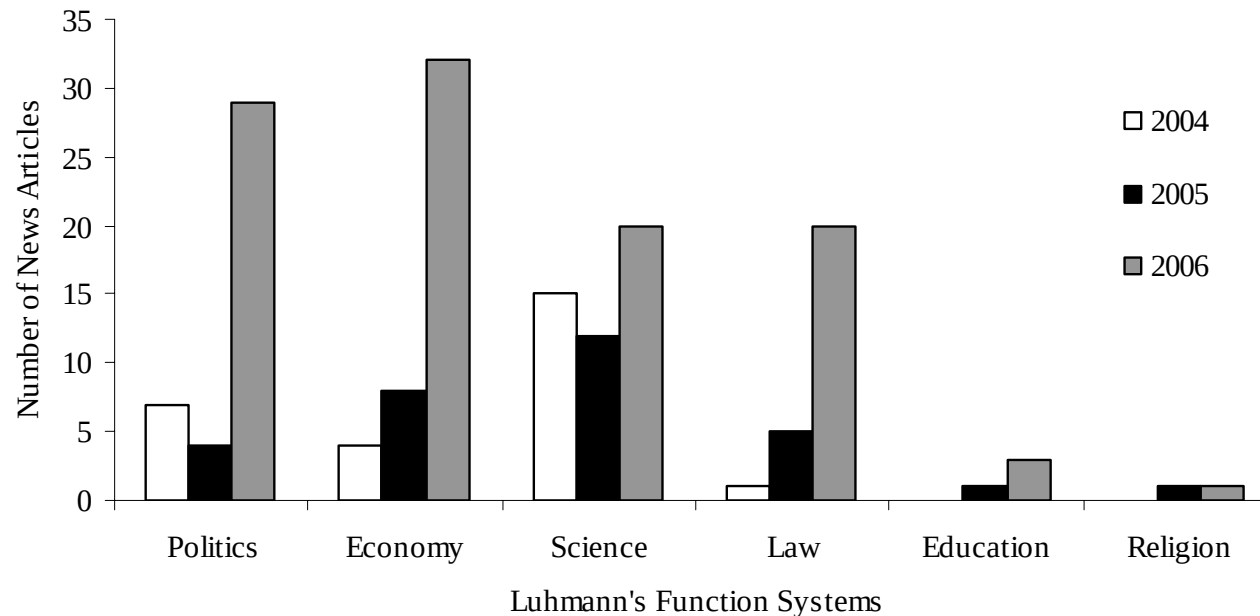
Though global warming, according to these passages, had nothing to do with the number or intensity of hurricanes during the 2004 season, people were associating the two phenomena.

Similar to the 2004 period, the 2005 set of articles focused largely on science. This was most likely due to the 2005 hurricane season (including Hurricane Katrina) being of higher intensity and breadth than the year before. This was the subject matter of the following article (key words in bold):

New York Times: Storms Vary With Cycles, Experts Say (8-30-05)

Because hurricanes form over warm ocean water, it is easy to assume that the recent rise in their number and ferocity is because of **global warming**. But that is not the case, scientists say. Instead, the severity of hurricane seasons changes with cycles of temperatures of several decades in the Atlantic Ocean. The recent onslaught "is very much natural," said William M. Gray, a professor of atmospheric science at Colorado State University who issues forecasts for the hurricane season.

Figure 1. Number of news articles by function system for the 2004, 2005, and 2006 time periods between August 29th and September 13th.



Once again, the article states that global warming is not the cause for an upsurge of tropical storms and hurricanes, but that there is increasing discussion of their relation.

Dispelling the relationship between hurricanes and climate change was not the only mention made of science. The influence of global warming in relation to other global concerns (mostly impacts on humans) was also a popular topic in the articles. These articles usually incorporated other function systems such as law, economics, and politics in addition to their discussion on science-based topics. Three such examples demonstrate the increasing discourse relating scientific proof to judicial (law/policy), economic, and political social spheres. The first article from The New York Times addresses political science, the second from USA Today is in the form of a letter written by former U.S. president Jimmy Carter, and the third article, also from The New York Times, is a piece on the Amazon jungle (no articles on climate change were found in the Los Angeles Times during this period; key words in bold):

New York Times: Political Science (9-4-05)

Yet what remains most divisive, according to Kennedy, is not the Bush administration's specific policies, but a more general sense that "scientific conclusions, reached either within agencies or by people outside of government, are being changed for political reasons by people who have not done the scientific work." It is this sense that science is being "misused" that has given rise to two Congressional bills.

USA Today: Longstanding Disaster Threats Can't be Ignored: Written by Former U.S. President Jimmy Carter (9-8-05)

The most definitive warning I've read about the consequences of a hurricane striking New Orleans was written by Mark Fischetti in Scientific American in 2001. He describes the potentially disastrous

channeling of the Mississippi River flow well out into the gulf, which robs silt from the coastal flood plains and the protective offshore barrier reefs. He also predicts with horrifying prescience the vast waters of the gulf and Lake Pontchartrain pouring into the city through dikes ruptured by storm surges... These longstanding warnings have been ignored or met with a halfhearted response. Instead of dissipating, the dangers have been exacerbated by **global warming**. The first warnings came in 1979 while I was president, when top American scientists expressed concern about **global warming**. Now we know their warnings are coming true, with a notable increase in the frequency and severity of hurricanes, the melting of mountain glaciers and ice in the polar regions and a rise in the level of the seas.

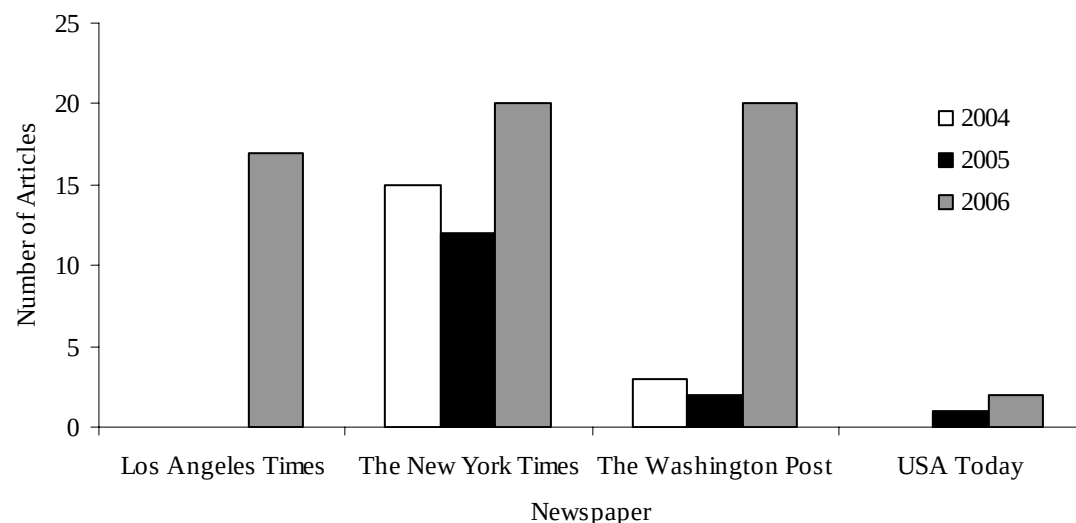
The New York Times: A Healthier Amazon Jungle (9-13-05)

The health of the Amazon is a global concern because the forest soaks up greenhouse gases, which lessens **global warming**. Deforestation means the Amazon could eventually become too small to produce the rain that it needs to survive. Deforestation is also deadly for millions of Amazon peasants trying to eke out a living growing small plots or collecting forest products. Land grabbers snatch up valuable property near planned paved roads, burning the villages to drive the inhabitants away. Hundreds of leaders who have tried to speak up for peasants have been murdered, and virtually none of the killers ever face jail. Unfortunately, part of the reason farmers and ranchers cleared less jungle this year is because the price of soybeans and beef have dropped, and Brazil's currency is stronger. So exports are less profitable.

In the third period from 8-29-6 to 9-13-06, there was a dramatic increase in news reporting on global warming, especially from the Los Angeles Times who went from zero articles in the first 2 periods to 17 articles in the third period (Fig.2). The Washington Post also had a substantial increase, though The New York Times (generally high

reporting) and USA Today (generally low reporting) stayed relatively constant during the 3 periods. Besides a change in the number of reports on the topic, was the further change in the articles' focus (Fig. 3). The Los Angeles Times in the third period focuses mostly on politics and economy, followed closely by law and distantly by science. Two examples from the

Figure 2. Number of Articles discussing global climate change/global warming by newspaper for the 2004, 2005, and 2006 time periods between August 29th and September 13th.



Los Angeles Times show the paper's second main focus, economics, as the way in which they view climate change (key words in bold):

Los Angeles Times: Global Warming Plan Could be Costly (9-1-06)

California's ambitious plan to curb **global warming** will be costly to businesses and consumers, experts said Thursday, and its effect on the climate could be negligible -- unless other states and nations follow. Although it is too early to know what will happen

over the next two decades, the state's basic industries, including utilities, oil refineries and steel mills, can expect to make major changes in how they do business. And consumers may face higher bills for electricity, gasoline and other goods that use energy. "My view is that in the end, this is going to be costly, but it's a cost that we have to be willing to pay because the alternative is potentially very bleak," said Severin Borenstein, director of the University of California Energy Institute in Berkeley. But experts stressed that California could do little if anything to

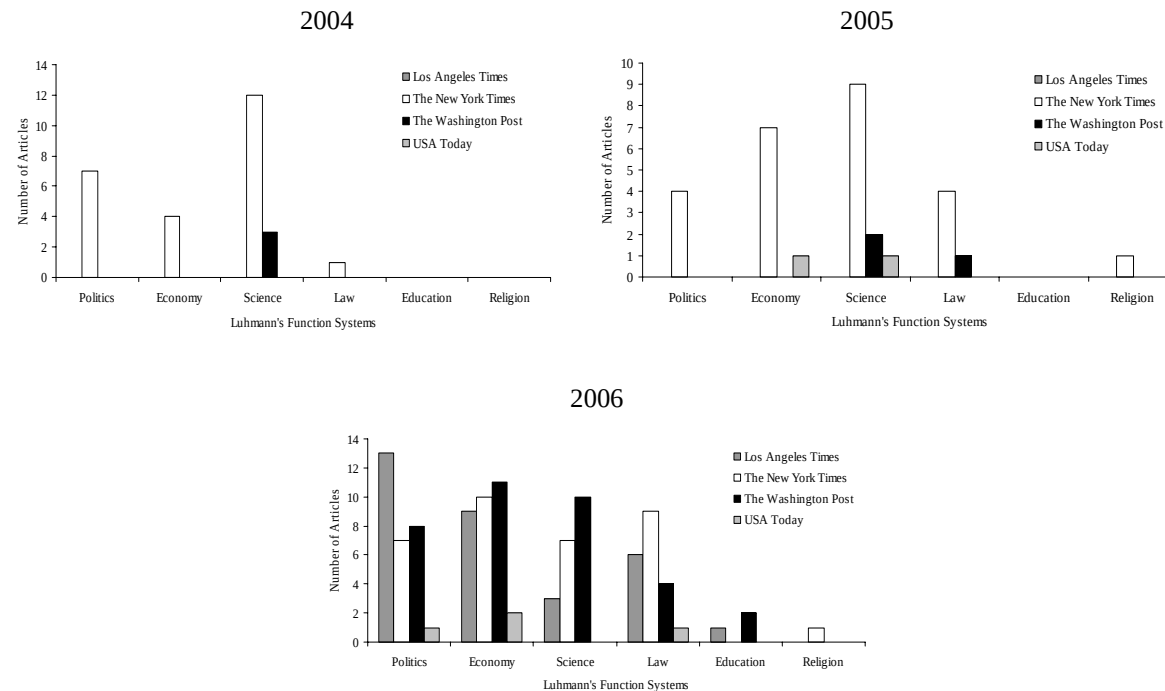
curb climate change on its own because of the global nature of the problem.

Los Angeles Times: The World: Deep Sixing CO2 Emissions (9-3-06)

Since 1996, Norway's largest petroleum company -- Statoil -- has been injecting 1 million tons of carbon dioxide every year from the Sleipner complex into undersea sediments to keep the potent greenhouse gas from venting into the atmosphere. Statoil's engineers

aren't doing it to save the environment, but to save money. The Sleipner injection facility, which cost about \$80 million to build, saves Statoil \$53 million every year in Norwegian taxes on carbon dioxide emissions. In areas such as California -- where lawmakers passed a bill last week to curb industrial carbon dioxide emissions 25% by 2020 -- the Sleipner platform is a harbinger of the future of fossil fuels, in which energy companies and power utilities retool for new greenhouse gas standards.

Figure 3. Number of news articles by function system for 4 popular newspapers during the 2004, 2005, and 2006 time periods between August 29th and September 13th.



The New York Times and The Washington Post went from focusing primarily on science in 2004 and 2005 to politics and economy, though The Washington Post continued their heavy reporting on science. In these 2 passages from The Washington Post, one article describes the severity of climate change as a “time bomb,” whereas the second article demonstrates some science-related skepticism or frustration on the part of the journalist (key words in bold):

The Washington Post: Findings (9-7-06)

Global warming gases trapped in the soil are bubbling out of thawing permafrost in amounts far higher than previously thought and may trigger what researchers warn is a climate time bomb.

The Washington Post: Eight Is Enough: With Science, the More Things Remain the Same, the More They are Bound to Change (9-10-06)

They've decided that dragonflies hover over asphalt roads because they mistake them for stagnant rivers. There are scientists trying to figure out whether elephants really run, or merely lumber along at a fast pace. They're debating a claim in the journal Nature that "living plants emit the greenhouse gas methane." (Predictable: Someone's blaming **global warming** on plants. Killer trees. Flowers that fart.) Now, they're reconfiguring the solar system.

USA Today, not having reported during the first period, focused on economy and science in the second period, and politics, economy, and law in the third period (no science present). In the following example, USA Today related climate change to sports, though playfully, by illustrating the impacts of weather change on field conditions for football (key words in bold):

USA Today: Five Moves that Matter (9-8-06)

Global warming: Think about it. There may well come a day when heat-based teams such as Tampa Bay don't actually dread a December visit to the thawed tundra of Lambeau Field in sunny Green Bay.

Though money was not directly mentioned, this article showed possible implications of global warming on professional sports, a major enterprise in the United States.

Education, and to a much lesser extent religion, surfaced in articles from time to time, but for the most part were not considered as part of the issue. Generally these function systems were represented in artful interpretations of the problem such as educating the public through song lyrics or debating the significance of the movie “March of the Penguins” as either representing family values (religious connotation) or heralding the threat of habitat loss. Overall, these spheres of society were considered to be out-of-scope when contemplating climate change.

Discussion

With a mild 2006 hurricane season in comparison to the previous 2 years (9 named storms – 4 tropical storms and 5 hurricanes, 2 of which were major though none made landfall), the eminent threat of global warming temporarily subsided in the minds of journalists and their readership only to come back stronger in the following months (National Climatic Data Center 2006). Many of the articles made reference to studies and quoted scientists refuting claims that global warming affected hurricane patterns. Even with statements to put the public at ease, the climate change issue has not lost momentum. Since the beginning of this study, the number of articles addressing global warming have continued to increase (the last month recorded in this study was the highest in number at 167 articles). Though a catastrophic natural disaster is no longer of immediate concern, Hurricane Katrina and the damage it inflicted on the United States citizenry has continued to increase human anxiety regarding the state of the environment.

Hurricane Katrina impacted the climate change debate not only by increasing discourse, but also by changing how the issue is viewed. Media's focus on global warming has changed noticeably over the course of

this study, with greater emphasis on economy, politics, and law. Though science received continued attention over the 3 periods, the other function systems (excluding education and religion) tended to dominate. The rise of these social spheres coincided with increased dissension on the legitimacy of scientific findings as well as what actions should be taken if the science is accurate.

Besides Katrina and its aftermath, environmental consciousness has also come into play as more people attempt to do their part in combating climate change. More frightening aspects of global warming are being brought to light or are being brought back into the public realm because of the scientific and political debates (e.g., increasing ocean levels, extinction of species, and drought in the American West; National Wildlife Federation 2006). This resurgence of attention to climate change has led to an increase in public action on the part of states, professional and private organizations, environmental groups, and other interested parties to increase regulation (laws/policy), focus on economic incentives (carbon trading, buying green), and change political power (more Democrats in the Senate and House). With Hurricane Katrina as the trigger that started the proverbial avalanche, the climate change issue has prospered in the media and in the views and opinions of the public. Therefore, Hurricane Katrina was an effective driver in the global warming feedback loop, giving climate change the legitimacy to leap into the newspaper headlines and kindle renewed public debate. The resultant media-ignited and mediated debate will continue to fuel policy discussions into the future.

Endnotes

¹Global climate change is defined as “a persistent change in the values of climate variables such as absolute extremes, means, and variances, of temperature, wind velocity, precipitation, and other weather elements” (Bostrom et al. 1994: 964).

²Greenhouse effect is defined as “an increase in the equilibrium temperature of the atmosphere caused by the addition of gases or aerosols which inhibit the outward flow of infrared radiation” (Bostrom et al. 1994: 964).

³Effects of global environmental change include a change in temperature, precipitation, and sea level (EPA 2000).

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Appendix

Table 6. Articles from 8-29-04 to 9-13-04 that discuss global climate change/global warming broken out by function system.

Number	Newspaper	Article Title	Politics	Economy	Science	Law	Education	Religion
1	The New York Times	Looking for Energy in the Campaign	Politics	Economy	Science			
2	The New York Times	The Dishonesty Thing	Politics	Economy				
3	The New York Times	After the Storm			Science			
4	The New York Times	Conference Board Stiffens Global-warming Stance			Science			
5	The New York Times	U.S. Joins Nations to Keep Tabs on Planet Earth			Science			
6	The New York Times	A Mosquito's Gift in Singapore: A Bad Case of Breakbone Fever			Science			
7	The New York Times	Global Warming			Science			
8	The New York Times	Global Warming			Science			
9	The New York Times	Global Heat	Politics		Science			
10	The New York Times	Global Heat	Politics		Science			
11	The New York Times	A Prankster Invasion In the Elephant House	Politics					
12	The New York Times	Computers Add Sophistication, but Don't Resolve Climate Debate	Politics		Science			
13	The New York Times	Destroying Coral's Color			Science			
14	The New York Times	Canada Reinforces Its Disputed Claims in the Arctic	Politics	Economy		Law		
15	The New York Times	A Greener Globe, Maybe		Economy	Science			
16	The Washington Post	Faulty Figuring on Emissions			Science			
17	The Washington Post	Corrections			Science			
18	The Washington Post	Storms In Florida Not Seen As Trend; Experts Don't Fault Global Warming			Science			
19-21	Deleted							

Table 7. Articles from 8-29-05 to 9-13-05 that discuss global climate change/global warming broken out by function system.

Number	Newspaper	Article Title	Politics	Economy	Science	Law	Education	Religion
1	The New York Times	A Healthier Amazon Jungle		Economy	Science	Law		
2	The New York Times	March of the Conservatives: Penguin Film as Political Fodder	Politics					Religion
3	The New York Times	New York Leads Suit Over Appliances' Energy Standards		Economy		Law		
4	The New York Times	BMW Will Join Daimler and GM in Hybrid Venture		Economy	Science			
5	The New York Times	World Briefing Asia: China: Europe To Provide Cleaner Power		Economy	Science			
6	The New York Times	Political Science	Politics	Economy	Science	Law		
7	The New York Times	Waiting for a Leader	Politics	Economy	Science			
8	The New York Times	Banished Whistle-Blowers	Politics	Economy		Law		
9	The New York Times	Putting a Lid on It			Science			
10	The New York Times	Scientific Savvy? In U.S., Not Much			Science		Education	
11	The New York Times	N/A			Science			
12	The New York Times	Storms Vary With Cycles, Experts Say			Science			
13	The Washington Post	Rethinking Defenses Against Sea's Power; Flood Experts See Lessons in New Orleans			Science			
14	The Washington Post	Washington in Brief			Science	Law		
15	USA Today	Longstanding Disaster Threats Can't be Ignored		Economy	Science			

Table 8. Articles from 8-29-06 to 9-13-06 that discuss global climate change/global warming broken out by function system.

Number	Newspaper	Article Title	Politics	Economy	Science	Law	Education	Religion
1	Los Angeles Times	Letters: The Advantages of Going Green		Economy		Law		
2	Los Angeles Times	The Ditch Blair Project	Politics					
3	Los Angeles Times	The Arts: Pop Music	Politics	Economy	Science		Education	
4	Los Angeles Times	Gov. Tries to Mend Fences With GOP	Politics	Economy				
5	Los Angeles Times	California Elections	Politics					
6	Los Angeles Times	The First YouTube Election	Politics					
7	Los Angeles Times	California Elections	Politics					
8	Los Angeles Times	Conservatives as Conservationists?	Politics					
9	Los Angeles Times	Emitting Opinions about Greenhouse Gas Bill	Politics					
10	Los Angeles Times	The World: Deep Sixing CO2 Emissions		Economy		Law		
11	Los Angeles Times	News Analysis: A Year When Deals Provail	Politics					
12	Los Angeles Times	See How They Run	Politics					
13	Los Angeles Times	A Bold Plan to Protect the Planet		Economy	Science	Law		
14	Los Angeles Times	Indian Casino Measures Stall in Legislature	Politics	Economy				
15	Los Angeles Times	Q&A: Who Bill Would Do, Who's Affected		Economy	Science	Law		
16	Los Angeles Times	Global Warming Plan Could be Costly	Politics	Economy		Law		
17	Los Angeles Times	State on Verge of Greenhouse Gas Restrictions	Politics	Economy		Law		
18	The New York Times	Updating Prescriptions for Avoiding Worldwide Catastrophe			Science			
19	The New York Times	Politics & Economics: Emissions Pact Stresses Developing Nations' Role		Economy				
20	The New York Times	Politics & Economics: Study Suggests Link Between Human Activity and Storm Intensity			Science			
21	The New York Times	For German Firms, New Emissions Caps Roil Landscape		Economy		Law		
22	The New York Times	Review & Outlook: California Dreamin'				Law		
23	The New York Times	God is Green	Politics	Economy	Science			Religion
24	The New York Times	Dwarf Planet	Politics		Science			
25	The New York Times	Inside		Economy				
26	The New York Times	Scientists as Custom Tailors of Genetics		Economy	Science			
27	The New York Times	Fans of Global Warming			Science			
28	The New York Times	The Good Side of Diamonds, Before a Movie Shows the Bad		Economy				
29	The New York Times	It's High-Tech vs. Smokestack, With Lots of Money to Be Made		Economy		Law		
30	The New York Times	From California, a Breakthrough	Politics	Economy		Law		
31	The New York Times	National Briefing West: California: Emissions Bill Is Passed	Politics			Law		
32	The New York Times	California Emission Plan Has Limits				Law		
33	The New York Times	Schwarzenegger May Strengthen Hand for Race	Politics					
34	The New York Times	Officials Reach California Deal to Cut Emissions	Politics	Economy	Science	Law		
35	The New York Times	Greenhouse-Gas Bill Gains in California	Politics			Law		
36	The New York Times	EU Warns Carmakers on Emissions				Law		
37	The New York Times	Biggest-Ever Emissions Trades: \$1 Billion Deal Benefits Beijing		Economy				
38	The Washington Post	Visiting French Presidential Hopeful Lauds U.S. in Speech	Politics					
39	The Washington Post	Missile Defense Misses the Mark		Economy	Science			
40	The Washington Post	An Inconvenient Truth About Youth	Politics	Economy				

Table 8 Continued. Articles from 8-29-06 to 9-13-06 that discuss global climate change/global warming broken out by function system.

Number	Newspaper	Article Title	Politics	Economy	Science	Law	Education	Religion
41	The Washington Post	Eight Is Enough: With Science, the More Things Remain the Same, the More They are Bound to Change			Science			
42	The Washington Post	The Zeitgeist Checklist: #6: Feeding the Addiction		Economy				
43	The Washington Post	Plan to Escape Warming Comes With a Hefty Tab		Economy				
44	The Washington Post	Findings			Science			
45	The Washington Post	World in Brief			Science			
46	The Washington Post	Science: Notebook			Science			
47	The Washington Post	Out of the Spotlight, Newsmen Still Shine	Politics					
48	The Washington Post	Tree-Planting Drive Seeks To Bring a New Urban Cool; Lower Energy Touted as Benefit		Economy	Science			
49	The Washington Post	Slipping Pump Prices About ...	Politics	Economy				
50	The Washington Post	The End of Eden			Science		Education	
51	The Washington Post	Action in California	Politics	Economy		Law		
52	The Washington Post	California Tightens Rules on Emissions	Politics	Economy		Law		
53	The Washington Post	Nation In Brief	Politics			Law		
54	The Washington Post	Real Estate Firms Buy Credits for Wind Power		Economy	Science			
55	The Washington Post	Bruce Robert AltschulerAge: 59 ...	Politics	Economy	Science	Law	Education	
56	The Washington Post	Where's the Beefsteak? Seering Summer Heat Stresses Tomato Plants			Science			
57	The Washington Post	A Commute Too Far		Economy				
58	USA Today	Five Moves that Matter		Economy				
59	USA Today	California Business Leaders Say Emissions Limit Could Harm Economy	Politics	Economy		Law		
60-71	Deleted							

Constructing the Innocent Body: An Analysis of the Appeals in the Body Burden in Newborns Report

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Abstract

The Environmental Working Group's (EWG) Body Burden in Newborns report communicates risk as being embodied and commonplace through the construction of the innocent bodies of fetuses. I analyze the Body Burden study in terms of the appeals made by the EWG to portray fetuses as innocent victims of industrial pollution, as well as the invisibility of pregnant mothers in the report. While the fetus and newborn bodies are particularly vulnerable and persuasive, the maternal body is not figured into the shocking quality of pollution. Using a material rhetoric analysis, I explore how prenatal bodies become a particularly powerful rhetorical tool through which arguments are made. Finally, I analyze whether the EWG report provides agency to its public audiences through its destabilization of the general view of fetuses and newborns as being free of pollution.

In this paper, I analyze the Environmental Working Group's Body Burden in Newborns study. I focus on the way risk is communicated and its relation to the construction of the innocent bodies of fetuses. I analyze the Body Burden study in terms of the appeals made to portray fetuses as innocent victims of industrial pollution, as well as the invisibility of pregnant mothers in the report. I explore how prenatal bodies become a powerful rhetorical tool through which arguments are made by using a material rhetoric analysis.

First, some background on the report. On July 14, 2005, the Environmental Working Group, an environmental advocacy group, published its study on industrial chemicals found in newborns' umbilical cord blood, titled *Body Burden – The Pollution in Newborns: A Benchmark Investigation of Industrial Chemicals, Pollutants and Pesticides in Umbilical Cord Blood*. This study analyzed the umbilical cord blood from 10 randomly selected infants, finding "an average of 200 industrial chemicals and pollutants" and "a total of 287 chemicals" (EWG, 13). The group has a web site devoted to the study. There, the report itself is posted, along with accompanying information. The report is 83 pages divided into four sections. They are titled Executive Summary, Babies are vulnerable to chemical harm, Human health problems on the rise, and Recommendations. It also contains detailed test results and findings of the 287 chemicals found, including tests summarized by chemical family, subclass, and potential health effects, a statement from medical doctors and scientists, their methodology, FAQs, and references for the report, among other information. The report received widespread media attention and was reported in more than 100 American and international

newspapers. It seems largely intended for a public audience, as it is written in mostly accessible language and posted on a public website.

For my reading of this EWG report, I rely heavily on Barbara Dickson's understanding of material rhetoric. She writes, "(M)aterial rhetoric is a mode of interpretation that takes as its object of study the significations of material things and corporal entities – objects that signify not through language but through their spatial organization, mobility, mass, utility, orality, and tactility. Of primary interest to material rhetoric are material objects that represent the human body, because of the way these representations are then taken up by and inscribed on corporal bodies" (297). The primary material objects in this study are the circumstances surrounding the EWG report as well as the cord blood itself. Other material objects that support the report include the lab studies and activities that analyzed that cord blood. Also, the charts and graphs that summarize the lab findings and represent the prenatal body are material objects. And the EWG website itself is a material object that inscribes meaning on bodies.

Material rhetoric's purpose, Dickson then writes, is to "examine how multiple discourses and material practices collude and collide with one another to produce an object that momentarily destabilizes common understandings and makes available multiple readings. It seeks to know how this object can be read as providing for or constraining agency, the ability of persons singly and collectively to produce change" (297-298).

How then does the EWG report destabilize common understandings and make available multiple

readings? One way is by constructing the prenatal body as an innocent victim of a shocking crime – industrial pollution. However, in doing so, the report relegates the pregnant mother to the solely physical role of providing a womb. Often environmental health appeals are made for the benefit of pregnant women, but in the EWG report, the pregnant women are almost invisible. The report explains how prenatal “babies” are particularly at risk for exposure in ways that women are not. This appeal to the susceptibility of newborns is primarily done in the second section of the report, titled “Babies are vulnerable to chemical harm.” This section works to portray the pregnant women in solely a functional role, whose job is not to nurture or care for herself, but for her fetus only. This is because a fetus is especially vulnerable. The report states, “A pregnant woman may avoid using hair dye and nail polish, pumping gas, or painting the nursery, for example, to protect her baby. This intuition is backed by science that has unfolded primarily over the past two decades. In 1993 the National Academy of Sciences enumerated, in a Congressionally mandated study, the primary factors that contribute to children’s unique vulnerability to the harmful effects of chemicals (NAS 1993):

- A developing child’s chemical exposures are greater pound-for-pound than those of adults.
- An immature, porous blood-brain barrier allows greater chemical exposures to the developing brain.
- Children have lower levels of some chemical-binding proteins, allowing more of a chemical to reach ‘target organs.’
- A baby’s organs and systems are rapidly developing, and thus are often more vulnerable to damage from chemical exposure.
- Systems that detoxify and excrete industrial chemicals are not fully developed.
- The longer future life span of a child compared to an adult allows more time for adverse effects to arise” (19).

In this section of the report, the EWG relies on scientific evidence, and scientific *ethos*, to show why the pollution in newborns should be especially galling. They are simply more vulnerable than adults. However, in the quoted source material, the National

Research Council’s book, *Pesticides in the Diets of Infants and Children*, the connections were not as absolute. For example, the second point as to why children are more vulnerable refers to the “immature, porous blood-brain barrier” that lets more chemicals into a child’s brain than an adult’s. In *Pesticides in the Diets of Infants and Children*, where this bullet point draws its data from, the NRC writes, “There is speculation that neonates and infants may be more susceptible to chemically induced neurotoxicity, in part because of the immaturity of their blood-brain barrier” (89). The NRC goes on to cite Watanabe et al. (1990), who found:

“the central nervous system in developing individuals is potentially vulnerable to chemicals for a protracted period because the central nervous system requires longer than most other organ systems for cellular differentiation, growth, and functional organization. Therefore, any increase in accessibility to cytotoxic agents because of delayed maturation of the blood-brain barrier could have serious consequences” (NRC, 89).

The EWG report removes the hedging words (e.g., “could have,” “speculation,” “potentially,” and “may be”) and indicates firmly the blood-brain barrier “allows greater chemical exposures” to children. This move to the epideictic appeal to value from the forensic appeal to science has been written about by Jeannie Fahnestock and is not unusual in popular scientific writing. Hedging words are often removed in scientific reports that are accommodated for a public audience. It is interesting to note, though, that the blood-brain barrier, a difficult concept itself, is left unexplained. The adjectives “immature, porous” serve to tell the reader that chemicals are getting into children’s brains, but the exact mechanism, including any reference to the central nervous system, is left shrouded in scientific language. Additionally, everyone’s blood-brain barrier is semi-permeable; it lets some things in but not others. Not just infants have a porous blood-brain barrier. But referring to a newborn’s blood-brain barrier as porous instead of clarifying that all blood-brain barriers are porous makes infants seem especially vulnerable. The EWG seems to use scientific *ethos* insofar as it helps construct the innocent prenatal and newborn body, but it is not a scientific report.

Throughout this section of the report, fetuses and infants are shown to be especially vulnerable. Another example: “As a whole, these (critical windows of vulnerability) facilitate more pronounced risks and effects for chemical exposures in childhood than adulthood. For example, a mother’s exposure to dioxins, mercury, or certain pesticides during pregnancy could measurably harm her baby, while affecting her own health perhaps not at all” (20). Here, the mothers seem secondary. They’re fine with the exposure, and we don’t need to worry about them. But it’s the babies we need to worry about. No scientific sources are offered here to support this claim. *Ethos* is here downplayed for *pathos*. The maternal body is only the source of concern insofar as it contains a baby. The appeals are not centered on the maternal body, but instead on the prenatal one.

Another point to make here is the confusion of terminology when referring to babies. The study was done on cord blood, which was collected at birth. However, the pollution and exposure occurred prenatally. Understandably, there is some confusion about how to refer to these bodies – are they fetuses or are they infants? In the previous example (a mother’s exposure to dioxins, mercury, or certain pesticides during pregnancy could measurably harm her baby), the term “baby” is used to refer to a fetus. Overall, the EWG uses “fetus” 11 times in the report. Compare this to “baby” or “babies” being used 72 times, “infants” 11, and “children” 63. Perhaps fetus was not seen to be as persuasive a term as “baby.” “Baby” helps construct innocence more so than “fetus” does. Frequently throughout the report, it is ambiguous whether a baby or a fetus is being referred to. Here’s such an example: “A developing baby depends on adults for protection, nutrition, and, ultimately, survival. As a society we have a responsibility to ensure that babies do not enter this world pre-polluted, with 200 industrial chemicals in their blood” (16). The first reference to “baby” is unclear. A developing baby as in a newborn who is growing, or as in a fetus growing in the womb?

The EWG report also states:

“The pace and complexity of growth and development in the womb are unmatched later in life. Three weeks after conception, an **embryo**, still only 1/100th the size of a water droplet, has nevertheless grown at such an explosive rate that were it not to slow down, it would be born literally the size of a million Earths. Over the next five

weeks the **baby** constructs the beginnings of elbows, knees, eyelids, nipples, hair follicles on chin and upper lip, external genitals, primitive internal organs, a four-chambered heart, working fingers and toes, and even a footprint (Greene 2004). At no other time in life does a **person** create so much from so little in so short a time” (bold mine, 19-20).

One almost expects the following line to be about the sanctity of life from the moment of conception. However, the next line begins, “Industrial chemicals that interrupt this intricate process can, at high levels, wreak havoc in the form of severe birth defects, or at lower levels cause subtle but important changes in development that surface later in childhood as learning or behavioral problems, or in adulthood in the form of certain cancers or perhaps neurodegenerative disease” (20). I am concerned with this loose terminology that equates fetus to baby to child. It seems to engage in the practice of equating human life and full moral status with a three-week old embryo. By doing so, the EWG normalizes the conception-as-life paradigm that is ethically problematic since no consensus exists on when life begins. These kinds of terms help rhetorically construct the innocent body, which makes fetuses and infants a particularly compelling way to convey the shock of industrial pollution.

Further appeals to *pathos* based on babies and their innocence are found in photographs sprinkled throughout the report. Close-ups of a baby’s feet, a swollen pregnant belly, and a chubby-cheeked baby all contribute to the reader’s sense of outrage that these precious things could be poisoned by just being alive. While these are strong rhetorical appeals, the visual rhetoric is almost manipulative because it forestalls real discussion.

Constructing this innocent body helps the audience see involuntarily pollution in the everyday body. The report works materially to map pollution onto an innocent victim. What makes the innocent body as a site of pollution even more shocking is that the EWG tested 10 randomly selected cord blood samples donated from the Red Cross. They write, “The 10 children in this study were chosen randomly, from among 2004’s summer season of live births from mothers in Red Cross’ volunteer, national cord blood collection program. They were not chosen because their parents work in the chemical industry or because they were known to bear problems from

chemical exposures in the womb. Nevertheless, each baby was born polluted with a broad array of contaminants” (15). Risk is communicated as being embodied, everyday risk. The samples’ randomness further makes the maternal body invisible, except for in its role as an agent for transferring pollutants. The randomness increases the persuasiveness of the prenatal body. These polluted bodies become material objects that shock us. Usually, pollution in the body is relatively invisible. As Ulrich Beck writes, “risks of civilization today typically escape perception and are localized in the sphere of physical and chemical formulas (e.g., toxins in foodstuffs or the nuclear threat)” (21). We don’t look at a baby and see PCBs and methylmercury. The shock of finding pollution in such a place fights the complacency that inevitably results from invisibility and ignorance. But our ignorance is understandable, given how body burden and biomonitoring studies are usually communicated – in long CDC reports or in environmental health journals. As Ulrich Beck writes, “The debate on pollutant and toxic elements in air, water and foodstuffs, as well as on the destruction of nature and the environment in general, is still being conducted exclusively or dominantly in the terms and formulas of *natural* science. It remains unrecognized that a social, cultural and political meaning is inherent in such scientific ‘immiseration formulas’...It runs the risk of atrophying into a discussion of nature without people, without asking about matters of social and cultural significance” (24).

The EWG report ends with a call to reform the Toxic Substances Control Act (TSCA). They write that the Act fails to mandate safety studies, and relies instead on “voluntary programs” that are “largely ineffective at reducing human exposures to chemicals” (EWG, 33). This body burden study is then the basis of a call for a major reorganization and reconceptualization of federal regulatory policy.

Risk, as conceptualized by the EWG Newborn report, is embodied and everyday risk. Newborns are particularly at risk due to their innocence in the exposure and their special vulnerability. The maternal body is the setting of the pollution, but is not figured into the shocking quality of pollution. Prenatal pollution is especially shocking for public audiences and can offer persuasive appeals. To return to Barbara Dickson’s theory of material rhetoric, these material practices “collude and collide with one another to produce an object that momentarily destabilizes common understandings and makes available multiple readings.” But does it provide agency, a way to resist pollution? When the audience moves beyond their shock, what can they do? The invisible is now visible, but not easier to change. The EWG offers a complex regulatory solution that involves changing a federal act. Such an act was proposed in the Senate and House, but nothing came of it. What can we do? The report, intended for a public audience, does not offer that audience agency. The everydayness of pollution is visible, but not changeable. The report destabilizes common understandings of environmental pollution, but the possibility of agency in actually changing environmental degradation and prenatal pollution seems limited by the EWG’s recommendations.

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Vulnerable Bodies, Burdens of Proof: The Anti-Nuclear Activism of Mothers for Peace

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Abstract

This paper analyzes the maternal rhetoric of the Mothers for Peace, a small but influential anti-nuclear citizens' group based in San Luis Obispo County, California. With the group's name and in many of its public statements, Mothers for Peace strategically deploys the maternal figure and frames its members as women whose activism is motivated by mothering work. In the tradition of other women's peace movement groups, MFP rhetorically mobilizes concern for sustaining life and protecting bodies, particularly the bodies of children, against the abstract, technical discourse of the nuclear power industry.

"The price of democracy is indeed eternal vigilance."

—Richard Ferguson, quoted in Mothers for Peace newsletter (July 4, 1987)

The relationship between humans and the technologies we create has long been fraught with anxiety. The harnessing of the atom and development of nuclear weapons and power, however, is arguably a technological "advancement" unlike any other. With it, writes sociologist Ulrich Beck, we are "confronted with the historically unprecedented possibility of the destruction through decision-making of all life on this planet" (p. 101). Indeed, Hannah Arendt proclaims the moment of the first atomic explosion as the birth of the modern era. In her brief prologue to *The Human Condition*, Arendt expresses concern about the increasingly specialized language used by scientists and experts, and laments the lack of citizen participation in decisions about technology. In a similar vein, Beck states, "Industrial society has produced a 'truncated democracy', in which questions of the technological change of society remain beyond the reach of political-parliamentary decision-making" (p. 118).

These ominous depictions of our modern "risk society," governed by experts speaking in a language beyond the comprehension of the general public, may be largely accurate. However, they overlook the many struggles for public participation and influence waged by dissenting citizen groups throughout the country. In many instances, with varying degrees of success, activists have formed vital counterpublics to protest exclusion from technological and scientific decision-making in which they have a stake. Such groups not only demand inclusion, they also challenge the discursive norms and values that define the very parameters of the public discussion.

This paper focuses on one such citizen group, the Mothers for Peace, based in San Luis Obispo, California. Mothers for Peace (MFP) was founded in 1969 to protest the Vietnam War, but since the early 1970s, the group has spent the bulk of its energies fighting the local Diablo Canyon Nuclear Plant, the last nuclear power plant to be built in the United States. The Mothers contested the completion and licensing of Diablo in the 1970s and early 80s; since the plant went online in 1985, they have continued to serve as a public watchdog in ongoing debates about the aging plant. They have scrutinized and challenged Pacific Gas & Electric (PG&E) and the Nuclear Regulatory Commission (NRC), the federal agency that oversees the plant, through attending public hearings, promoting public awareness and education, and filing as legal intervenors.

This essay is one small part of a larger, ongoing ethnographic project on the Mothers for Peace. In addition to telling the nearly forty-year story of this remarkable group, I hope to contribute to the growing body of research on the rhetoric of social movement counterpublics, and on communication practices related to the nuclear industry. In their call for expanding research on communication and the nuclear weapons production complex, Taylor, Kinsella, Depoe and Metzler lay out a tripartite theoretical framework, the first category of which is "Democracy, Participation, and the Nuclear Public Sphere." While I am studying public debate regarding nuclear power rather than nuclear weapons, my work is still oriented toward democracy and public sphere theory. Debates over the siting, licensing, and regulation of nuclear power plants reveal a clash between the industry and government,

on the one hand, and citizen groups organized into counterpublics on the other. I contend that, while the Mothers for Peace failed to halt the completion of Diablo Canyon or prevent its operation, the group has played a vital role in claiming citizens' right to participate in technological decision-making through demanding public access to hearings, insisting on transparency from the NRC, and bringing lived, bodily experience and common sense concerns to the table.

How have the Mothers accomplished these ends? Of course, there are many answers to this question. The unique group dynamic of MFP—small, intimate, local, consensus-based—has certainly contributed to its longevity and success. So has the passionate dedication of its members, who over decades have spent countless hours researching, organizing, educating, and raising hundreds of thousands of dollars for legal battles. This essay will focus on one particular rhetorical strategy used by the group in its public activism. By speaking “as the Mothers,” MFP deploys the power of maternal concern, specifically through highlighting risks to vulnerable bodies: children and babies, pregnant women, the elderly, and unborn future generations. In part through using maternal appeals, MFP has persistently challenged the abstract discourses of technical rationality characteristic of the nuclear industry. The Mothers have demanded accountability and public access, facilitated translation of complex technical terminology, and pressed human and environmental safety concerns over corporate profit.

Historical Background: The Mothers and Diablo Canyon

In 1969, Joan Stembridge wrote a letter to the editor of the *San Luis Obispo Telegram-Tribune*, expressing concern about the Vietnam War and a desire to form a group to oppose it (Groshong D-1). A handful of women called her, and later met at Stembridge's home in nearby Los Osos, California, where they founded Mothers for Peace. They conducted draft education, sponsored workshops, distributed leaflets at the bus station, and organized boycotts of local stores that sold war toys. By 1973, the war was over, and the Mothers turned to other concerns, including nuclear weapons proliferation and nuclear power. In the spring of that year, they attended an environmental study hearing held by the Atomic Energy Commission (the NRC's precursor) and presented a statement of opposition to the Diablo Canyon plant (Groshong D-1). That summer, they filed their first legal petition to intervene in hearings about the plant, whose construction was already

underway.

PG&E had obtained permits to construct two nuclear reactors at Diablo Canyon in 1968 and 1970, respectively. The site—a breathtakingly scenic stretch of coastline between Morro Bay and Pismo Beach, sacred burial grounds of the Chumash Indians—had been chosen in 1966 with input from the local Sierra Club (Wills). The initial cost estimates for the two reactors was \$371 million, and the plant was supposed to start generating power in 1972. However, more than a dozen years of protests, labor disputes, construction mistakes, and political gaffes on the part of PG&E delayed the plant's completion until 1985 and increased its cost more than thirteen-fold.

In the late 60s and early 70s, American public confidence in the promise of clean, safe nuclear power ran high. In San Luis Obispo County, more than 80% of local residents supported Diablo when construction began (Redburn), and the local paper, the *San Luis Obispo Telegram-Tribune*, enthusiastically endorsed the plant (Wills 85). When the Mothers for Peace first started organizing against Diablo, then, they had to fight the tide of public opinion as well as the utility giant PG&E. In 1975, a poll found that 75% of residents “strongly” or “somewhat” favored the Diablo plant (Wills, p. 77). A year later, SLO county voted 2-1 against Proposition 15, “which would have placed stringent safety controls on nuclear power plants” by prohibiting “the building of nuclear power plants until the federal liability limits [\$560 million at the time] are removed” (Walbert, p. 1; Lafferty, p. 1).

One of the major concerns of Mothers for Peace and other Diablo critics was the seismic potential of the site. The original plant was designed to withstand a 6.5 magnitude earthquake from a fault 12 miles away (Redburn). But in November of 1973, MFP learned that there was evidence of another fault less than three miles from the plant. Students of Gordon Silver (Cal Poly professor and husband of MFP founder Sandra Silver) had toured a U.S. Geological Survey boat in port at Avila Beach, where researchers showed them evidence of a scarp a mile offshore from Diablo. Word got back to Sandra Silver, who called the ship “by radiotelephone to confirm the finding, then called the local papers” (Neiburger “Why Hosgri's” A-7). It turned out that two Shell Oil scientists had found the fault in 1969, and reported it in industry journals. PG&E had learned of the fault's existence in 1972, but failed to report it to the Atomic Energy Commission for over a year. The Mothers for Peace publicized the existence of the

Hosgri fault, which set PG&E back for nearly a decade in its quest for a license to operate (Groshong D-1). In 1976, the NRC finally determined that PG&E would have to strengthen the plant enough to withstand a 7.5 magnitude quake on the Hosgri fault (“Diablo Countdown”).

In the mid-70s, the Mothers for Peace also badgered various authorities about evacuation plans in case of an accident at the plant. Apparently, a sketchy evacuation report had been “made public” simply by being put on file at the local library. The Mothers also approached the school board to inquire about evacuation plans for schools—none existed. Diablo officials tried to dodge responsibility for evacuation concerns, claiming they were only responsible for the three-mile radius around the plant (Lafferty). The Mothers hired a security expert consultant, and battled the NRC for several years to get access for that consultant to review Diablo’s security plans. They also retained legal counsel to advise them on filing as intervenors.

Mothers for Peace also organized a number of rallies and brought in speakers. They asked county supervisors to sponsor a nuclear forum in 1975, but were denied; a group of concerned area doctors sponsored the forum instead, and 5,000 people turned out to hear Edward Teller and John Gofman debate the faults and merits of nuclear power (Walbert, p. 13). The following year, actress Jane Fonda made an appearance in San Luis Obispo to speak out against the plant (Kutzann). Throughout the 70s and early 80s, a number of other anti-Diablo groups also formed; several local and state environmental and anti-nuclear groups coalesced into the Abalone Alliance, which conducted sit-ins and blockades of the plant to try to prevent fuel from being loaded and the plant from going on-line. The Mothers for Peace never officially participated in civil disobedience as a group, lest they jeopardize their legal efforts (von Alten); however, several members of MFP did participate in blockades as individuals, and were arrested.

A major turning point in national public sentiment about the promises of nuclear power was the Three Mile Island accident in March of 1979. An anti-Diablo rally that summer in San Luis Obispo drew 30,000 people, including Governor Jerry Brown, who publicly stated his opposition to the plant. Several Mothers recalled that their public reputation improved in the wake of Three Mile Island; Sandra Silver remarked that “after TMI, a lot of people came up to us and said, ‘We always felt you were misguided before, but now we’re behind

you’” (quoted in S.E. Seager).

Another major setback in Diablo Canyon’s construction was the discovery in 1981 that a set of blueprints had been switched. A young engineer stumbled upon evidence “that previous technicians had used the wrong blueprints in determining whether certain pipes in the twin reactors could withstand an earthquake. Somehow, they had mistakenly used a mirror-image diagram from Unit 2 in assessing Unit 1, and vice versa” (Redburn). After this revelation, the NRC suspended Diablo’s pending license and ordered a full review of the plant. Following this embarrassing incident, editorials in national newspapers still expressed support for nuclear power and Diablo. The *Washington Post* maligned activists fighting Diablo as “the mindless school of nuclear protest” and issued the following statement: “Counting ourselves among those who want to see nuclear power prove to be safe and economically competitive, we hope the incident will send a message to the industry that it still needs to try harder” (*Washington Post*, 1981, October 6). An *L.A. Times* editorial titled “Easy ... Easy ...” said, “We hope PG&E is right,” that the incident sounds more serious than it really is. The paper counseled NRC, “Don’t hurry, take your time” (*Los Angeles Times*, 1981, October 13).

In 1984, a low-power operational license was issued to Diablo, but public sentiment against the plant continued to grow. All three major Democratic presidential candidates in 1984 criticized the project; Walter Mondale said in a May 25 speech in SLO that Diablo Canyon was a “menace” and should not be put into operation (Groshong D-1). By this time, the local *Telegram-Tribune* had become much less enthusiastic about the plant. Even after the plant went on-line in 1985, the public debate continued, and fears of human error and environmental catastrophe were heightened by the Chernobyl accident in 1986.

In the following years, the Mothers for Peace continued to monitor Diablo, PG&E, and the NRC regarding safety and environmental issues. As the plant’s spent fuel pools filled up, and the Yucca Mountain federal nuclear waste storage facility was repeatedly delayed, PG&E elected to re-rack and condense fuel in existing pools, and later to build an on-site facility to store the spent fuel. In March of 2004, the NRC granted PG&E permits to build an above ground, dry cask storage system, which is now under construction. The storage facility consists of 138 above-ground silos, clustered together on an expansive, gently sloping hillside in full view of the

Pacific Ocean. The NRC refused to hold public hearings on this matter, and it “ignored recommendations by the county to make the facility safer” (Sneed “Nation Watching”). The Mothers for Peace, together with the Sierra Club and County Supervisor Peg Pinard, filed a lawsuit against the NRC, contesting its ruling that it does “not have to consider terrorism when doing the environmental analysis of a proposed nuclear storage facility because attacks by terrorists are ‘remote and speculative events’” (Sneed “Nation Watching”). The Mothers for Peace eventually prevailed in court, in what has been one of their biggest and most satisfying victories. At a recent community celebration of the court’s ruling, MFP spokesperson Jane Swanson declared, “When a small, local group—that’s us—can prevail over a federal bureaucracy with buildings full of attorneys, and PG&E, a big corporation,” it is “a huge victory for democracy and the rule of law” (February 11, 2007, remarks).

Maternal Rhetoric and Bodies at Risk

One of the most potent rhetorical strategies employed by the Mothers for Peace is embodied in the group’s name: the appeal to “motherhood.” Throughout American history, activism by women, often by mothers or in the name of “mothers,” has been a driving force in a variety of social movements, from suffrage and temperance, to peace and environmental justice. By speaking “as mothers,” women capitalize on a traditional, culturally sanctioned feminine role to move from the private domestic sphere into the public realm. In campaigning for peace, women have framed militarism and war, death and destruction as the opposite of the province of mothering: birth and life, nurturing and protection. Women have claimed, or implicitly assumed, a special authority for speaking out against anything that threatens the lives of children. Many women explain that their activism is inspired, or even required, by their roles as mothers: they have no choice but to take public, political action in order to protect their children and nurture their families. Such activists, note Peebles and DeLuca, “use what appears to be a liability, their gender—especially their roles as mothers and housewives—as potent rhetorical resources to enlist others in the fight against practices that threaten their homes, families, and communities” (p. 61-2).

The maternal archetype, then, can be a powerful means of establishing women’s authority to speak on political matters, and for promoting an ethic of nurturing and care. While practices of mothering

vary widely across and even within cultures, Sara Ruddick argues that at its core, maternal work is fundamentally about responding to the demands of children. She writes, “Maternal practice begins with a double vision—seeing the fact of biological vulnerability as socially significant and as demanding care” (p. 18). It is the fragile, vulnerable bodies of babies and children that require a maternal response—whether that response comes from a biological mother, a father, or some other care-giver. Ruddick writes: “Preserving the lives of children is the central constitutive, invariant aim of maternal practice; the commitment to achieving that aim is the constitutive maternal act” (p. 19).

Maternal thinking, as Ruddick defines it, is central to the purpose and collective identity of the Mothers for Peace. All of the MFP members I’ve interviewed claimed that their primary motivation for working with the group relates to mothering. Jane Swanson explained that the group initially formed “to prevent the needless loss of life in Vietnam,” because “mothers do not raise their children to go off and be cannon fodder.” Later, that concern translated easily into “prevent[ing] the needless loss of life from things nuclear, which includes nuclear weapons, and nuclear power plants, because of the waste.” Sandy Silver said that her “reason for joining the Mothers was pragmatic. She worried about the contaminating effects of radiation on her milk and the even greater susceptibility of the fetus and young children to such contamination” (von Alten A-9). Liz Apfelberg declared, “We’re doing it for our grandchildren and our great-grandchildren ... more than just for ourselves. And I think our families were more of a priority than the environment.”

The bodies of children and babies are small, fragile, and particularly susceptible to environmental hazards, including radiation, and so are particularly powerful bodies of evidence to deploy in arguments against nuclear power. Furthermore, children evoke a sense of innocence: they are unable to participate in debates about nuclear power, and haven’t the capacity to decide for themselves whether or not to accept the risks of living near a nuclear plant. Even more marginalized are those yet to be born—those who will have to deal with the growing stores of radioactive waste generated by nuclear power plants. Appeals on behalf of the vulnerable bodies of children, and of unborn future generations, appear throughout Mothers for Peace discourse. For example, a 1979 Informational Flyer asserts: “The Mothers for Peace are not willing to let PG&E endanger our health and that of future generations for the sake of PG&E’s corporate profits. We are not

willing to live with reactors that would produce over 1,000 pounds of plutonium a year, when a millionth of a gram is enough to cause lung cancer” (MFP Informational Flyer 1979).

A 1982 ad published in the local paper urges, “LISTEN! Tomorrow, 12:30 p.m. Diablo Canyon sirens will blast a disaster alert. Given one hour could you: Gather your family members? Obtain a tank of gas and sufficient cash? Find a passable route in the event of an earthquake? Drive to safety? 100,000 others will be trying to do the same. PG&E is testing its sirens BECAUSE ACCIDENTS HAPPEN!” An even more alarming poster and ad depicts a mother kneeling next to a young child and asks, “What do you do in case of a nuclear accident? KISS YOUR CHILDREN GOODBYE.”

Maternal appeals use authority grounded not in technical expertise, but in the practical, embodied experiences of everyday living. Mothers everywhere are experts in the mundane details of ordinary life, and are often the first to notice subtle changes in their families’ environment that may suggest an environmental problem. As Joni Seager explains, “Because women, worldwide, still have primary responsibility for feeding, housing, and childcare, they are often the first to notice when the water smells peculiar, when the laundry gets dingier with each wash, when children develop mysterious ailments—or they are the first to worry that these assaults on family safety and health are imminent” (p. 280). In their challenges to Diablo and the NRC, the Mothers foreground risks to bodily safety and health, thus engaging their authority in everyday life, in contrast to technical expertise. Sandy Silver asserts:

You don’t have to be a nuclear engineer, because I don’t give a damn about the valves and the filters and everything. Those are technological fixes. If a valve doesn’t work right, I’ll get a new valve. But what do you do about the wastes? What do you do about emergency systems that have never worked? What do you do about radiation that’s coming from the plant all the time and then ‘accidentally’ releases? These are the things that are bothering us. (quoted in Lafferty, p. 6)

The Mothers give voice to pragmatic concerns: if there is an accident at the plant, what will residents do? MFP member Nancy Culver said that living near

Diablo “puts a shadow over every day of life. You have to think every day which way the wind is blowing; do I have a half a tank of gas in my car at all times; am I in a position where I can go and get my daughter” (quoted in Brown 5-A).

Members of Mothers for Peace sometimes also strategically used their status as mothers during public hearings. Liz Apfelberg recalls,

You know we did, on occasion, use it to our advantage. The head of the Atomic Licensing and Safety Board, which is a three-person panel, was a woman, Elizabeth Bowers ... Sandy [Silver] and I were many times the only women up at the front. There were all these men: attorneys for the NRC, and PG&E, in their suits and everything ... and then we would say, ‘We have to go home and make dinner! (Laughs heartily) And the attorneys would say, ‘Well, we’re here for important business...’ and Mrs. Bowers would say, ‘Oh, I think we could break now for the evening and start again tomorrow.’ Now, I know full well my husband is capable of cooking. Or, Sandy and Gordon and their four kids ate a lot of pizza. So, we used it to our advantage, because we had to regroup. We had to meet in the evening and figure out what we were doing, and where we were going.

In some respects, though, maternal appeals can also be a political liability. While “mothers” may legitimately claim some authority over matters relating to children and home, dominant conceptions about motherhood and the proper, private role of mothers tend to enforce strict limitations on their expertise. Women overstepping those limits invite censure. Keep in mind that the Mothers started their battle against Diablo in the early 70s, in a small, conservative town in a largely rural county. Particularly in the early years, the Mothers took their share of criticism. Some saw the Mothers for Peace as hysterical housewives with too much time on their hands, or as political lightweight. Dick Davin, PG&E nuclear information specialist, said, “Most of the mothers are very pleasant people, [but] ... Their true knowledge of nuclear power is very sad” (quoted

in Walbert, p. 1). Sandy Silver admitted, “The public image of us is these very emotional women should be home ironing” (quoted in Walbert, p. 13). Jane Swanson recalls, “we were so patronized People at those meetings were saying [to our faces], ‘Why don’t you girls just go home and make cookies?’” Liz Apfelberg remembers a mixed public reaction over the years: “Some people have said, ‘You’re nothing but a bunch of frustrated housewives’ ... Others right after Three Mile Island said, ‘We should’ve listened to you years ago’” (quoted in “Battle Long” A-2). At the height of the public battle over Diablo, some Mothers received harassing phone calls at home, and were accused of being communist sympathizers. Once, Swanson “found a newspaper clipping in her mailbox telling about an infestation of roaches in Germany that was blamed on housewives who spent too much time away from home” (Walbert, p. 13). The local paper chastised Liz Apfelberg and Raye Fleming for bringing their kids to a blockade event, depicting them as “bad mothers” for “thrusting their children into the fray” (Apfelberg). The paper later printed a retraction, but attacks like these illustrate a backlash against activist women—expressing the conservative sentiment that “good mothers” should be staying at home, not marching in the streets, to take care of their children.

A number of feminists have also raised concerns about the theoretical implications of maternal appeals. In her critique of ecofeminism, Lynn Stearney warns that celebrating a universal ideal of motherhood threatens to reduce women to their reproductive capacity, essentially conflating womanhood with motherhood (153). Indeed, a central project of the women’s liberation movement in the late 60s and early 70s was to dismantle the ideology of compulsory motherhood and the cult of domesticity. Feminists struggled against the cultural norms that held motherhood as the highest and most perfect expression of femininity.

Still, others argue that maternal appeals need not be tied to biological sex. Ruddick insists that mothering work can be, and is, done by women and men, in a wide variety of family structures. While the vast majority of Mothers for Peace members have been women, the group remains open to anyone interested—male or female, parent or not. As Jane Swanson explains, “it has nothing to do with gender. Motherhood in this context is an attitude. An attitude of nurturing life. So if you share our values and attitude, then you’re a mother, regardless.” In fact, one year, the group honored County Supervisor Dick Kresja as “Mother of the Year.”

In her analysis of the Million Mom March, Sara Hayden argues that, despite feminist concerns about essentialism or reifying patriarchal gender roles, maternal appeals may have important pragmatic, political utility. She makes the case that “motherist politics” can provide a useful alternative vision of society—not just a rosy picture of women’s work—one that privileges the welfare of all citizens. Hayden asserts that “a significant part of maternal appeals’ allure is their ability to highlight values and attributes typically considered irrelevant to public issues and debates” (p. 198). This is precisely the value of MFP’s maternal appeals: they bring to the debate a passionate concern for lived experience and the risks to vulnerable bodies, which tend to be ignored by the discourse of the nuclear industry.

Conclusion

Even though they were ultimately unsuccessful in their bid to block the completion of the plant, the Mothers for Peace have played a vital role in making sure the plant was safer and the public more informed about potential risks of nuclear power. When the plant went on-line in 1985, PG&E spokesman Ron Weinberg lamented the pricey delays to the construction, and spoke glowingly about the promises of Diablo and nuclear power in California. However, he also conceded that the plant was made safer by all of the protests. “In a way, the intervention (by opponents) is one of the reasons why the plant is probably as good as it is because, certainly, they made us look a lot harder” (quoted in Stammer). Sandy Silver also noted that, “Some people in the NRC have said to us privately that thanks to the Mothers for Peace ... a lot of things have been fixed out there [at Diablo Canyon]. We will never get those thanks (in public)—but that’s not what matters” (quoted in Brown 5-A).

The watchdog role played by Mothers for Peace in the political process of regulating Diablo Canyon has been especially important, given the powerful influence of industry and the PG&E public relations machine on the public and the NRC. Mothers for Peace attorney Diane Curran remarks, “There’s a great deal to be said for a citizen group like Mothers for Peace that maintains this level of vigilance over that plant, because that’s what it takes ... The public needs to put pressure on this agency just in order to counteract the tremendous effect that the nuclear industry has on the NRC” (www.mothersforpeace.org). Still today, nearly four decades after its founding, the Mothers for Peace are active and ever watchful, educating the public and doing all they can to make Diablo as safe as possible.

Their efforts have benefited San Luis Obispo county residents, but also citizens nationwide as they exemplify the power of ordinary citizens to exert

influence in highly specialized debates over technologies like nuclear power.

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The Green Party in Presidential Election 2008: A Preliminary Study of the Rhetorical Situation at the Start of a Campaign Season

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Abstract

The Green Party of the United States (GP) potentially sits at a moment of great opportunity. Interest in environmental matters (global warming, organic foods, etc.) is high, as is anti-war sentiment, concern about healthcare, and economic worries. Furthermore, the American public is experiencing a level of discontent with elected figures and the major political parties that is unparalleled in recent history. This paper is a preliminary study of the rhetorical situation in which the GP currently finds itself. The long-range purpose of this study is to examine how the GP takes advantage of the opportunity before it, especially as it concerns the 2008 election of president and significant representation in congress. This paper does not attempt to forecast some grand revolution in voter behavior over the next two years. Instead, it simply seeks to understand the party, its relationship to the green movement, and the developments leading into the next election cycle. After reviewing existing literature on the GP and green movements, this study examines the GP website to understand its own rhetorical construction of its present reality.

The year 2007 began with a flurry of political activity in Washington, D.C. A Democratically controlled congress was sworn into office on the heels of the 2006 election and twelve years of Republican control. The success of the Democrats was due to a number of factors, not the least of which was an unpopular war in Iraq, several highly publicized Republican scandals, and the mismanagement of Hurricane Katrina. At the same time that power in congress changed hands, several highly recognized Democratic and Republican figures from across the country were throwing their hats into the ring for the 2008 presidential race, many of whom have as many detractors as supporters. The change of power in congress – or more specifically the reasons for that change – and the flood of candidates to enter the race for the presidency serves as an impetus for critical examination of the Green Party (GP) and its rhetorical situation leading into the election of 2008.

An examination of the GP is meaningful for a number of reasons. First, the GP may position itself as a meaningful player on the political stage. After the mid-term elections of 2006, the GP, according to its own website, had 221 individuals serving at the local level (Green Party of the United States, February 26, 2007). While there was no significant electoral win (i.e. governor, U.S. congress member), in the broad scope of American politics the GP may have found 2006 to be its best year yet. The success at the local level may translate into successes at a

state level in future elections. Second, the discontent that allowed Democrats to regain congress in 2006, along with many state legislative seats and houses, was also likely a factor in allowing the increase in gains for GP candidates to local offices. This discontent has not meaningfully decreased in the months since the mid-term elections, nor does it look to abate any time soon. In fact, recent polls suggest that the discontent with congress and the president is growing with unfavorable ratings for both political bodies and political parties being significantly higher than the favorability ratings. If there was ever an opportunity for a GP candidate to capitalize on the discontent, 2008 appears to be that time. Third, if the major parties are already presenting America with a slate of candidates, then a GP that wants to be a player in the field may not be able to wait in the wings to put forward a national candidate until shortly before the election. They may need to act now.

To be clear, as the political situation is currently configured, this researcher does not believe that the GP has a great chance of winning the presidency or numerous seats on Capital Hill in 2008. They may have a reasonable possibility of meaningful gains at the state and local levels, building on achievements from the last election. Other than these gains and the possibility of future electoral success, one may be tempted to ask why a study of the GP is appropriate now. This paper is meant as an exploration of the rhetorical situation the GP faces as it moves forward

into 2008. The GP, if properly organized and with the right political conditions in the United States (conditions similar to what we are currently experiencing), could serve as an important influencing factor and voice in 2008. Such a statement is made with the full recognition of the influence that Ralph Nader had in the 2000 election or that other third-party candidates such as Ross Perot have had in previous years. In a political environment where so many people feel discontent with their political leaders, parties, and with the direction where the country is heading, and in time when environmental, economic issues, and social justice issues are top news stories, to ignore the GP could be to give up the most significant opportunity environmentalists/progressives have recently had to impact the national political scene.

The project begins by addressing four key background areas before turning its attention to the GP website. The four areas provide a foundation from which an understanding of the GP can be developed. The GP website serves as a reasonable “statement” about where the party sees itself politically at this moment (i.e. its sense of the rhetorical situation). As should be clear, this study might be seen as the beginning stage of a larger project meant to examine the GP as the nation moves closer to election 2008.

Defining the Green Movement(s) and the Green Party

While green organizations existed for much of the 20th century, it was not until the later part of the last century that many argue a movement with consequential socio-political influence really took shape (e.g. Barken, 2004; Barry & Doherty, 2001; Benton & Short, 1999; Curran, 2006; Dalton, Recchia & Rohrschneider, 2003; Johnson, 2006). This consequential influence draws from the movement, and the respective green parties both inside and outside the US, having taken up environmental as well as political, social, and economic concerns. Curran (2006) argues, “Through sustainable development, the green movement was successful in putting environmental issues on political agendas in a relatively short period of time” (p. 49). It could be argued that the GP has the potential of doing this again with any number of additional topics or issues.

As environmental knowledge and sensitivity have grown among US citizens, so have the perspectives taken by these groups in an effort to attract that citizenry. Some espouse a green rhetoric

in Washington, with little action elsewhere. Others take a mainstream position to attract a broad support base and greater financial support. The radical groups reject modern environmental, industrial and social practices, and their actions or rhetoric are meant to shock. To refer to the green movement at all is really to refer to several movements with differing interests, goals and strategies. Johnson (2006) argues that the selection of issues will draw supporters as well as the possibility of success during any efforts to influence policy decisions. Johnson adds, “The shift in focus away from issues of resource and wildlife protection towards the ‘new’ quality of life issues, such as environmental pollution and its human health effects, represents the most significant transformation in the twentieth century environmental movement” (p. 132).

During the last several decades, many green groups moved toward the center of the political spectrum to encourage a degree of environmental hegemony where left-leaning politicians would co-opt the eco-politics of these groups. The combination of issues to which a movement such as the greens attends will reflect its own agenda-setting function and, if successful, the agenda-setting function of the government entity to which it is appealing. If an environmental group finds itself connected to specific mainstream issues that political leaders or agencies also adopt, chances for survival and legitimacy of the group can increase. However, as social and economic issues have risen to importance along with the environmental concerns, Johnson (2006) maintains, many existing green groups have not embraced these issues alongside their standing environmental concerns. Some groups were uncomfortable with certain topics being included in green politics, or perhaps inclusion of any issue that was not directly tied to their environmental concerns. These groups characterized the inclusion of such issues as a diversion or as a means of co-opting the environmental movement into a broader progressive agenda. Such co-optation, they suggested, would be to the detriment of the environment. This has created tension between the movement groups and it is out of these tensions that were born the new radical green groups whose focus stayed on the environment. However, other radical groups have embraced the diversity of issues while also positioning themselves to the left of their more moderate colleagues. Failure to embrace multiple issues can leave a green group politically silenced when their concerns are not on the nation’s radar or when the nation sees these groups as unable to speak intelligently about any issue other than the environment. This “one-hit-wonder” effect may have been a problem for early GP voices that were not seen as being able to address

concerns as diverse as education and national security.

The tension between green groups can be great when the larger or older groups get hearings before congress, for example, and the new minor players are ignored. This tension is enhanced when the older groups are seen as representing “the cause” both by politicians and by citizens. Dalton et al. (2003) note that the conflicts can be between the movement and citizens or between the movement and political entities. They argue, “The desire for influence places environmental groups in the dilemma of other challenging movements: to protest the political status quo or to work within conventional channels to implement new policies” (p. 744). Working within the channels often means working with persons whose politics you oppose. Despite their differences, green movements tend to share four key characteristics. First, they have a collective identity that binds them in the cause. Second, as a member of the cause, movements are often bound to the causes of related organizations, creating a loose network of groups. Third, movements are involved in collective acts of protest. Finally, the movements challenge existing forms of power.

While the politics of these groups may be fractured, what is solid is their growing numbers and purse strings. The largest green groups have a combined membership in excess of ten million people and a combined budget over \$300 million. Yet, Benton and Short (1999) point to the fact that these memberships and purse strings are not a sign of significant socio-political power. The members of green movements may be wealthier, have more influence than your average citizen has, and be more politically involved. They, however, cannot bring about the needed changes by themselves. Green movements and their leaders have taken a more active role in politics as time has passed, yet they have done so while also compromising on key issues and negotiating middle grounds acceptable to the left and the right.

How is it that greens address movement issues? Barry and Doherty (2001) argue that there are two courses of action. One course of action is to take up local causes. Here we might find protests, civic activism in one’s community, and participation in local organizations. The other course is to engage in information campaigns and policy creation initiatives that target regional or national leaders and governing structures. Here is where green movements may turn into political parties or movements. Green parties are interested in the creation of policy and governance and see the varied issues they take up (e.g.,

environment, health, justice, economy) as intertwined in principle and practice, meaning the implications or effects of one are tied to the others.

Benton & Short (1999) argue that “In the United States, the dominance of the two-party system and the sheer expense of electioneering rule out an effective [administrative] role for the Green Party” (p. 116). The role that does exist, they indicate, is through “pressure group activity, including lobbying, mobilizing public opinion, and fundraising. The bigger and more powerful the group the more its pressure yields results” (p. 116). Galtung (1986) disputes this point, contending, “The Greens have probably come here to stay, and to expand” (p. 76). Galtung does not clearly distinguish between the green movement and the GP, which one can speculate is because he sees the GP as a political “branch” of a much larger tree whose organizations and movements engage the system in different ways. What interconnects the green movement is, according to Galtung, its progressive politics that attempt to critique and change a Western political tradition that is flawed and dangerous. Galtung concludes, the diversity of approaches that green movements take to socio-political causes and agencies is a “socio-historic dialectic...and should be understood in light of that dialectic” (p. 79).

The green approach to the political process and to the creation of policy is central to a discussion of the GP. Different green organizations will take conflicting positions in regards to political participation, dismissing the notion of involvement, especially at a national level, because such involvement would only legitimate a system from which they seek to disconnect. The state itself is the problem and they would have power returned to local governments and institutions and not national bodies. Less radical greens are more willing to participate in and with national government entities if it assists them in achieving desired ends. In fact, Barry and Doherty (2001) note that all greens share a critical view of the state, realizing that its influence is never without drawback. More acceptance of the state apparatus comes for local matters where people can decide for themselves and participate more clearly in making green decisions. Even when greens do participate in national-level apparatuses, it is often done with the intent of bringing more power and control back home to the local level.

Defining the Green Agenda

As previously noted, there really is not one green movement or agenda; there are several and this

section attempts to paint in broad strokes some of the defining characteristics of the green issues. Hutton and Connors (2004) contend that the differences between the greens and what might traditionally be called liberals/progressives or democrats are significant, especially where issues such as economics, democratic processes, and social justice (e.g. education and/or health) come together with the environment (i.e. sustainability) and affect class divisions. Greens give attention to the effects of consumption, among other practices, on the current environmental condition. Consumption (broadly defined) happens in economics, health, and education. The green issues are appealing to those from the left who find the party they traditionally supported (Democrats) as having failed to take up causes important to these supporters.

The agenda of the greens, and the appeal to those who are not yet greens, may be found in the policies outlined in the Green Charter's self-identified "four pillars" – ecological sustainability, social justice, participatory democracy and nonviolence. These pillars serve as key principles to sustainable development (SD). The prioritization and resources given to these areas presents the greens with the internal and external conflicts previously noted. The four pillar issues are able to explicate the connections between various socio-political issues to show how many of our nation's pressing concerns are environmental concerns. One only has to reflect on the lingering effects and discussion of Hurricane Katrina to see all of the four pillar issues at work. Furthermore, governments recognize that their citizens will vote or participate based on the approach to the "green issues" that a country takes.

The practices of SD within green groups and among green citizens have had considerable mainstream appeal. Curran (2006) writes that SD frames the discussion and logic of much government action and green movement appeals to action. As an approach, SD considers the interrelationship of the natural environment, the economy, and the social environment or community in this moment and for the future. The significance of SD, Curran maintains, is that it is "rhetorically appealing, with very much or very little claimed under its name" (p. 49). The strength and the weakness of SD is that it can vary from a series of talking points to complex policy agendas, both of which may be very appealing or the subject of considerable argument. Finding a meaningful balance between SD issues requires meaningful political commitment and skillful rhetoric by leaders and advocates.

Another practice with similar appeal and rhetorical ambiguity is "ecological modernization" (Curran, 2006). Ecological modernization (EM) advances the concepts of SD in a direction useful to those whose concerns or criticisms center on the economic side of SD. EM recognizes that industrial societies with consumptive practices are not disappearing any time soon, nor are they giving up their consumptive ways. The demands of industry, however, can be adapted to a green approach in a manner that business can embrace. The crux of the EM argument is that pollution and waste equal inefficiency, and thus a cost, for a business. The pollution and waste is an environmental problem. By investing in new technologies that reduce waste and pollution, the business profits in the increased supply of resources that remain available, in the decreased amount of waste that must be dealt with, and in the positive public sentiment that comes from being responsible. For many devoted greens, EM is not the reasonable middle ground between economic/consumer wants and environmental needs. These individuals would prefer reduced consumptive practices. However, EM does reframe the green debate in a manner that the public may more easily accept.

When paired up with trends toward international globalization, EM still sets us on a course toward eventual self-destruction. As more and more countries have stronger and stronger economies and as these countries (and their citizens) engage in more consumer practices, the inevitable course cannot be denied. As rich and powerful countries systematically gain control over the limited and remaining resources of the poor, the affluent are able to claim a modernized lifestyle while still dumping the burden of that lifestyle on the poor who have now lost their resources and livelihood and may be straddled with the waste products. Curran (2006) suggests that the relationship between the affluent and the poor is one of the more troubling parts of EM for any well-intentioned green.

Moreover, Smith (2005) notes that if the costs and benefits of EM consumption are understood and internalized by citizens, the market should adjust to this new understanding. However, if consumers are under the false impression that simply buying green is equated to green citizenship, they are mistaken and the same levels of consumption may continue – only with green products being purchased. An approach that does not combine limited consumption with green consumption only stalls the inevitable time when resources will be depleted. Furthermore, EM may wrongly assume that citizen customers will

readily accept the government regulation that leaves them with green products, which may not always be the cheapest to purchase. Smith adds, "Without cultural change, it is not clear that citizens will be willing to alter their consumption and behavior patterns or trust that government is increasing taxation for legitimate reasons" (p. 275). To get the green citizenship that accepts responsible consumerism requires a deliberative process of which citizens, bureaucracies and businesses are a part.

A final troublesome aspect of green activism, as Curran (2006) notes, is that as green issues have moved into the national and political sphere, the green movement and green parties have had less ability to shape them or control the direction they take. Moderates in the green movement may be satisfied with the progress made toward SD and/or EM. The radical arm of the green movement is less satisfied. Some may find that the negotiated approaches are a sell-out to big business and worry that without a hard-hitting approach, the public may accept flawed solutions as resolutions to complex problems and green issues may be moved off the burner. Big business, as it is already doing, only needs to talk about its environmental consciousness to pacify members of the public. The same pacification happens in government. Thus, the connection of green issues to areas like global justice and anti-globalization by the radical parts of the movement allows the debate and movement to continue.

Finding Environmental Citizenship

Smith (2005) suggests that the green citizenship the GP and green movement is seeking needs to be cultivated in institutions to which the citizens will want to belong (e.g. churches, schools, civic organizations), and not just in the citizens. It can be fostered through a process of deliberative democracy and sustainable development that allows citizens to internalize environmental attitudes or beliefs and to participate in appropriate environmental behaviors through the institutions to which they belong. Smith contends that the full role of environmental citizenship with local institutions has been underdeveloped. The social economy in which the deliberation could play out meaningfully includes green organizations (co-operatives, voluntary organizations, etc.) and "trade" groups or associations (building societies, consumer trade groups, credit unions, housing associations, etc.). This ethos, and the deliberation that it inspires, is often missing in many major corporations whose objective is profit. Deliberation only on a

government-level ignores the fact that people interact more with local entities such as businesses.

On an individual level, Barken (2004) notes that the GP will find a range of commitment from the populace ranging from those whose interest is nonexistent to those individuals who define their character by or through their participation. What the GP needs are those individuals who fall between the two poles; people who ideologically agree with the movement and are willing to offer their time, skills and financial support. Included here would also be their vote. Ideological support alone is no guarantee of success, as is evidenced by the number of persons who claim to have environmental sympathy yet make no meaningful contribution to an environmental movement. To get the environmental citizenship being sought, Barken claims, one often needs individuals with the ability to "afford" the citizenship. If an individual has a favorable attitude towards political activity and if this individual brings in other participants (e.g. family, friends, neighbors, and co-workers), the movement strengthens and grows. Of importance is the extent to which one actually engages personally with the issues to which the movement is committed. Barken argues that political and religious ideology, among other socio-demographic factors, may also influence environmental citizenship. The GP and green movements find support in the very people who work professionally in these same causes. Barry and Doherty (2001) find that medical, education, social service, and local government workers are often the biggest green-issue supporters, leading them to argue that "one can view green social policies as a form of 'institutional reflexivity' and self-criticism" (p. 599).

The attention on the local in political participation allows people greater access to self-government and administration of services that can decrease the need for forms of employment that take people outside their homes for long hours and keep them locked in a system of material consumption. When focus is on the local, consumption can be replaced by quality of life and free-time concerns. Barry & Doherty (2001) contend that this does not make the greens anti-materialist as much as it reassesses what material the greens value, in this case animal and plant life, unaltered natural habitats and locations, the needed resources of everyday life (i.e. clean water, food, air) and not the consumer goods found in most shopping malls and mega-stores. It is this SD that greens rally around and recruit new members to also enjoy.

Orr (2006) claims that whatever approach the GP or a green group may take, they face a difficult battle to gain support from the public. The battle is made all the more difficult by a news media whose agenda-setting and framing mistreat or misrepresent green issues, by a public that is ill-informed of these issues, and by a federal government that has turned oil (among other anti-green concerns) into a right and a crisis. When green citizenship is characterized as “eco-terrorism,” as “do-gooders and wackos who cost Americans jobs and livelihoods,” as “[anti-]property rights and the use of available resources,” as Luke (1999) recognizes several framings of the movement, then the battle for hearts and minds is all the more difficult (p. 121).

Despite all these difficulties, there is a potential means of reaching out successfully to potential and existing green citizens, the World Wide Web. Gibson, Margolis, Resnick, and Ward (2003) assert that while television, marketing techniques, and political consultants have been the stuff of politics for years, allowing campaigns to be personality-driven and limiting the contact people have with the candidates for high offices, the internet may take a more prominent role in the future. The internet could allow for a level of depth missing in other mediums of communication and it could allow the GP to target its most likely supporters. The Web has particular relevance in the green relationship to politics. In an era where form follows function, the major political parties have begun to look and sound alike. To protect their own interests, the majors have created a system (e.g. debates, balloting) that keep minority opinions and positions quiet. The internet allows organizations such as the GP to reach audiences restricted to them through other venues. While the number of people using political websites to gain information is still small by comparison to other media, Gibson et al. assert that the numbers are growing.

Finding its Leaders

Orr (2006), writing in an issue of *Conservation Biologist*, made the argument that the environmental movement is without a strong and recognized leader. He made this argument based on the report “Death of Environmentalism” by Shellenberger and Nordhaus (2004) who assert that no one figure in the environmental movement is addressing the environmental crisis to a degree fitting the scope of the problem. For those who do address the environmental issues, their approach and the solutions are too small and too narrowly focused on technological fixes of nature, ignoring the people and

economic considerations of the problem. Furthermore, the existing leadership has not worked well across organizational boundaries to build powerful and meaningful coalitions with other greens. How does the green movement, and by association the GP, find its leader? Shellenberger and Nordhaus contend that it does so by “die[ing] a timely death and be[ing] resurrected with a robust progressive movement with issues ‘reframed’ to generate wider public appeal. This solution is consistent with an approach connected to George Lakoff (2004) who has written extensively on the promotion of progressive values.

The suggestion the greens/GP is without a leader and that they should “die” was troubling for some within the green movement and welcomed by others. No matter one’s own feelings on this issue, the suggestion does bring forth questions worthy of discussion: Who is the leader of the green movement and can one person lead such a diverse group of individuals and organizations? To what extent are the green movement and the GP synonymous (if not for the movement or party members, for the general public)? Is the Democratic Party an ally or a foe and does the issue of competition really matter in the effort of greens to be politically successful? If the green movement/GP cannot compete on a national scale, or even “meaningfully” on a local scale, is it worthy of a longer life?

The answers to these questions are more than this paper can handle and more than this author wishes to take up at this moment. However, the answers are nonetheless relevant to the ultimate goal of this paper, figuring out where the GP goes in 2008. As Orr (2006) notes:

Everyone agrees that the stakes in climate destabilization are high and rising, and that humankind and environmentalists alike are not winning the battle to avert the worst of climate change just ahead either at a policy level or at the level of public opinion. (p. 992-993)

Orr concludes that in order to make a difference, environmentalists must have a “compelling vision” and “a smart policy strategy” which can deal with the “unprecedented magnitude of the issues involved” (p. 993). This will not be easy and will likely draw suspicion from those the vision and the policy is meant to protect.

One way to look for leaders and future party development is to examine electoral success where it happens – locally. The GP has had success in the placement of greens into city council and school board positions. Huan (2006) notes, “Success in federal elections will not be an achievable aim in the near future, although election to a national legislature is always one of the most important turning points for a political party no matter what the political polity” (p. 654). To build its image and chances for larger successes, Huan declares that the GP must find a way to have a candidate reach Capital Hill. Much like the handful of independent candidates who have made it to congress or governor’s offices, a win at the national level could be a turning point for the GP. Without this type of success, the two hundred or more local elected officials may serve as meaningful pieces to a local puzzle, but adding these pieces up to a complete picture nationally will be impossible.

No examination of GP leadership would be complete without a brief examination of the most significant GP figure from recent memory, Ralph Nader. Because of his impact on the 2000 presidential election, and discussion of the extent to which his presence in the race siphoned 2.7 million votes from Al Gore, he has been the subject of critical study (e.g. Allen & Brox, 2005; Burden, 2005). Nader’s impact, however, runs deeper than vote totals. By taking a position to the left of Gore, Nader drew the former vice president back from a centrist position he was taking, yet not so far to the left as to overlap Nader’s own position. Gore also needed to campaign harder in states where Nader was making a significant, although still small, showing in the polls. Nader’s success itself can be tied to voter (i.e. progressive/liberal) discontent with Washington politics. Nader addressed issues that otherwise far-left Democratic-voting individuals felt most strongly about.

As Allen and Brox (2005) point out, the individuals who voted for Nader may have selected him because they like third-party candidates, not because they were voting against Gore. Alternatively, Gore may have seemed like a second-best alternative to Nader voters who were unwilling to compromise their progressive voting obligation (vote your choice). Thus, it is uncertain how much Nader should be blamed for siphoning votes from Gore and how much Gore should be blamed for losing votes to Nader. Either way, Nader’s support points to an issue addressed at the start of this paper. In America, there is a degree of discontent that has only grown since 2000 – and especially since 2006. If that discontent continues into 2008, and if a large percentage of

Americans continue to be rather evenly divided between Democratic and Republican identification, both major parties would be wise to pay attention to any third-party candidates. Likewise, the third-party candidates would be wise to capitalize on their power to influence, even in minor ways, the 2008 vote. Allen and Brox note that in 2000, Nader drew significantly more votes away from Gore than the 537-vote lead Bush had over Gore in the state of Florida. Such power should serve as a word to the wise about the power the GP could have to shape the political future.

Analyzing the Situation

The previous sections summarized the rhetorical situation the GP faces as it moves forward to the 2008 election. This section focuses on the GP website as an indicator of the party’s own understanding of that situation and a framing of the situation the party is itself trying to create. This section will return to the previous sections as a guide for analyzing the rhetoric of the GP.

Defining the Party

It is clear that the one thing the GP needs to do is define itself as a party and as a part of the green movement. If the majority of Americans see the GP as one-issue environmentalists (i.e. more movement than party), and if the term “environmentalist” is used by potential voters in the pejorative, then the GP has much work to do. On the part of its national website where it defines/explains itself, the GP notes that it is a “federation” of local parties found at the state level. This statement is the first point the GP makes about itself and indicates an awareness of the importance of the local in the green movement. This is not an entity that exists first in Washington, D.C. and then has members at the state level, or so it would have viewers to the site believe. This is a bottom-up organization. Their descriptive statement about themselves implies that the Democratic and Republican parties are removed and disconnected – they are top-down organizations. Several additional statements sprinkled throughout this particular page on their website also highlight the local focus. For example:

The mission of the Green Party of the United States is to build the Green Party into a viable political alternative in the United States, and our operating principle has been to keep it simple and focused. Our support comes from thousands of

volunteers at the national and local level and from small contributions from individual citizens. Our growth plan includes managing our national office as a focus for national organizing and hiring field organizers to work with local groups and parties to help mobilize greens in voter registration drives, election activity and daily citizen action. Our preference is to leave most decision making and financial resources at the state and local level, minimizing our budgetary needs. (Green Party of the United States, February 26, 2007)

This statement highlights the importance of local organizations and movements, as well as individual participants and donors – local individuals – who are working toward the green cause.

While the GP may be attempting to highlight its local “roots” and concerns, there are reasons to believe it may not be doing so as convincingly as it could. Several statements on this same page may tarnish the ability to imply a localized emphasis and interest. They claim, “...we will devote our attention to establishing a national Green presence in politics and policy debate while continuing to facilitate party growth and action at the state and local level.” To be successful nationally, the GP must have a national presence; but this statement (along with a similar one in the earlier block quote) suggests that the national party may be prioritizing the creation of a national party and will lend a hand to the creation/maintenance of the state-level parties. Further, they point to their international connections when noting, “We are partners with the European Federation of Green Parties and the Federation of Green Parties of the Americas.” If the party is appealing to the discontent American voters, and there is some support for this reading, emphasizing the creation of the national party and partnerships with other countries may be a double-edged sword. Some potential voters will want to see greater international cooperation and ties (the war in Iraq symbolizes that), but other potential voters may be cautious of national and international organizing (free trade/NAFTA symbolize that). Objective research methods may be able to tease out audience readings of GP statements and further explore the attitudes that develop in potential voters toward local versus national organizing.

The specific web page further offers the following three statements in the introductory paragraph: “Greens are renewing democracy without the support of corporate donors.” “Greens provide real solutions for real problems.” “Greens have the courage and independence necessary to take on the powerful corporate interests.” The key point of these statements may be the effort to capitalize on the discontent that voters experience when presented with the major parties – groups tainted by the money and lobbying found in Washington. Voter discontent is often a key factor in turning traditional voters, or non-voters, toward third-party candidates. The GP may do well to develop these areas of discontent. Again, objective methods could bring more depth to this area of research.

The ‘Green’ Green Party Agenda

In order to understand the GP agenda, one could look to a number of areas on the website, including the party platform, which has been developed into a lengthy document. However, this research limited itself to the “10 Key Values” section of the homepage and the most recent press releases because of their prominence on the homepage and because it can be fairly argued that these items should summarize the party’s framing of itself well. These are the items an interested citizen may access, not a “platform” document that runs for tens of pages.

Clicking on any one value takes the viewer to brief statements about the ten values. These values include “grassroots democracy, social justice and equal opportunity [for all people to prosper], ecological wisdom [of living in balance with nature], nonviolence, decentralization [of wealth and power], community-based economics, feminism and gender equity, respect for diversity, personal and global responsibility, and future focus [on sustainability] (Green Party of the United States, February 26, 2007).” These values clearly reflect and extend the SD perspective (i.e. four pillars) described earlier. What they also reflect is the contentious yet diversified perspectives of competing greens. These values are very briefly described and only in the most general terms. These values are not numbered, which would imply a rank order or prioritization. The webpage itself notes, “There is no authoritative version” of these values and that they are “guiding principles that are adapted and defined to fit each state and local chapter.” At the bottom of the webpages that briefly outline each value is an additional link that redirects viewers to a re-organized list of these values that allows viewers to click on additional links to various state or provincial

(Canada) webpages where these values are explained by the local green party organizations. Thus, viewers to the website – people who may be potential supporters and voters – are allowed to create their own interpretation and rhetorical vision for what these values really mean, just as the local parties are able to do. This may be a wise choice for the GP. Future research in the area of political communication and issue polling should examine just how these values are translated into voter preferences and behaviors.

Press releases capitalize on voter discontent with political leaders, Washington politics, and the war in Iraq. Recent releases at the time of this writing included the following titles: “Clinton and Democrats are obstacles to real health care reform,” Iraq war is an impeachable crime, not a strategic blunder,” and “The Party’s Over: Democratic party is a lost cause for voters opposed to the Iraq War.” These issues of discontent fit nicely with the values that the party advocates. They also match well the major concerns of many Americans. If people visit the website of the national GP, they are likely to find rhetorically appealing statements about currently political issues. As rhetorical statements, and as objective voter issues, these press releases serve as another site for not only developing the green citizen perspective, but for conducting fruitful research that could tease out voter responses. It would be interesting, for example, to see how voters respond to the titles of press releases versus how they respond to the actual political policy contained within these releases.

Environmental Citizenship

On the left-hand side of the GP homepage are five links, each done in red font (which is unique to most of the page), that draw visitors to ways that they can participate in their own environmental citizenship: donate, volunteer, take action, register, and online store. By clicking on the “donate” link, one is taken to a page where the viewer can select between check or credit card donations. One can even opt to become a sustaining donor. The placement of this link first certainly begs the question about what priority the party has given to “green backs” as environmental citizenship and/or what priority was given to making this option easy to find.

The “volunteer” link takes viewers to a form that allows individuals to provide their address information and a series of boxes to check indicating what type or manner of participation one might like to partake. This information, the website claims, will be passed on to a local green party organization in the

viewer’s area. The only information provided to a person interested in actually volunteering comes from the lone statement this page offers, and this statement has little to do with physical participation and much to do with becoming a member of the GP or registering to vote for the GP. On this page one is also given an additional link allowing them to register to vote.

The “take action” link directs viewers to a page with many of the same issues addressed as the press releases. After providing a brief statement about the respective issue, viewers can click on an additional link and be taken to a form where one can sign petitions electronically, send an email letter to a national congressperson, or donate to a cause. Actual physical participation is not described as a method, nor are there any meaningful statements of encouragement offered that might motivate a viewer to leave his/her computer and involve themselves with the issues highlighted.

The “register” link takes viewers to a page where, once again, they can register with GP, the Federal Elections Commission, or learn more about the party. The final link, “online store,” allows a person to buy clothing, bumper stickers, or pins and buttons that promote the green party and green values. Green citizenship does not appear to be a priority of the GP, unless it involves donations and a vote. Perhaps other sections of the website would take an interested person to information about physical participation, but this does not appear to be the case. At any rate, the places where such participation may be suggested or described are either hidden or missing to such a substantial degree that meaningful green citizenship itself is not an easy-to-find option. A developing area of communication research examines how people use websites, including political websites. An examination of the GP site may reveal how interested parties use the site and if they are able to find participation options not limited to elections.

A Green Leader

Perhaps the most motivating and reassuring area of the GP website, at least as this study is concerned, is the area related to the election of green candidates. Through a prominently displayed link on the homepage – “ELECTIONS” – viewers are taken to a new page that opens up to a list of victories in the 2006 elections, to a list of GP officials now serving in local offices across the country, and to information on GP voter registration numbers and ballot history. Users can even learn about previous presidential

candidates, Cobb in 2006 and Nader in 2000. The GP appears to excel at celebrating the local successes of regional and local candidates. At this point, however, little mention is given to the selection or promotion of a green candidate for president 2008. In fact, it is difficult to identify on their website a person who one might call a leader in the GP, at least based on this site. This, however, does not prevent the offering of an observation.

Harold (2001) has asserted that instead of denying its power in mainstream politics, as it may have done in the 2000 campaign against Al Gore and George W. Bush, the GP should embrace the role “as an infecting agent – a kind of green virus – actively forcing a reconfiguration of American politics” (p. 581). In 2000, Nader had suggested that he did not want to infect the campaign of Al Gore or the election process, but instead had wanted to earn the 5% of the vote necessary to secure Federal Election Commission funds in 2004 (Burden, 2005; Harold, 2001). Yet, Nader was an infecting agent, drawing voters away from Gore and drawing Gore away from the path he would have liked to take in his bid for the presidency. The GP, and its eventual 2008 leader and candidate, should be the infecting agent or spoiler Harold advocates. This is done, Harold asserts, through a rhetoric of contamination and disruption. As Harold notes, a virus infects, but it also creates

immunity and cleansing in that which it has contaminated. By contaminating that which is already ailing, the GP could serve as the needed immunization that America and its political process needs. This infection can happen, Harold maintains, by allowing the party to appeal to baby-boomers and their children, each through ways that reflect their specific approaches to political processes and political rhetoric. If this study is any indication, that rhetoric may already be present in the above analysis areas.

As the next presidential election draws near, the GP may find itself in control of its own destiny. Faced with an opportunity similar to the political mood today, the green movement and the GP could capitalize on voter discontent in the current political leaders/parties and voter interest in the issues that the GP advocates. This study begins an exploration of the rhetorical situation in which the party finds itself. It also suggests a handful of potentially-fruitful lines of research that could be undertaken to better understand the party and its potential supporters. Environmental communication and political communication scholars should continue to explore the GP and the many opportunities it offers for productive and insightful research.

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Public Participation through Public Science: Scientific Argument in the Yucca Mountain Controversy

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Abstract

Although there are numerous flaws in current models of public participation in environmental decision making and a variety of alternatives proposed to foster more dialogic and inclusive models, public participants in contemporary environmental policy debates are often faced with flawed models that uphold the primacy of scientific argument. This essay explores how participants in a public hearing process concerning the Yucca Mountain High Level Nuclear Waste siting decision used scientific rhetoric to argue against the suitability of the site. Instead of focusing on the scientific arguments coming from the policy makers, this essay importantly shifts our focus to developing a better understanding of the role of science in environmental policy deliberation through focusing on the arguments of non-policy makers, labeled as “the public.” This article has significant implications for the study of environmental communication by developing the concept of public science and offering suggestions for public engagement in scientific argumentation.

Science plays an important but problematic role in public deliberation over environmental issues and policies (Killingsworth & Palmer, 1992; Powell, 1999; Rosenbaum, 2006; Walker & Daniels, 2004). Congressional committees, government agencies, politicians, activists, and others frequently employ scientific arguments for and against particular environmental policies. From the perspective of policy makers, “sound science” is perceived to be desirable in a public policy system that values scientific and technical reason, particularly with regard to environmental policies (Powell, 1999). Indeed, “sound science” is often metonymically substituted for “fact,” even though Rosenbaum (2006) argues that there is disagreement between scientists and policy makers about the meaning of sound science. The role of scientific argument in environmental policy making is complex and often controversial because of inherent uncertainty in scientific projections and risk assessment, the linking of science with values and policy objectives, the manipulation or censorship of science to meet particular ends, and debate between scientists. For example, contemporary controversies demonstrate that the Bush administration and other federal agencies may be selectively using scientific evidence and experts who support their policy, censoring information that disagrees, and pressuring agency scientists to produce certain results (Cart, 2005; Mitchell, 1995; Revkin, 2002, 2006; Rosenbaum, 2006; Seelye, 2003; Stolberg, 2002; Union of Concerned Scientists, 2004; Vig, 2006). This role becomes even more complex considering public participation in environmental decision making. How

do members of the public make sense of and engage in scientific argument about particular policies? Does the value placed on scientific argument limit and constrain other forms of non-scientific argument? Considering that science cannot answer every question and address all of the political, social, and value-laden aspects of environmental policy-making, Rosenbaum (2006) argues that “the challenge is to achieve a high standard of ‘good science’ within the constraints imposed by the political realities of environmental regulation” including critical review of policy-linked science, publicly accessible scientific reports, and transparency. Public participation in environmental decision making can play an important role in achieving good science.

In environmental policy deliberation, the primary role of scientific argument is often integrated into the official government-sanctioned process of deliberation. Most currently practiced models of decide-announce-defend (DAD) public participation assume a technocratic one-way model of communication in which the public is conceptualized as passive recipients of information and education, particularly scientific and technical information (Depoe & Delicath, 2004; Farrell & Goodnight, 1981; Fiorino, 1990; Fisher, 1987; Goodnight, 1982; Katz & Miller, 1996; Kinsella, 2004; Peterson, 1997; Ratliff, 1997; Waddell, 1990, 1996). The public hearing, which is the most popular form of public participation, is one such model (Senecah, 2004). Although much scholarly attention is paid to theorizing, developing, and advocating alternative models of public participation that are less

constraining than the public hearing (e.g., Beierle & Cayford, 2002; Daniels & Walker, 2001; Fiorino, 1990; Waddell, 1996) the reality is that many environmental policies still rely on traditional, technocratic models of public participation.

Regarding the Yucca Mountain high-level nuclear waste siting decision, public participation occurred in the form of several rounds of public hearings. In 2001 the Department of Energy ran a public comment period as a part of the Secretary of Energy's site authorization decision. These public hearings were explicitly and legally framed as an opportunity for the DOE to educate the public and for public to comment on the scientific and technical documents that the DOE would use to support their recommendation of the Yucca Mountain site (U.S. Department of Energy, 2001b, 2002b, 2002c, 2006a). So, in addition to using a traditional method of DAD public participation, the Nuclear Waste Policy Act (NWPA) constrains the hearing process so that the public is expected to make scientific arguments. However, due to the large number of scientific and technical documents, the self-perceived scientific illiteracy among many participants in the hearings and the nature of the process, the common citizen's voice in policy deliberation can easily be overwhelmed, intimidated, co-opted, or silenced (Katz & Miller, 1996; Powell, 1999; Toker, 2004, 2005; Wander, 1976). Clearly, this model of public participation is not desirable. However, this is the model that many concerned members of the public faced in the case of Yucca Mountain and continue to face in other environmental policies. Although ultimately an alternate model of public participation in environmental decision making should address these flaws and we should work toward changing the system, this essay focuses on how the public might be able to find voice and efficacy within traditional models of public participation.

One way to engage in such models is to address exactly what the model calls for, scientific argument. Although some might argue that the science is sound in the case of Yucca Mountain, my research demonstrates that there is substantial debate and controversy over the scientific and technical arguments in support of the site. First, my reading of the 2002 site authorization public hearings indicates that a majority of the comments/statements include argumentation that contests the scientific and technical arguments put forth by the DOE (U.S. Department of Energy, 2002c). Although there were certainly many other types of political, cultural, social, and pathos-based arguments against the site, the presence of so many comments making scientific

arguments against the site supports an interpretation that both the credentialed scientists and non-scientists who spoke at the hearings perceived a controversy over the scientific evidence to support the Yucca Mountain site. A perception of scientific controversy by participants in the public hearing process, however, does not necessarily guarantee that there is a controversy among scientists or policy-makers. Secondly, articles in peer-reviewed scientific journals indicate the presence of scientific debate both at the time of the site authorization decision and contemporaneously. Foci of debate include arguments that contradict the data presented by the Department of Energy, indicate a debate in scientific literature, call for more research, and a forum in the one of the premier peer-reviewed scientific journals, *Science* (Apted et al., 2002; Birkholzer, Tsang & Tsang, 1999; Ewing & MacFarlane, 2002a, 2002b; Flint et al., 2001; MacFarlane & Ewing, 2006; Stuckless & Dudley, 2002; Waltar, 2002; von Winterfeldt, 2002; Zhang, Wu & Houseworth, 2006). Third, there are several reports from governmental agencies regarding the scientific and technical feasibility of the Yucca Mountain from the time of site authorization and more recently (U.S. General Accounting Office, 2001, 2006; Nuclear Regulatory Commission, 2006; Nuclear Waste Technical Review Board, 2002). Moreover, the recent discovery that members of the U.S. Geological Survey (USGS) falsified hydrological scientific findings that were used in the DOE's documents in support of the Yucca Mountain site because "science by peer pressure is dangerous but sometime [sic] it is necessary," raises question as to the validity of the hydrological arguments in support of the site (Yucca Probe Focuses, 2005).

This essay is an attempt to answer the question, how does the public use scientific argument to participate in environmental decision making? In this essay, I use the term public to describe those who are considered to be and named as a part of the public by policy makers, those who act as participants in the public hearing process by submitting comments, as opposed to those organizing and running the hearings. At public hearings, Beierle and Cayford (2002) argue that "access is open; any interested citizen can participate. Whereas participants may identify with major interest organizations...or be members of interest groups, their roles are those of individual citizens, not formal representatives of groups" (p. 45). Although I recognize and encourage the efforts to problematize and theorize the notions of public and public sphere, especially with regard to environmental decision making (e.g., DeLuca, 1999; DeLuca & Peebles, 2002; Hamilton & Wills-Toker,

2006; Toker, 2004, 2005; Pezzullo, 2003; Walker, 2004), the purpose in this essay to address how those who are considered by policy makers to be “the public” engage in scientific argumentation. Instead of assuming that the all those engaged in public participation in environmental decision-making are one homogeneous public, I adhere to the notions of multiple publics and counterpublics (e.g., Asen, 2001; Fraser, 1993; Hauser, 1999; Warner, 2002).

In this essay, I argue for a focus on the public’s use of scientific argument, or the rhetoric of public science. A focus on the rhetoric of public science shifts our focus from the arguments of scientists and policy-makers to the scientific arguments made by those designated as the public. In order to articulate the rhetoric of public science, I examine the *in situ* scientific arguments in the 2001 Yucca Mountain site authorization public hearing/comment process. An underlying assumption of public science is that it emerges from below, by activists, non-government scientists, and members as a way to both converse with and challenge the science coming from above and to engage in public participation within the constraints imposed from above. Charles Alan Taylor (1996) suggests that in issues of policy deliberation, the public is increasingly called upon to “make sense of often contradictory ‘expert scientific’ testimony” and that this depends on the public’s “ability to make meaningful judgments of technical rhetorics” (p. 15). My findings suggest that scientific argumentation can be understood, employed, and critiqued by members of the public, scientists and non-scientists alike. I argue that considering the current flawed models of public participation, it is crucial for the public to engage in, demand acknowledgement of, and assert a space for public science in environmental decision making. This essay begins by demarcating the rhetoric of public science. Second, I turn to my analysis of the public hearings. The article concludes with theoretical and practical implications.

The Rhetoric of Public Science

Public science describes the emergent forms of scientific arguments that are rhetorically constructed by members of the public (broadly defined) as they participate in policy decision making. The rhetoric of public science attempts to theorize about and categorize these forms of scientific argument. Although there are many studying the role of science in deliberation (Condit, 1990; Ceccarelli, 2001, 2004; Farrell & Goodnight, 1981; Fisher, 1987; Gross, 1984, Mitchell, 1995; Reeves, 1997; Sturgis & Alum, 2004; Waddell, 1990; Weaver, 1997), they tend to look at the rhetoric of politicians and scientific

experts speaking to the public instead of examining the ways that the public use scientific argument. Studying public science involves challenging the privileged status afforded to scientific argument in policy-making while also recognizing the public’s ability to engage in scientific argumentation. Thomas Lessl (1989) writes, “The driving motives of science—rationality, skepticism, and the desire to know—are not the exclusive property of the scientist; they are fundamental qualities of the human creature that happen to be featured in the scientific mindscape” (p. 195). Recognizing and exploring public science does not mean that anything stated by the public should be considered a valid scientific argument, but it does demand that we consider these arguments if we are to understand the complex roles of public participation and scientific argument in environmental policy deliberation.

The rhetoric of public science, as discussed in this essay, is closely related to the dominance of technical/scientific reason in public deliberation (Farrell & Goodnight, 1981; Fisher, 1987; Gross, 1984; Powell, 1999; Rosenbaum, 2006). Walter Fisher (1987) notes, “public moral argument naturally invites participation from field experts and tends to become dominated by the rational superiority of their arguments.” Because of the (ascribed as well as real) value of technical reason, many forms of social, cultural, and emotional argumentation may be excluded in deliberation. The preference for scientific reason translates into many of the current models of public participation in environmental decision making that adhere to a technocratic, one-way model of communication. This model is problematic and studying the rhetoric of public science addresses the many flaws in a technocratic model.

As Craig Waddell (1990) argues the technocratic one-way model of communication unnecessarily privileges scientific evidence and argument over other forms of argument and expertise. Indeed, exclusive reliance on scientific proof may defer attention from other important social, economic, or pathos-based considerations in what Alan Gross (1984) refers to as “the failure of technical knowledge to resolve social, ethical, or political dilemmas” (p. 406). Rational scientific appeals can be just as “inauthentic and deceptive” as emotional appeals are often assumed to be, lack the motive to push people to action, and can lead to immoral decisions (Waddell, 1990). In response, several scholars call for models of public participation that do not privilege science over the public’s expertise and perspectives (Depoe et al., 2004; Katz & Miller, 1996; Kinsella, 2004; Waddell, 1990, 1996; Walker

& Daniels, 2004). Kinsella's (2004) notion of "public expertise" calls for models of public deliberation that allow for multiple voices, types of expertise, and types of arguments. Similarly, Gregg Walker and Steven Daniels (2004) offer the notion of civic science that calls for conversation between scientific experts, political experts, and citizen experts. However, "science should not be tossed aside in deference to social preferences of interest groups" (Walker & Daniels, 2004, p. 138). Despite its emphasis on scientific argument, the rhetoric of public science does not maintain the primacy of scientific argument in political controversy; it is not meant to replace the social, emotional, and other forms of argument that we often see in the public's arguments. Although public deliberation should include both scientific and non-scientific argument, as discussed above, many currently practiced models of public participation continue to privilege scientific argument. Ratliff (1997) argues that "citizens are expected to come to the table with enough scientific knowledge to make technical comments" (p. 372). Until changes are made in the model of public participation in environmental decision making that truly seek to include other non-scientific forms of argument, we are faced with a reality in which to be heard, the public must speak to the scientific and technical justification of the site.

A second flaw in current models of environmental policy making is that much of the scientific evidence to support policies comes from documents produced by (various) government agencies such as the EPA or DOE or from Environmental Impact Statements (EIS) which are of course *rhetorical* documents whose arguments are likely to be linked to pre-determined policy objectives but are presented as non rhetorical (Bazerman, Little & Chavkin, 2003; Ginger, 2000; Mitchell, 1995; Powell, 1999; Ratliff, 1997; Rosenbaum, 2006). My argument is not that the science presented in EISs or other governmental scientific studies is inherently flawed and suspect but that the EIS and similar documents can be a form of one-way information transmission between environmental decision-makers with a predetermined policy objective and the public. However, Charles Bazerman (2001) argues for the possibility of public challenges to federal scientific documents. "What would provide the validity of the information would be its source in the scientific community and, increasingly, its independence from government-commissioned and controlled science. This was to be science that came from citizens and served the needs of citizens—science in the public interest" (Bazerman, 2001, p. 273). Studying the rhetoric of

public science is intended to critically analyze the way the public uses science in public deliberation. Moreover, this essay uncovers rhetorical and argumentative strategies that allow the public to engage in deliberation in contemporary constrained models of public participation.

Public Science in the Yucca Mountain Controversy

Decisions about where to store nuclear waste or any form of toxic waste are difficult and rife with controversy. The Yucca Mountain high-level nuclear waste repository site is no exception. Under the Nuclear Waste Policy Act (NWPA), the Secretary of Energy is responsible for researching and choosing a site for permanent geologic storage of high-level nuclear waste. The NWPA outlines a detailed process for site selection including an evaluation of multiple sites, production of an Environmental Impact Statement, several public comment periods, and site characterization research. Although the site was authorized in 2002, the Yucca Mountain site is not guaranteed to begin accepting waste. The DOE still needs to obtain a license from the Nuclear Regulatory Commission, which stated in 2006 that they did not believe the DOE was ready to do so (Nuclear Regulatory Commission, 2006). Moreover, Nevada state government officials and citizens, environmental activists and organizations, people living on transportation routes, anti-nuclear activists, and American Indian activists insist that their fight against the site has not stopped with the 2002 siting decision. There are currently several pending lawsuits that have implications for the future of the site (Ensign, 2004; Nuclear Energy Institute, Inc. v. Environmental Protection Agency; Rogers, 2005).

Recall that the NWPA mandates that the high-level nuclear waste repository siting decision be made using science as the primary criterion for the decision. Moreover, Section 114(a)(1) of the NWPA mandates that "the Secretary shall hold public hearings in the vicinity of the Yucca Mountain site for the purposes of *informing the residents* in the area of such consideration and receiving their comments" (italics added; as cited in U. S. Department of Energy, 2002a). The Yucca Mountain project makes great efforts to "educate and inform" the public with tours of the Yucca Mountain site, a public science center with displays and information about the site, outreach to local schools, and a website with a plethora of user-friendly information about the site (U.S. Department of Energy, 2006b). This "educate and inform" model is in line with the technocratic and elitist DAD models of public participation and

does not promote standing and influence by public participants in the process. The Yucca Mountain Site Authorization public hearings often began with presentations by DOE employees about the suitability of the site and posters were arranged and staffed by employees in the lobbies of hearing locations to teach the public about the suitability of the site (U.S. Department of Energy, 2001g). In preparation for making a site authorization decision, the DOE released scientific and technical reports and the draft EIS which were to be used by the Secretary of Energy in the site authorization reports. These documents make the initial case for the Yucca Mountain site and provide inventional resources for future documents by other proponents of the site. Concurrent with the release of these documents, the DOE announced a period in which they would accept public comments and hold public hearings about the scientific and technical suitability of the site (U. S. Department of Energy, 2001b). The public comment period lasted from May-December 2001 and included 5,250 public comments taking the form of a statement at one of the 66 public hearings throughout Nevada, a statement to a court reporter at the Yucca Mountain Information Center, an e-mail message, or a written comment sent via post. An archive of public comments is at the Yucca Mountain information center and on the web (U. S. Department of Energy, 2002a; U. S. Department of Energy, 2006c) Following the public comment period, the DOE produced a document that summarizes and responds to the public comments (U. S. Department of Energy, 2002a). The public hearing texts and DOE site authorization documents serve as the texts for my analysis.

Although public comments are not the only source of arguments against the Yucca Mountain siting decision, these texts record an officially-sanctioned scene for public participation in environmental decision making. The public comments are the only arguments that the DOE was legally compelled to consider in making the site authorization decision. From the corpus of public comments, I focus on those comments that make arguments about the scientific and technical grounding for the Yucca Mountain site. Science plays a prominent role in both opponent and proponent arguments about the site, but I focus only on the scientific arguments against the site. Although there are many argument themes, some of which are procedural or pathos-driven, most of the comments address the scientific and technical basis for the site in some way. In order to understand how the scientific arguments made by the public in the public comment period interact with the department of

Energy's justification for the Yucca Mountain site, I also examined the DOE's official response to public arguments, the DOE's scientific and technical documents, and Secretary Abraham's site authorization report (Abraham, 2002; U.S. Department of Energy, 2002b; U.S. Department of Energy, 2002c). Together, these texts provide significant insight into both how the public made scientific arguments and how the DOE constrained and responded to these arguments. In the following sections, this essay explores two themes of scientific argument: raising questions, and common sense science.

Raising Questions

Numerous arguments attacked the scientific and technical arguments in support of the Yucca Mountain site. These arguments came from self-identified scientists, self-identified non-scientists, and non-identified participants in the public hearings. Although many of the participants cited scientific journal articles, scientific experts, and their own scientific findings, about as many participants did not cite additional support for their arguments. In the following two sections I identify two arguments types that I argue actually undermine participant arguments. Although we might expect a challenge to provide specific scientific argument to dispute the DOE's science, many challenges to the DOE's scientific and technical reports came in the form of questions or calls for more research. Raising a question is a particular communicative form in which someone brings something up as a relevant issue to be discussed, though a direct answer is not always given or expected (Bilmes, 2001; Leichter & Black, 2003). Raising a question does not have to appear in the form of a question. However, in a process of public participation that does not allow direct real-time dialogue and discussion, but instead takes comments and responds months later, the strategy of raising a question is an ineffective method if the goal is to argue against the DOE's science.

An example of the raising questions strategy comes from Jane Feldman, from the Toiyabe Chapter of Sierra Club,

One of the most serious issues that has been raised by the scientific work at Yucca Mountain is ground water contamination. The hydraulic relationships between the lower carbonate aquifer and the volcanic units and the alluvian [sic] units beneath and down gradient of the

aquifer are poorly understood. Will there be contamination in the Amargosa River? Will that contamination spread to other aquifers? (U.S. Department of Energy, 2001f, n. p.)

Feldman does not offer an outright, scientifically based counterargument to the DOE's assertion that groundwater contamination from the site is not a significant risk, and instead raises the issue as one needing more research. However, there were several research studies out at the time that do challenge the DOE's conclusions, meaning that Feldman could have made an argument about the hydrology instead of raising questions (Birkholzer, 1999; Flint et al., 2001; Shrader-Frechette, 1993).

After the fact in the comment summary document, the DOE responds to this issue by stating where the questions are answered in their technical documents, thus, effectively shutting down the raised issue (U.S. Department of Energy, 2002a). Because this is not a real-time conversation, this type of comment that asks a question allows the DOE to reply to the question by referring back to its original reports instead of providing new information. Moreover, in his Site Recommendation Report, Abraham categorizes all of the scientific arguments against the site as "Assertion 2: The Project Has Received Inadequate Study" and replies,

Critics have said that there has been inadequate study to determine Yucca Mountain's suitability. To the contrary, and as I believe section 6 ["Is Yucca Mountain Scientifically and Technically Suitable for Development of a Repository?"] of this Recommendation makes clear at length, the characterization process at Yucca Mountain is unprecedented for any even remotely comparable undertaking...Additional study will be undertaken at stages to come as an appropriate part of the licensing process. For these reasons I have concluded that the current body of accumulate scientific and technical knowledge provides a more than adequate technical basis to designate the Yucca Mountain site. (Abraham, 2002, p. 33).

Abraham also argues that it is impossible to answer every question raised about the site and to obtain scientific certainty. However, because of the preliminary results and the plan of the DOE to do more study, he concludes with a recommendation of the Yucca Mountain site. The Secretary's response serves to dismiss what could be strong scientific arguments against the site because they raise questions as opposed to offering specific counterarguments. Abraham uses two arguments about process instead of providing answers to the question raised about groundwater contamination. This response suggests that instead of raising issues and questions, the public should specifically (and explicitly) challenge the scientific results and present the reason why those results make the site unsuitable.

"Common Sense" Science

Although public hearing comments raise questions or issues about the site, some comments directly challenge the DOE's scientific proof. For example, opponents argue that the mountain's geologic features make it an unsuitable place to store nuclear waste. Their arguments raise scientific issues, but draw from anecdotal information and personal observation as opposed to the type of scientific proof provided in the DOE's scientific and technical documents. Many of the arguments are "common sense" arguments. The two main "common sense" geological arguments raised in public comments are about earthquakes and volcanoes.

Regarding the risk of earthquakes in the region, Ralph McCracken, Amargosa Valley resident, states

Seismic activity. Yes. What was it, about three or four years ago, we had a pretty good one. Shook several of our mobile homes in the valley pretty good and some of them had to be releveled [sic] and reset on their stands. Obviously, we are not an area that's immune from seismic activity. And I'm talking to you about things that are within 25 miles of Yucca Mountain. (U.S. Department of Energy, 2001e, n. p.)

Terry Kozlowski, Las Vegas resident, argues that Las Vegas is classified as a level 2b earthquake zone and compares this to California, a level 3 zone. "We've had our own earthquakes here. Not quite as devastating as the ones you find in California, but I think that this facility would be better located in a

less earthquake tolerant area.” (U.S. Department of Energy, 2001c, p. 49; see also: U.S. Department of Energy, 2001e). These arguments are enthymematic in assuming that the audience will fill in the premise that an earthquake will damage the waste repository and release radiation into the environment and endanger the public.

In response to public comments about the seismic activity of the site, the DOE refers back to the research in its scientific and technical documents:

Scientists and engineers expect earthquakes to occur at Yucca Mountain. The NRC requires that all licensed nuclear facilities be designed and constructed to withstand the effects of natural phenomena, including earthquakes, such that their operations do not represent a threat to public health and safety. Based on the results of analyses (reported in S&ER Rev. 1, Section, and YMSD, Section 12) of the long-term performance of the repository, which considered the effects of future earthquakes, the DOE concludes that a repository at Yucca Mountain could operate safely.”(U.S. Department of Energy Office of Civilian Radioactive Waste Management , 2001a, section 4.3.2)

This tactic serves to dismiss the question and refer back to previous research. Because this research was released prior to the public comment period and because the public comment period is framed as a way for the public to respond to DOE scientific and technical research, the DOE's response implies that if the speaker had just looked at the documents, he or she would have gotten their answer. When public comments do not specifically reference the DOE's documents or findings, the DOE can simply reference these documents and does not have to defend a challenge to their scientific findings.

Volcanism is a second area of common sense scientific argumentation that arises from the public comments and hearing statements. Ralph McCracken, Amargosa Valley resident, also states,

Well, you have to be a blind man not to look around in the area there and see the cinder cones that are coming up through the valley floor.

You have a cinder cone mine just a few miles down the road from it. Go down to the entrance to Death Valley and there is another very obvious cinder cone there. You go up towards Beatty and you look off to the west, another cinder cone. The water temperature in the wells in Amargosa Valley is very common, 70 degrees. Serious warmth there. Another indicator of volcanic activity. (U.S. Department of Energy, 2001d, n. p.)

Nevada resident Frederic George Tucker states, “It must be some form of stupidity to try to store a highly dangerous substance which will last for millions of years in an active volcanic area” (U.S. Department of Energy, 2001a). Again, these statements employ common sense argumentation. The public knows that there are volcanoes and therefore they could erupt and endanger the site. It seems to make sense. However, in light of the DOE's scientific and technical documents, these concerns seem to be easily answered by their own scientific data.

Not surprisingly, the DOE responds with scientific claims that show that even though a volcanic eruption could occur in or near the repository, that the risk is very small. Moreover, they argue that a volcanic eruption of contaminated ash would meet the Nuclear Regulatory Commission's radiation safety standards. The *Site Recommendation Comment Summary Document* states that “the presence of past volcanism and the existence of small, extinct basaltic volcanoes, the youngest of which is 80,000 years old, does not make the site unsuitable for long-term waste disposal” and references where issues of volcanism were addressed in the *Science and Engineering Report, Yucca Mountain Suitability Determination*, and the final version of the EIS (U.S. Department of Energy, 2002a, section 4.3.3). The *Site Recommendation Comment Summary Document* concludes its response to this issue stating, “Past volcanism in the Yucca Mountain region is well characterized and indicates a very low probability of future volcanic disruption of a repository. The DOE focused its investigations on the number, ages, and geologic structural control of smaller basaltic eruptions found within the Yucca Mountain region to evaluate the potential for future volcanism” (U.S. Department of Energy, 2002a, section 4.3.3). I included a large portion of the DOE's response to volcanism to demonstrate how the “scientifically-based” answer by the DOE seems to

overwhelm the common sense argument of the opponents. While it is certainly possible to challenge the probability and radiation safety standards in the DOE reports, the common sense challenge does not hold up against the mass of reports and probability calculations cited by the DOE. The response also presents a challenge to opponents because they would have to wade through all of the cross-referenced documents.

Arguments made by the public about seismic activity and volcanism assume a common sense, intuitive logic that is meant to challenge the DOE's site authorization. However, with the emphasis placed on scientific evidence and proof, these arguments are overwhelmed by the DOE's science in favor of the site and disregarded for lack of scientific information. In both DOE responses, they simply refer back to the points in the DOE documents that address the risk of earthquakes or volcanoes disrupting the repository. While the common sense arguments may actually be rooted in more "scientific" challenges, when presented without scientific data, though they may be persuasive to the common sense of the audience, the DOE is not forced to defend their scientific findings, but rather to state that they have scientific findings to back up their claims. Instead, the public must avoid common sense arguments. One can begin with a common sense idea as the starting point for a well-researched and well-informed argument that fits the form expected by the Department of Energy and actually specifically responds to the science in the documents.

Conclusion

Some may argue that it is likely that because of the way that the public hearings are conceived by the DOE as a means for further educating the public, the arguments of the public opponents of the site never had a chance of persuading the Secretary of Energy. Even though the DOE did respond to public comments in the comment summary document, close examination of these responses reveals expository statements with references back to reports rather than evidence-based statements on the specific issues raised. So, while the existence of the public comment period and the DOE's comment summary document suggest that the process is somewhat dialogic, both the way that the DOE responds to public comments and the stated purpose of the meeting to educate further suggest that the process is not one of open deliberation. Rather, it is a guise of deliberation. Nonetheless, although it is the responsibility of the DOE to make the process dialogic, they have not done so. Rather, the public must find ways to

participate in current process by challenging the science of Yucca Mountain project, by pushing for change from below. Over 5000 public comments submitted during the site authorization public comment period show that many members of the public want to have their comments heard.

The Yucca Mountain site authorization hearings put members of the public in a catch-22 in which they are expected to respond to the science and make scientific argument, but they are not taken seriously because they are not considered to have the expertise or they do not directly criticize the DOE's intricate scientific and technical reports. I argue, however, that there might be a way out of this catch-22 that involves altering the rhetorical strategies and forms of scientific argument that I observed in the hearings. My findings show that the raising questions and common sense type arguments introduced by the public actually undermine their goal to challenge the DOE science because they allow the DOE to respond with informative answers that show "it has been studied," reiterating the conclusion that the scientific and technical justification for the site is grounded. These questions keep the hearing process framed as one of information and education transfer to the public. To overcome these constraints and meet the expectations of the Department of Energy, I argue that when faced with traditional models of public participation in environmental decision making that demand scientific argument, the public participants need to provide strong, researched, direct scientific arguments that challenge to the DOE's reports. Arguments with support, as opposed to questions that merely raise issues, would create the expectation that the DOE respond by defending their science as opposed to informing through answering a question.

Sociologist Steve Fuller (1997) calls for a radical change in the way that science is conceptualized in his advocacy of secular science, which offers some hope for developing a rhetoric of public science that can directly engage the DOE's science. He argues that "The invocation of scientific findings (almost any findings will do) has turned out to be the most ideologically palatable means of coercing the populace available to democratic governments" and calls for the government to stop producing science and to start distributing science for public, scientist and non-scientist critique, and educating the public to be scientifically and technically literate such that "science is driven by the entire community of enquirers." (Fuller, 1997, pp. 489-490). It is likely that the DOE and other parts of the government will not give up their power to shape opinion and policy

through science lightly. This change in government science policy must come from below.

Public scientists and citizens should strive to become more educated about scientific policy and method and should start to challenge scientific findings. Michael Zimmerman (1995), a professor of biology and an ecologist, argues that scientific literacy does not mean that all decisions will be made solely on science in the absence of politics and ethics or that all members of the public will be scientists; rather, the public should become “conversant with basic scientific principles and methodology” (p. xiii). However, there is a common conception among scientists and scholars that the public is scientifically illiterate. In an analysis of the quantitative trends in the public’s understanding of science, Jon D. Miller reports that only 20% of the public has civic scientific literacy (Miller, 2004, p. 290). Zimmerman (1995) laments the scientific literacy in the American public and calls for better education in the sciences so that the public can participate in environmental policy debates. This conception is also seen specifically in the Yucca Mountain public comments. Many argue that the public is scientifically and technically illiterate. While I do not deny that a large portion of the public may scientifically and technically literate, and that it is in the interest of environmentalists and the public to understand and challenge the science used to support environmental policy, dismissing arguments because the public is scientifically illiterate is dangerous for a few reasons. First, this dismissal reifies the assumption that scientific and technical reason is more important than social, political and emotional arguments. Second, dismissal based in scientific illiteracy is based in sweeping claims meant to apply to all of the arguments of the public and to further the point that the DOE “the experts” agree in their support of the Yucca Mountain project. Finally, dismissing these arguments creates the catch-22 that I described earlier, in which the public is expected to comment on the scientific and technical evidence, but when they raise arguments, they are criticized for being illiterate. Increasing the level of scientific literacy, while heeding the above warnings, is an important a step toward more effective public participation in decision making.

Scientific literacy does not necessarily address all of the problems that arose in the Yucca Mountain site authorization hearings in which there were scientifically literate people posing questions and challenges. Scientific critique in public policy decision-making also requires access to information and resources with which one can make reasoned

scientific arguments, whether or not they include alternate scientific data. Drawing from Bazerman’s (2001) notion of activist science, environmental and citizen activist movements can play an important role in disseminating scientific and technical information to the public, which can serve as intentional tools for challenging and debating science. This was the case with the anti-nuclear movement’s information dissemination campaign (Bazerman, 2001).

Studying public science is not meant to fall into the trap of privileging technical reason. While scientific literacy will be a crucial tool in increasing public participation in environmental decision-making, we must also never forget that scientific and technical reason must be complemented by other forms of reason and knowledge. Condit warns against definition of “worthy” scientific critique “as requiring accompaniment by scientific data” (Condit, 1996, p. 93). This involves not only challenging scientific conclusions with scientific data, as the scientists do, but also making reasoned arguments about the scientific method. Condit reminds us that “scientific findings can be challenged for flaws in practice and also for linguistic insufficiencies” (p. 85). In addition to challenging science in multiple ways, we should also continue to challenge environmental policy from multiple vantage points not limited to science. Gregg Walker and Steven Daniels (2004) admirably advocate for civic science in which “scientific inquiry and scientific and technical knowledge are clearly essential, when working through environmental conflict and developing environmental policy. Yet, there needs to be a space too, for citizen concerns and traditional (local and indigenous) knowledge” (p. 136). The public’s use of scientific argument can play an important role in alternate processes of public participation that do allow for a more diverse set of arguments and should be included in these models. However, until there is a new model of public participation, refining the public’s use of scientific argument so that they have the tools to challenge the scientific findings and experts produced by the government is a crucial element for engagement in deliberation. In my advocacy, I do not deny the need for other forms of public participation that work both within and outside the system. Activism remains an important venue for social change. Increasing public participation in environmental decision-making requires numerous strategies of which a focus on public science as one.

This essay advocates the rhetoric of public science which entails examining the many ways in which the public actually uses science in

environmental deliberation. This essay also calls for more theory and criticism in this area. My findings suggest that the public can and should engage in public debate over science and suggests that the manner in which it was done in the Yucca Mountain hearings did not achieve the purpose of stopping the project. However, we might also consider that speaking at the public hearings or submitting public comments also serves the purpose of persuading and rallying support of other members of the public, whether they are proponents, opponents or undecided. This is certainly an important function of the arguments of opponents to the Yucca Mountain site and should be studied further. To foster public engagement in environmental decision-making, there needs to be a push from below, from public scientists challenging the science of policy makers, but with scientific data, linguistic means, and reasoned challenges to scientific method.

Public participation in environmental decision-making is ultimately an issue of environmental justice. Environmental decisions have far-reaching effects on the citizens of the United States, American Indian tribes, and sometimes individuals from other countries. A crucial element of environmental justice is that the public should have a say, beyond voting, in environmental decisions that affect them. The

environmental movement has done valuable work in increasing the amount of public participation in environmental decision-making, which has resulted in the National Environmental Policy Act (NEPA) that mandates Environmental Impact Statements (EIS), and other policies aimed at involving the public in review of and participation in decision-making. Environmental communication scholar Susan Senecah argues “most governing systems attempted to develop, and are now mandated by a litany of federal and state laws and executive orders to provide a minimum of formal opportunities for public participation” (Senecah, 2004, p. 16). She continues that although many administrators and decision makers might be able to “talk the talk” of participation in environmental decision-making, they are still limited in “walking the walk,” fearing antagonistic responses, costs, time, and implications of fostering an open process of public participation. Although the DOE is subject to laws that mandate public participation and the DOE is able to rhetorically “talk the talk,” they do not “walk the walk,” resulting in an unjust process that limits voices of dissent and true public participation in decisions that affect them. A focus on public scientific argument is one way to address the unjust process.

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Stakeholder Dynamics at the Intersection of Property and Fire: Conflict, Cohesion, and Communicative Practices

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Abstract

This study explores the role of property in shaping stakeholder conflict and cohesion within the context of wildland fire. We draw together aspects of disaster literature, social psychology and property rights to evaluate stakeholder discourse about fire events. Of particular importance is the function of discourse in responding to the changing material conditions which occur during wildfire events – like other disasters, fires rupture taken-for-granted notions of property and its boundaries. We contend that much of the social conflict or cohesion during disasters is contingent upon stakeholders' communication of property and what is damaged during the event. To explore these dynamics, we analyze public discourse from newspapers covering two significant fires from the 2006 fire season – the Columbia Complex fire in southeast Washington and the Day Fire in southern California. We find that property is a salient force in these dynamics and that public land is less important because of its “non-property” status, that fire is constructed as an active agent threatening property, and that stakeholders' adoption of different cultural values has much to do with the incidence of conflict or cohesion between groups involved in fire management.

Introduction

The physical results of wildland fire and other disasters are well documented in research (Cova & Church 1997, Flint & Luloff, 2005). These literatures, however, have generally overlooked property as a key force in creating stakeholder conflict or cohesion in these events. In this paper we explore the role of property in stakeholder discourse and the way conflict or cohesion arises when different stakeholders—local interest groups and fire management agencies—work together through an urgent event. Additional understanding of the communicative structures constituting fire management is particularly important because firefighting practices have changed drastically during the past 30 years and, as a result, have come under increased scrutiny from impacted publics (Thackaberry, 2004). This organizational change is matched with an equally contentious stakeholder situation because managed and managing organizations fail to understand the insight and perspective the other entity offers management processes (Daniels & Walker, 2001). Research indicates that both internal organizational culture (Carroll, Cohn, Seesholtz & Higgins, 2005) and communication among entities (Peterson & Horton, 1995) is a significant source of these problems. The consequences of these points of tension weigh heavily on stakeholders residing both near to and far from public lands as more than 9.5 million acres of public and private land burned in 2006, the latest in a series of severe fire seasons exceeding 1 billion in

federal spending. In short, federal land management agencies expend considerable public-financed resources in fighting wildland fires, a trend expected to and become more significant over the next 40 years (National Interagency Coordination Center, 2006).

In this paper we explore the intersection of property discourses (Peterson & Norton, 2007) and organizational participation (Stern & Barley, 1996; Weick, 1979, 1987) at the wildland-urban interface (WUI), where human settlement intermingles with unmanaged or “wildlands.” We argue that natural processes such as wildland fire disrupt the tidy boundaries between nature and property; they enter as a perturbation to the sociopolitical construct of certain land being designated for private interests. Given this disruption of property reification, what role does discourse play in defending and sensemaking the changing conditions of our environment? To approach this question, our manuscript develops as follows: First we review the growing interest in the intersection of organizational and environmental communication literatures, a juncture supported by both sociological and natural resource concerns over wildland fire. We then turn our attention to the role property plays in these contexts and how to better understand stakeholder politics by considering property discourse. Next we discuss the Columbia Complex (Columbia County, Washington) and the Day (San Bernardino County, California) Fires while highlighting salient methodological concerns such as data collection and

coding. Using available discourse, we explore themes characterizing the intersection of property and wildland fire with an eye toward stakeholder dynamics. We conclude with suggestions for public agency managers and considerations for continued research.

Literature Review

A growing number of scholars examine communication processes at the intersection of organizational and environmental domains. Deetz's (1995, 1996) communication-centered theorizing of the stakeholder concept clearly increased attention to communication and environmental components of corporate management practices. Thackaberry (2004) extended Deetz's notion of discursive closure (1992) to examine the implementation (or failure thereof) of safety practices in the U.S. Forest Service following the much publicized Storm King Mountain Fire. Just as Peterson and Norton (2007) turned environmental discourses to problems along system boundaries, Shome (2003) shifted cultural-studies literature toward issues of space and environment along nation-state borders. Peterson and Horton (1995) problematized land-management authority by considering rancher's narratives of species management as well as the failure of the U. S. Fish and Wildlife Service to consider this unique knowledge. McGlasnan and Williams (2003) argued that while inclusion of local stakeholders is useful, the technical demands of environmental management present a significant barrier to their involvement. Conversely, Kinsella (2004) deconstructed "public expertise" as an organizational practice of control, including a dialectical tension for impacted groups to participate in organizational structures of domination in order to change them. Emerging from these developments, we find an increased interest both management and participation within the environmental domain.

Wildland fires are a useful application of this organizational and environmental intersection because such events rupture socially constructed and reified notions of property by materially disrupting their boundaries. We approach these issues systemically to problematize the haven of individualism written into the construct of private property. Property logics demonstrate a tension between individual benefits and collective costs and benefits (Raymond, 2003). The defense of these assumptions is precisely, although implicitly, the objective of collective "fire fighting" strategies to "save" land. The material reality is that a multitude of stakeholder sectors are impacted when landowners

choose not to create a "defensible space" (McCaffery, 2004; Parkinson, Force & Smith, 2003). This much is obvious in the common nation-wide coverage of a fire starting as a brush-fire and spreading from house to house as it reaches a residential area.

Stakeholder Dynamics

We survey literatures on stakeholder dynamics within natural disasters to contextualize discourse during wildland fire events. Scholars contend that disasters can create cohesion or conflict among collectives and geographically diverse stakeholders. These dynamics concern (a) the difference between natural and technological disasters, (b) stakeholder cohesion, (c) conflict emerging from class, and finally, (d) organizational structure issues. Literature applying these theories to wildland fire is, however, largely absent (Carroll et al., 2005) and even such critiques have overlooked the role of property in these struggles. From this review we argue for additional consideration of property dimensions.

Natural and technological disasters

As articulated by Quarantelli and Dynes (1976), disaster literature typically distinguishes between natural and technological disasters because they differ drastically in their management and effect on communities (Kumagai, Carroll & Cohn, 2004). Natural disasters include meteorological weather patterns and tectonic events such as hurricanes, tornados or earthquakes; technological disasters most commonly include toxic spills or nuclear meltdowns resulting from human activity. These should not be treated as easily dichotomous, however, because many situations involve complex feedback cycles between human activity and what appear to be 'natural' forces (Peterson & Norton, 2007). Fire, for example, can be a natural event caused by lighting or the result of arson—but both may swell in size due to excess fuels accumulated from human management of the forest. As such there is no simple prediction in these situations because the politics of sense-of-place and community culture play a significant role (Cantrill, 2004; Drabek, 1986).

Stakeholder cohesion

A growing body of literature indicates that natural disasters tend to invoke support among members of a community. Community cohesion in the face of adversity provides a cornerstone of social dynamics as conflict necessitates that community members pool their resources together or disengage

(Coser, 1956; Simmel, 1955). Natural disasters are the result of forces largely outside human control and thus less likely to involve hostility toward other parties. As a result, local residents band together in what Cuthbertson and Nigg (1987) dubbed “therapeutic communities.”

Therapeutic communities may occur because residents’ share a common predicament and circumstance (Beebe & Omi, 2003; Cuthbertson & Nigg, 1987). Such similarity in condition results in a cohesive group effort and eliminates inter-group antagonism by drawing upon common ties, shared experience and group accomplishment (Coser, 1956). Communities affected by natural disaster unite by viewing the natural processes responsible for the disaster as an “enemy” – thus obscuring the human activity involved in such an event. The availability of identifiable cause (e.g., high winds) facilitates mobilization of resources to fight the common enemy (Quarantelli and Dynes, 1976).

Stakeholder conflict

Conflict occurs more often in technological disasters as they involve human agents or organizations to blame for the situation (Quarantelli & Dynes 1976; Siegel, Bourque & Shoaf, 1999). The result reproduces and even exaggerates pre-existing “us-versus-them” mentalities for both community members and government agencies such that the affected community is constructed as vulnerable (Siegel et al. 1999).

Cultural and class differences can also function as an impetus of conflict during disaster events. Cultural distinctions and disparities are often exaggerated during disasters when the distribution of scarce resources place community stakeholder at odds with one another; different groups are differently impacted and marginalized sectors often suffer the worst (Schnider, 1992; Dynes, 1994). Such disparities are sometimes evident between rural and urban communities. Scholars have long maintained that rural and urban communities possess different values and norms (Hunter & Brehm, 2004; Eser & Luloff, 2003). Rural communities dependent on natural resource extraction—for example, ranchers (Peterson & Horton, 1995)—are often most at risk for disasters and their collective identity as helpless is constructed both reflexively and externally (Flint & Luloff, 2005). Conflict also can arise when people migrate from urban to rural areas because of differing cultural values (Eser & Luloff, 2003; Smith & Krannich, 2000).

Disaster events often divide community residents along socioeconomic lines (Rakow et al., 2003). Erikson (1976) contended that disasters irreparably disrupt social functioning by traumatizing communities, extending disparities in social stratification and fragmenting social solidarity. Property dynamics are thus a site of struggle as they lend owners power over others by restricting control and access to resources. Disasters have the capacity to alter material and cultural power dynamics through the damage of property, thus at times nullifying disparity and, at others, exaggerating pre-existing inequalities (Rakow et al. 2003; Tichienor, Donahue & Olien, 1977). In short, poorer communities and marginalized sectors suffer the most during disasters because of their limited ability to recover. Hurricane Katrina provides numerous examples including the capacity to evacuate, proximity to key infrastructure, and so forth.

Forms of organizing

Stakeholder conflict often arises due to drastically different logics of organizational structure. Conflict between communities and outside groups involved in disaster management may often stem from the standardized system of government mitigation and residents’ expectations for management (Schnider, 1992; Carroll et al., 2006). Such struggles arise when the formalized procedures of disaster response (e.g., Incident Command System) fail to incorporate the characteristics, needs of, and response to collectives (Tauxe, 1995; Forester, 1989). Carroll, Higgins, Cohn, and Burchfield (2006) demonstrated how the efforts to eliminate the danger of wildland fire are largely a form of bureaucratic rationalization, what Weber (1930) described as the human attempt to master the natural world with calculation and science. Carroll et al. (2006) indicated that rationalization extends the government’s bureaucratic logics and form to fire management. Such strategies lead to conflict between incident response managers trying to put out the fire and private landowners threatened by it. Residents’ difficulty in understanding the logics and ambiguities of management (Kumagai et al, 2004; Sweet, 1998) and managing agencies’ failure to understanding stakeholder values and knowledge (Gilroy, 2000; Hamilton, 2004; Peterson, 1991; Senecah, 2004) reveals the organizational logics within disaster decision-making. As a result, residents blame management agencies such as the U.S. Forest Service for improper use of resources and criticize their efforts to put out fires. The dynamics become cyclical and stifle adaptive decision making in agencies due to fear of criticism from the public and media (Davis,

2006; Maquire & Albright, 2005). These structural forces manifest over time because in the short-term “different groups compete to serve their own interest and to control symbolic and discursive resources” (Putnam & Fairhurst, 2001, p. 201).

Stakeholder Interaction: Property and Fire

Fire management has shifted substantially in the past 30 years from an era defined largely by fire suppression to one characterized as fire inclusion. The onset of the latter era requires different types of communication and collaborative efforts on the part of agencies and stakeholders. In addition to this increased attention to discourse we urge consideration of the role of property in generating conflict or cohesion among stakeholders. Homeowner defense strategies such as defensible space—drastically reducing fuels around homes—are couched in taken-for-granted constructs of property. Such notions are reified by interested parties such as residential development in dangerous fire zones (Cova & Church, 1997). As such, wildland fire provides additional evidence for the complex boundaries along material and symbolic lines (Peterson & Norton, 2007) such that fire fighting costs are the somewhat predictable material condition and consequence of monetary gains in development processes. Given this complexity, it is imperative to explore stakeholders’ conceptions of property and the conflicts such notions manifest and suppress.

Property has long been tied to the dual notions of resource used, and the right to control such resources, as is evident in the modern flurry for property rights including intellectual, genetic, mineral rights, and so forth. This trajectory treats property materially and does little to explore its discursive structures (Adebanwi, 2004). In an attempt to wrestle notions of property away from as a predominately economic force (Anderson & Hill, 1981; Marx, 1973, 1990; Weber, 1930) and explore its symbolic import, we extend upon the central problematics of land-valuation (Peterson & Peterson, 1996) and conceptualize property as an interorganizational discourse. Raymond (2003) compellingly argues that property should not be viewed both as a bundle-of-rights and an undergirding logic to gain and defend such rights. That is to say, property functions as a “smokescreen for the naked exercise of political power in pursuit of self-interested ends” (Raymond, 2003, p. 11). Our interests concern the role of discourse in fueling this smokescreen when property notions are disrupted as fire spreads across public and private spaces.

Conceptualizing property as the site and source of interorganizational discourse helps explain the complex social interactions occurring during disaster events and the way stakeholder communication about property rights creates conflict or cohesion (Raymond, 2006; Norton, 2005). Disputes over property continue to be a source of great conflict between stakeholders in both general resource management (Hibbard & Lurie, 2000) and specific fire management issues (Loomis, Bair & Gonzalez-Caban, 2001). Ownership implies the right to influence and exploit land in a capitalistic system (Carruthers & Ariovich, 2004). From this view government is no neutral and instrumental mediator of rights, but is rather an active stakeholder (Forester, 1989). Just as organizing is gendered (Ashcraft, 2005; Ashcraft & Mumby, 2004) and management is contingent upon power and control (Alvesson & Deetz, 2000), land management is a heavily classed politic (Hunt, 2003).

Though the perceived condition of ownership involves rights with no disruption from the external environment (Carruthers & Ariovich, 2004; Raymond, 2003), property is a fragile claim contingent upon both symbolic and material stability. People become intertwined with their physical setting and the power ownership imparts. As Shome (2003) notes, identities occur in relation to particular localities. This is especially important in communities dependent on natural resource extraction, as their collective identity is closely tied to the natural environment and the discursive practices justifying such rights (Flint & Luloff, 2005; Wilkinson, 1992). At the same time, multiple stakeholders possess rights and hold interests to a given piece of land and these expressions often constitute sites of struggle (Singer, 2000). In this respect, property rights are an evolving condition based on communication between groups (Peterson & Peterson, 1996; Norton, 2005). Given the preceding review of literature and theoretical conceptualization, we propose the following research questions:

- RQ 1: How do stakeholder notions of property and property damage come into opposition with fire management strategies?
- RQ 2: How stakeholders’ conceptions of property rights contribute to social conflict or cohesion between groups involved in fire management and mitigation?

RQ 3: How do the cultures of affected communities create a point of conflict/cohesion among stakeholder discourses of fire?

Methods

Any study of stakeholders' symbolic and physical conceptions requires a multi-faceted approach to their expression. Discourse analysis achieves this by thoroughly connecting language processes to social and political dynamics (Titscher, Meyer & Vetter, 2000; Van Dijk, 1997). Discourse is a layered concept, including any written or spoken communication conveying meaning of an underlying structure (Gee, 1999; Harkness et. al, 2005). This includes linguistic and contextual elements of discourse, such as the relationships contributing actors have with their environment. This perspective is useful in understanding stakeholders' views in our study because it provides an appropriate breadth to understand the wide-reaching concepts included in conceptions of property.

At first glance this manuscript may look much like a standard media framing or agenda-setting examination. Agenda-setting theory contends that media officials' decisions about what to include in their coverage leads certain topics to gain more consumer attention than others. Thus the media does not tell people what to think, but what to think about (McCombs & Shaw, 1972; Mazur, 1998). Similarly, framing theory demonstrates how the construction of a story can place bias on certain perspectives over others, most often through the misrepresentation of news events through selective source use. Such processes "frame" news events and can influence consumers' perspectives on the events covered (Shanahan & McComas, 1997; Entman, 1993).

Our examination differs from these conceptualizations in that we are using newspaper discourse as a site of organizational communication, sensemaking, and contestation. Newspapers provide a useful data source because they constitute an important instance of interorganizational and stakeholder discourse concerning interested parties and agency officials views on the appropriateness of wildfire mitigation and management. Newspaper content, including news and various opinion articles extend upon the increased focus on text as the linkage between internal and external organizational communicative domains (Cheney & Christensen, 2001). In this way newspaper text is more than just a discursive context, it is where organizational and

identity politics are contested and managed (Oktar, 2001; Sotillo, 1999; Wilson, 2001).

Data collection and background

This study analyzes news coverage of the Columbia Complex Fire in southeast Washington and the Day Fire in southern California to better understand stakeholder discourse about property.

To capture a broad representation of text we gathered discourse from both regional and local newspapers. Papers for the Columbia Complex Fire included the Tri-City Herald, 55,000-circulation daily covering the south central area of Washington's Columbia Basin; the Walla-Walla Union Tribune, a 14,000-circulation daily covering southeast Washington; the Lewiston Morning Tribune, a 26,000-circulation daily covering the southeast corner of Washington and parts of Idaho; and the Spokesman Review, a 110,000-circulation daily covering most of eastern Washington. Papers for the Day Fire include the San Francisco Chronicle, a 512,129-circulation daily; The Los Angeles Times, a 851,832-circulation daily; the Daily News of Los Angeles, a 178,207-circulation daily; The Modesto Bee, a 85,725-circulation daily; the Press Enterprise, a 189,000-circulation daily; and The San Gabriel Valley Newspapers (Pasadena Star News, San Gabriel Valley Tribune) with a circulation of 110,000. Relevant data include all newspaper articles, editorials and letters to the editor concerning the fire in these publications. Coverage ranged from Aug. 22 through October (Columbia Complex Fire) and September through December (Day Fire), the latter date indicates when crews contained most of the fires and coverage decreased significantly.

Analysis of Discourse

Discourse analysts range considerably in that some use it as a guiding theoretical terrain and conceptual framework (Gee, 1999; Garrison & Massam, 2001) while others offer specific analytical models (Eubanks, 1999; Hackett & Zhao, 1994; Huckin, 1995, 2002). Regardless of the level of granularity, Critical Discourse Analysis conceptualizes language as a primary site or system in the exercise of power and the social construction of reality (Titscher et al., 2000). As Huckin (1995) articulates:

critical discourse analysis . . . is a highly integrated form of discourse analysis in that it tries to unite at least three different levels of analysis: the text; the discursive

practices (that is, the processes of writing/speaking and reading/hearing) that create and interpret that text; and the larger social context that bears upon it. In so doing, CDA aims to show how these levels are all interrelated" (p. 95).

This highly integrated sense of discursive practice provides a useful framework for the study of property and discourse about wildland fire because it is through and within discourse that these material conditions are constructed and contested. In the actual analysis process, we draw upon Huckin's three modes of reading to include (a) reading the text as the normal reader would, (b) reading with more attention to the subtle ways discourse functions within the genre, and (c) for the micro-analytics within the sentence level. Each researcher read all articles multiple times with these phases in mind. Huckin provides a conceptually systemic means of connecting processes of discourse (e.g., presupposition or metaphor) to the broader social processes (e.g., stakeholder rights) applicable to our consideration of property and wildland fire.

Interpretation of Results: Wildfire Fires and Property

The Columbia Complex Fire began after lightning struck Umatilla National Forest land on August 21. It quickly spread to private lands near the community of Dayton in southeastern Washington. At one point the Columbia Complex Fire was the number one fire concern in the nation, including all three levels of incident command crews outlined in the bureaucratic response to disaster situations ("FEMA Authorizes Funds For Columbia Complex Fire," 2006). Crews fought the fire for nearly a month until they contained it in early October, after it had burned 109,402 acres of private and public land including National Forest, wheat fields and grasslands. During the initial growth of the fire, crews ordered the evacuation of nearly 350 homes in the area, closed off area highways, and restricted access to a large portion of the Umatilla National Forest, including the Wenaha-Tuccannon Wilderness area. About 30 structures were damaged in the event, including permanent residences, vacation cabins and outbuildings such as barns and storage sheds. The Columbia Complex Fire cost \$35 million to suppress.

The Day Fire began on Labor Day, Sep. 4, 2006 after a rubbish fire grew out of control. It burned more than 162,702 acres, mostly in the Los Padres

National Forest, and about 4,800 firefighting personnel helped put the fire out. The fire cost about \$73 million to suppress and it burned two mobile homes, several sheds and barns. The Day Fire is the fifth-largest fire in California history.

In the following interpretation of results, we highlight themes of the Columbia Complex and Day Fires concerning the intersection of wildland fire and property. We argue that these fires can be understood through the following: (a) Public lands as marginalized, non-property; (b) Property as site of stakeholder conflict; and (c) Existence of Property/Fire issues leads to adoption of organizational values.

Public lands as a non-property

Results suggest that stakeholders in the Columbia Complex and Day Fires reinforced the dichotomization of property and the insignificance of non-property land. Stakeholder discourse suggests a significant difference in stakeholder conceptualization of public and private land during these two events. Community members and fire officials' articulated discussion about fire loss and damage to private property and seldom mentioned damage to Forest Service land. These discourses rarely indicate the potential benefits of letting fires burn in the backcountry to reduce brush and increase wildlife habitat. Similarly, newspaper reports focused on the structures or lands damaged during fire and never distinguish monetary losses to public property. The few instances where fire managers or journalists do focus on damage or benefit to National Forest, the issues are always centered around issues of property. As Sergio Vargas articulated concerning the Day Fire, "One of the good things is that it (the fire) happened in the backcountry, so there's some distance to absorb these flows and take care of some of the debris" (as cited in Biasotti, 2006). Wildland fire damaging nature was not an issue; it was only when fire potentially threatened property that it became a concern. This point is emphasized in the Columbia Complex fire. As Hopkins argues, "If it (the fire) crosses over the draw to North Touchet it's going to be a bad scene," Newman said. "There are a lot of homes in there" (Hopkin, 2006a).ⁱ

The disregard of public land as a site of damage during fire made it a "non-property" in the eyes of stakeholders. Fire on public lands did not concern members of the nearby communities because they did not equate damage or benefit to public property as their concern. As fire official Koshare Lomicki said during the Columbia Complex Fire, "Now that it's in the wilderness, and the west edge is colder and

black, people think the fire is out,” (as cited in Ferguson, 2006). Firefighting efforts centered primarily around keeping the fire from eventually impacting private property (specifically structures) rather than reducing losses on public land. This is apparent in fire officials’ efforts to protect a private ski resort and cabins within Forest Service land during the Columbia Complex Fire and focus on the Day Fire boundary closest to Interstate 5.

The centrality of property discourse manifested itself only when fire became a threat to private lands. Preemptive measures by fire agencies to “reduce losses” are consistent with this perspective. As a professor of fire ecology articulated during an article about the Day Fire, “The fire guys don’t like it [letting fires burn on public land]. . . If the fire builds up a head of steam and starts going gangbusters, it could get close to an urbanized area where it’s hard to stop” (Lewis, 2006). In the Columbia Complex Fire, stakeholders placed significance on agricultural crops and livestock: “So far, the blaze has destroyed one home and one cabin, as well as several outbuildings, acres of wheat and has killed numerous cattle” (Hopkin, 2006b).

Stakeholders conceive of fire primarily as a threat to property given its reinforcement as a stable piece of the environment. In this way, wildland fire—a predominantly natural event—is given considerable agency. Agency includes having the capacity to enact change (Huckin, 1995) or to choose otherwise (Giddens, 1984; Mumby, 2005). As the Federal Emergency Management Agency indicated in its initial announcement of the Columbia Complex Fire, “At the time of the request, two separate fires (Whiskey Creek and Cory Eye) were within one mile of the Columbia Fire, and *were expected to merge*. The fires *threaten* facilities ranging from roads and bridges, utilities, recreation areas and businesses, and resources such as wheat fields, timber. . . (“FEMA Authorizes Funds For Columbia Complex Fire,” 2006). As “Federal Emergency Management Agency Director R. David Paulison said . . . the fire was threatening 50 homes, and up to 1,500 more” (“FEMA Authorizes Funds For Columbia Complex Fire,” 2006). Under this mindset, fires become aware of choice in that “‘If we do experience hotter, drier weather, there’s no telling *what the fire will do*,” (Hopkin, 2006c). The human/environment relationship is upheld by making humans the victims of an irrational nature because, as one fire official indicated, “It wasn’t what the people of Fillmore wanted to hear, but county officials said Monday night that flooding is likely this winter along the Santa Clara River, and *there’s not much anyone can*

do to stop it” (as cited in Biasotti, 2006). As one Day Fire reporter wrote, “The fire has not burned any homes, but firefighters were concerned about Paradise Ranch mobile home park, east of Interstate 5 and less than two miles from the fire’s southeastern flank” (A. Dobuzinskis, 2006a).

Wildland fire matters only because it disrupts property interests. It is a politically motivated enactment based on very select and motivated criteria. Extending from this interest, we highlight the way such dynamics bear upon stakeholder conflict and cohesion potential.

Stakeholder dynamics at the Intersection of Property and Fire

Fire events can force agents (firefighters) and rural cultures to interact. When these collectives came together during the Columbia Complex and Day Fires, each group expected the other to adopt or recognize their organizational values and functions. For residents this included a focus on their concerns for property, livelihood and emotional ties to property. As one journalist reported, “More than 80 personnel as well as farmers using tractors to create firebreaks were fighting the fire” (Porter, 2006a). Here fire is the active agent and property the force bringing about cohesion among local and agency collectives working together to save property. At the same time, property functions as a source of conflict because agents were not attending well enough to local property concerns. As Karen Rubenser, president of the Columbia County Cattleman’s Association said “ranchers aren’t being allowed reasonable access to get their cows out of danger either. This is our livelihood” (as cited in Hopkin, 2006b).

Likewise, firefighters communicated the reasoning behind their efforts and acknowledged that they could not completely mitigate property damage. As Chicken (2006a) reported, “most of the more than 200 people at the meeting seemed satisfied with information provided and the opportunity to meet with fire officials.” Stakeholders were dissatisfied with agency performance based on the perceived degree that firefighters acknowledged human and agency limitation to control fire. Firefighting efforts fell short of residents’ expectations primarily because of agency safety regulations—hence failing to protect property at any cost. As one frustrated resident said, “I’m out there dozing, we lose our power, so I can’t pump water, they won’t let my water truck past the roadblock, and those guys (firefighters) are sitting on their butts” (as cited in Hopkin, 2006d). Another

resident stated “We don’t have to be victims . . . We can be in control.” (as cited in Hopkin, 2006e). More often than not, such frustration arose because locals thought “the response to the fire wasn’t aggressive enough and complaining that in many cases, homeowners weren’t allowed to get to their homes to try and save them” (Hopkin, 2006d).

Stakeholders experienced greater levels of cohesion when agencies attended to property concerns. Interorganizational discourse is especially prevalent in the Columbia Complex Fire, where fire managers held frequent information meetings with homeowners to address concerns about threatened property. Sufficient symbolic and interpersonal communication about fire led to cohesion between stakeholders because it allowed groups to evaluate their adoption of other stakeholders’ cultural values and reduced barriers to understanding. In these instances, local residents were more apt to adopt the agency view on fire issues. Such adoption is evident in “Buet [coming to] appreciate the firefighters, who have checked on him regularly. And he realizes the fire managers have a ‘strategy that is thought out. It is not emotional like it is for people like us that have property. They see the bigger decisions that have to be made’” (as cited in Chicken, 2006b). This inter-stakeholder cohesion was possible largely because firefighters attended to people’s property.

Results thus indicate that support for firefighters was contingent on their perceived protection of private property above all other concerns. This meant having as much value for personal and private property as the residents themselves. As one resident said, “I feel like you just need to be there at the right time, to save your house. And I’m the one who really wants to save it” (as cited in Chicken, 2006f). The firefighter then is really fighting for property. As firefighter Matt Falat articulated, “We’re not going to back down to structures that are in our own county . . . We are not going to lose.” (as cited in Navarro, 2006a). At the same time, residents are not as open to leaving their own property so firefighters can protect it. As a resident reflected after the fire passed: “The strike team stayed with us. . . Fire commanders ‘told them to leave but they never left’” (as quoted in C. Saillant, 2006a).

Stakeholder Dynamics: Distinction between the Columbia and Day Fires

We have thus far given similar treatment to our two fire cases. This is because our primary interests were to establish the intersection of property and fire (RQ1) and the dynamics between agencies and

stakeholder (RQs 2 &3). We would now like to briefly turn our attention to some distinction between the two cases to explore how these aspects apply in different contexts.

Cohesion between stakeholders occurred much more often than conflict in both the Columbia Complex and Day Fires—but for very different reasons. The Columbia Complex Fire forced residents to interact with agency personnel and other stakeholders much more than the Day Fire because it burned at the interface between public and private land. Results show a high level of stakeholder cohesion during the Columbia Complex Fire, with widespread support for firefighting efforts and firefighters acceptance of residents input or aid. Support among community members also was present. It is apparent that each group attempted to understand and adopt the cultural values of the others. Examples include residents making sandwiches or doing laundry for firefighters and fire officials taking the time to inform residents about fire mitigation efforts.

Especially important was firefighters adoption of residents’ property-related values, included a commitment to protecting structures and property with intrinsic value in the Columbia Complex Fire. As a Virgil Minke, fire information officer at the Waitsburg fire camp said, “One home is too many and we don’t like to lose any of them,” (as cited in Porter, 2006b). Similarly, area resident Betty Turner said “The wonderful firemen had our pictures out on the lawn in a garbage can,” . . . The firefighters had gathered the Turners’ pictures off the walls. When the Turners arrived they helped them gather important papers, and items they didn’t want to lose” (as cited in Chicken, 2006c).

In contrast, cohesion in the Day Fire emerged primarily from a lack of interaction among stakeholders because the fire seldom threatened private property. As one fire official reported, “Efforts to keep the fire from jumping into populated areas were very successful, with just one home and a handful of outbuildings destroyed. (“Firefighters save the day; Day Fire puts everyone to the test, 2006). The Day Fire was a success and stakeholders experienced some level of cohesion because after four weeks there were “no injuries or significant losses” (Aidem, 2006a), and that “Damage to property was relatively light” (Martin, 2006). These results do not indicate no alteration to the lands in the Day Fire; such alteration simply did not happen to private property. As Martin noted, “Even the Day

Fire, the season's biggest, burned mostly brush and light timber" (Martin, 2006).

Firefighters in the Day Fire maintained cohesion by focusing on the possible threats to private property when they arose. They quickly established communication and interaction with private landowners in the few occasions when the fire did threaten private property and pooled the majority of their resources to reduce or prevent further need for interaction. In the Columbia Complex Fire, cohesion among stakeholders arose primarily due to the mutual appreciation of organizational-cultural values. Simply put, officials in the Day Fire reduced the need to change organizational values by constructing the fire in terms of property early on. Because the Columbia Complex Fire happened in the Wildland-Urban Interface, officials needed to share cultural values with other stakeholders more often than in the Day Fire. In contrast, officials in the Columbia Complex Fire had to attend to property in ways more consistent with local sensibilities.

Discussion and Conclusion

The above interpretation of results offers a useful consideration of stakeholder dynamics at the intersection of property and fire. This study is limited in its strict use of newspapers as a source of stakeholder discourse. Future studies could expand on these results by interviewing residents and fire managers involved in other fire events. At the same time, organizational scholars should not fall into an all-too-easy hierarchy of pseudo and actual discourse (text and talk respectively) and the use of newspapers as an organizational text provides considerable clues into inter-stakeholder dynamics. As we have shown here, property is an important underlying condition in wildland fire events and future studies might explore a number of trajectories stemming from this research.

Our current research findings have a number of practical implications for fire managers. First, it is important for managers to understand that fires near or in the WUI require additional communication considerations with nearby property owners. Face-to-face communication spaces such as meetings – formal and informal alike – genuinely move toward a communicatively rich model of interaction (Deetz, 1995) for the consideration of organizational values and interests during fire events. Increased communication between stakeholders also allows residents time and space to articulate their stake in the planning process, thereby reducing residents' perceptions of uniform bureaucratic management that does not integrate their concerns. In addition, resident

input has the capacity to improve firefighting efforts by utilizing local knowledge.

Second, managers implementing fire management strategies should place more emphasis on conversation with WUI residents about property considerations and realize that they have specific expectations and cultural demands for protection during fire events. We are not suggesting that these views are absent of powerful interests and identity forces. At the same time, these property concerns simply dominate the social dimensions of fire management and agencies would likely alleviate considerable tension by systemically and collaboratively mapping them with an array of stakeholders. Therefore, managers should do what they can to understand the specific needs of a given community at risk for wildland fire and foster enough interaction to communicate mutual respect for different stakeholder values. These behaviors have the capacity for firefighting support regardless of the outcome by creating realistic standards for fire management.

Third, the residential view of public lands as a non-property – and hence seeing no value in them – is disturbing. If increasing public sensibility about wildland issues is an identified objective, land managers might utilize the salience of property to accomplish this goal. Apathy about public lands has negative connotations for future fire management including the reduction of fuels leading to catastrophic fires. The WUI residents with a perception of public lands as a non-property would presumably be less likely to engage in the collaborative management needed for fire and contributes to a disengaged citizenry wary of political processes. In short, managers could draw upon the importance of property to foreground the centrality and impact of fires on public land.

Fourth, while we find some educational traction in the property construct we are also suspicious about some of the ways property is presently articulated concerning expenditure and fire policy. Extending upon critical scholars interests, we must look beyond the way property and fire intersect to allow certain interests to go unquestioned and, thus, to obscure political sway and dominance (Deetz, 1992; Deetz & Mumby, 1989). We find it problematic that current articulations of fire justify any amount of agency expenditure to protect property—natural spaces where dominant interests have gained hegemonic dominance as privately owned. Our move here is not simply to deconstruct the socio-political concept of property but, rather, to question the underlying logic

of spending millions of dollars each year to protect the interest of what are ostensibly a select few—many of which tend to build in fire-prone spaces.

In the Columbia Complex and Day Fires explored here, Residents and fire managers constantly framed fire losses or benefits only in terms of private property or structures. What is more, in many cases residents and newspapers were quick to mention the amazing lack of damage during a fire which impacted nearly 170,000 acres of public land and cost \$73 million to fight. Part, though certainly not the only reason, of such outrageous federal expenditure—i.e., taxes—is the extreme expense associated with firefighting equipment and personnel hours. Because the Columbia Complex Fire was a priority 1 fire, officials approved use of a DC-10 to

drop extra-large loads of retardant on the fire. The property problem here is that the DC-10 costs \$26,000 per hour with a 3-hour minimum. This is just one aspect and one sector of economic benefit derived from the particular modes of exchange as presently articulated and performed. This is a useful point of contradiction in a country significantly tied to individualism and intrinsic rights of self-reliance (Raymond, 2003); a problematic that deserves more consideration in future research. It would be useful, for example, for additional studies to examine more fully consider the exploitative nature of property policy as it currently stands—in ways similar to but extending beyond the current study—and to examine the communicative processes involved in implementing genuine self-reliance of in term of property protection.

Endnotes

¹Data from the Columbia Complex fire and Day Fire in that the former were collected on newspaper website or using Lexis-Nexis, thus no page numbers accompany the articles. For scholars interested in tracing these data, they are available at the newspapers as listed in the reference portion of the manuscript.

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An Interpretive Analysis of Core Values of Agriculturalists of the Yellowstone River

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Abstract

Contemporary watershed management issues spark conflict that emerges from competing perceptions of appropriate relationships between humans and natural resources. Effective management of these conflicts relies on understanding that they develop within a historical context that includes social as well as biophysical factors. This study examined agriculturalists' discourse regarding use of bank stabilization structures to protect private property from erosion. We obtained discourse by conducting interviews with agriculturalists in 12 counties of the Yellowstone River corridor. We used qualitative content analysis to identify and categorize core values that emerged from agriculturalists' conversations. Our analysis focused on their discussion of the relationship of private property rights in relation to voluntary adoption of Best Management Practices and regulatory mandates regarding the river. Based on the results of our analysis results, this paper offers a set of collaborative strategies for managing this and other similar natural resource conflicts.

Montana's Yellowstone River described as the last free-flowing river in the lower 48 states, stretches 670 miles from its source in the Yellowstone National Park to the confluence of the Missouri River just inside the North Dakota border. Many people consider it a national treasure, boast of its significant historical events such as the Lewis and Clark expedition of 1806, and desire to keep it wild and free (Graetz, 2002). The river's corridor is under increasing demand as a natural and cultural resource area. Some river stretches are experiencing increased industrial and residential development that potentially conflict with traditional agricultural uses of the river (Herring, 2006). As of April 2006, the Yellowstone River was listed by American Rivers as America's second most endangered river due to new development that demands massive bank stabilization and flood control projects (DeVries, 2006) to protect private property and/or public infrastructure.¹

A meandering river with diverse eco-systems, the Yellowstone River can appear serene. Yet, during spring rise and ice jams, it is prone to flooding which leads to erosion. The 1996 and 1997 floods changed river channels; caused large-scale erosion; and destroyed human structures, pasture and cropland. Subsequently, over 100 permits for bank

stabilization structures were filed by private landowners with the U.S. Army Corps of Engineers (USACE).² Environmentalists contending that bank stabilization structures intensify erosion problems elsewhere on the river and degrade fish habitat contested the permits (Kudray & Schemm, 2006; Auble, Bowen, Bovee, Farmer, Sexton, & Waddle, 2004; Montana Audubon, 2002). Consequently, stabilization projects halted until further research determined the potential environmental and ecological consequences of channel modification (Auble, et al., 2004).

Contemporary watershed management issues, such as this one, spark conflict that emerges from competing perceptions of appropriate relationships between humans and natural resources. Typically, water disputes occur at local, regional, national, and international levels. They involve diverse and competing users (e.g. agriculturalists, environmentalists, municipalities, companies, tribes, and non-human species) (d'Estree & Colby, 2004). Frequently, government entities with jurisdiction over the disputed natural resource are directed by state and/or federal initiatives to address the biophysical and social factors when developing policy. Although seemingly effective in their

consideration of biophysical factors, their consideration of social factors is lacking (Cox, 2006; Daniels & Walker, 2001). Typically, the public's decision-making role occurs either too late in the process or after decisions are made (Cox, 2006). Effective management of these conflicts relies on understanding that they develop within a historical context that includes social as well as biophysical factors.

Human interaction with the natural environment plays an increasingly central role in local, state, national, and international environmental policy development. Previously, few analyses of environmental conflict have appeared in communication journals (Cantrill, 1993). Communication analyses focusing on natural resource users such as fishers, loggers, ranchers, and farmers, whose economic livelihood directly depends on decisions regarding environmental policy have been rare. Huspeck and Kendall's (1991) analysis of a discourse community formed by lumber workers, and Peterson's (1986, 1991) examinations of U.S. historical ambivalence toward conservation have been exceptions. However, since the early 1990s, more environmental communication studies have examined these particular natural resource users' perspectives (Allison, 2002; Higgins, 1991; Horton, 1992; Peterson et al., 1995; Sanders, 2005).

This case study focuses on Montana and North Dakota agriculturalists' discourse regarding the use of bank stabilization structures on the Yellowstone River to better understand the agriculturalists role in sustainable development of the river. Natural resources are the base of agriculture industry and sustaining that base is essential to sustaining human development (Peterson, 1997). Through the development and application of new technologies agricultural practices must make safe use of renewable resources yet, remain efficient and non-threatening to the biosphere. Agricultural policy makers' use of the *sustainability* term suggests recognition of ecological devastation caused by agricultural practices and demonstrates a concern for ecology and the environment. However, Peterson (1997) suggests that most agriculture producers are oblivious to the fact that "nature and humans are fundamentally and inextricably linked" (p. 13). Since, approximately 84% of land adjacent to the Yellowstone River is private property, much of which is still in agricultural production, an analysis of this group's perspective is needed to develop feasible Best Management Practices (BMPs) for sustainable natural resources.

Critical-Interpretive Method

Data collected to analyze agriculturalists' discourse is part of a larger research project. The 2006 Cultural Inventory of Yellowstone River included four additional interest groups: recreationalists, residentialists, civic, and Native American. A three-member research team helped develop a database of potential contacts, scheduled interviews by telephone, interviewed participants, and analyzed interview transcripts (Gilbertz, 2006). For purposes of this paper, we focus on data collection and analysis pertaining to the agriculturalists interest group.

A growing number of communication scholars advocate the use of interpretative methods to uncover meaning systems within a community. Discussing the limitations and advantages of qualitative research versus quantitative research, Waitzkin (1993) argues quantitative methods lack in capturing the complexities, context, and underlying themes and structures of discourse. Infrequently used in the past, qualitative approaches to studying environmental conflicts are increasing when examining natural resource and agriculture issues (e.g. Allison, 2002; Higgins, 1991; Peterson, 1991; Peterson et al., 1994; Peterson & Horton, 1995; Sanders, 2005).

Informant-Directed Interviews

An ethnographic approach aids the researcher in uncovering meaning systems within a culture. By becoming a "participant observer" the researcher interacts within a particular culture to gain greater insight about the meaning of social action from the perspective of members (Anderson, 1987). Despite its value in studying cultural categories and themes, time scarcity and privacy issues combined sometimes make participation-based ethnography impossible. The face-to-face interview, an aspect of ethnography, provides one of the most powerful methods for understanding how people order and assess their everyday world (Spradley, 1979). Peterson et al. (1994) suggest qualitative interviewing as an appropriate method for research into cultural meaning systems. Lincoln & Guba (1985) stress that when the research goal is to explore values systems, a methodology that captures social construction of situations must drive the interview process. McCracken's (1988) "long interview" protocol is a means for stepping "into the minds of another person to see and experience the world as they do themselves" (p. 9). The interview protocol relies on generalized questions related to the topic. We adapted McCracken's (1988) "long interview"

protocol, designing the questions to encourage informants to discuss the importance of the Yellowstone River to their lives and the management strategies for insuring sustainability of the river as a natural and cultural resource.³ Prompts, in the form of open-ended questions, were used to encourage informants to address bank stabilization techniques and any issues they thought relevant to fair and equitable watercourse regulatory policies.

Selecting and Interviewing Informants

The Yellowstone River corridor was divided into five geographic settings determined by important topographic differences found along the river corridor and included 11 Montana counties and 1 North Dakota county.⁴ Members of local Conservation Districts, the Yellowstone River Conservation District Council (Council), and the Yellowstone River Conservation District Council's Technical Advisory Committee helped "pre-recruit" participants from the agricultural community by calling ahead to set the stage for our call. We then contacted participants by telephone between 6:00 pm and 9:00 pm or 6:30 am and 8:00 am over a four day period the week prior to our visit to each geographic area. We used snowball sampling (Rakow, 1986) to obtain additional names of potential participants from each contact. We conducted a total of 86 interviews.

Each individual of the three member research team traveled to the agriculturalists' counties to conduct interviews. Interview locations included cafes, homes, personal offices, pickup cabs, and on the riverbanks of the Yellowstone River. Most interviews averaged 30-45 minutes, allowing participants opportunity to fully explain their individual perspectives. The shortest interviews lasted 20 minutes while the longest interviews took 2 hours.

Analysis of Interview Transcripts

All interviews were audio-taped except for one. The participant refused to be recorded. Detailed notes were made immediately after the interview. The audio-tapes were transcribed by a 5 member transcription team to provide a verbatim record of the informants' input. Analysis of interview transcripts was guided by a combination of McCracken's (1988) analytical structure and Strauss & Corbin's (1990) techniques for fragmenting and reformulating data and used by Peterson et al. (1994). First, each interview for a specific geographic segment was reviewed by one member of the research team. Individual utterances were examined to identify

possible themes. These themes were listed separately. Next, each theme was developed by comparing and questioning the meaning of responses. Finally, significance of each theme was determined and grouped into broad thematic categories. As the analysis progressed, the researcher developed an outline of broad thematic categories listing specific themes under each category. The most common themes and the themes that contradicted one another were examined. The outline was reviewed by the other 2 researchers. This was essential to assure themes had been appropriately captured, since all 3 researchers had conducted interviews with agriculturalists. The goal was to create a composite review of agriculturalists for each geographic setting. This method was followed for each geographic segment. Once all geographic segments were analyzed and outlined, we then compared the four geographic segments to discover the primary similarities and differences in the perspectives offered by each of the geographic settings with attention to how the geographic differences influence the issues considered most important.

Themes of Agriculturalists

Themes discovered in agriculturalists' discussions about the Yellowstone River and bank stabilization structures provide insight for resource managers as they design voluntary and/or regulatory frameworks to protect the Yellowstone River. First, agriculturalists describe their occupation as a lifestyle that provides quality of life, but entails hard work, financial and political challenges. Second, living with the Yellowstone River is a paradox for agriculturalists. Intuitively, they know the river is part of their lifestyle. They enjoy it, yet fear it. They depend on it, yet take it for granted. Finally, agriculturalists view the land as productive. They perceive productivity is enhanced by the use of the river and modification of the land adjacent to the river.

Agriculture is a Lifestyle

Agriculturalists enjoy the agricultural lifestyle. They appreciate living near the Yellowstone River on a ranch or farm, but recognize it is not valued by everyone. One agriculturalist remarked, "Some people tell me they couldn't live [here] because they'd just sit on the porch and watch the river go by." Their conversations revealed an appreciation of wildlife detailing the different animals and birds seen. One agriculturalist commented that "osprey have been an exciting thing...we look for them to come back every year. And they do." Some were

philosophical stating, "...it is part of the American Spirit that the land, as Thomas Jefferson said it...the only pure way to live was the agrarian existence...I think there is this Jeffersonian spirit in America where the land is fundamental to their happy existence..." Others talked about being permanently located on the land, "...we are not like the people that move every two or three years and change jobs...we are different. A lot of country people are that way—they stay in one spot." This in turn makes it "a good place to raise a family. We have a lot of history here." One agriculturalist said it best, "...I was born and raised here, and until I take my dirt nap, that's where I plan to be."

Hard work is an accepted part of their lifestyle. Agriculturalists described themselves as survivors, dedicated to the occupation. Some agriculturalists attributed this to being "born and raised on a ...farm to really appreciate the amount of energy it takes to produce a sugar beet crop..." and "irrigation...you got to be out there. All summer. You hardly get a day off..." Still others recognized to succeed, sacrifices must be made, "you're going to eat a lot of noodle soup...and maybe drive not too nice a vehicle..."

Enjoyment of this life is buffered by attempting to make money. Agriculturalists conversations revealed making a profit was a challenge. One stated, "You stay busy trying to really make it, to make ends meet." Throughout the Yellowstone River corridor, agriculturalists discussed difficulty in keeping up with increasing costs: property taxes, fuel, equipment, land leases, and land purchases. Cattle and crop revenues can't keep up. One agriculturalist commented, "It was fun when it was small-family farming...now...you had to be so big, otherwise you couldn't afford to buy the equipment, it's not fun anymore."

Agriculturalists see encroachment on their individual rights by others (e.g. government agencies, environmentalists, city people, newcomers) adding difficulty to making a living. Conversations revealed agriculturalists felt, "...like it becomes not your property, anymore. It's other people's business" and that these actions hinder what agriculturalists can do with the land to make a living. One agriculturalist commented, "You've got to allow the owner of the land to do what is best in his interest and the land's best interest...if you start stepping on that, then you're violating their property rights..."

Living with the Yellowstone River

Agriculturalists live with a meandering Yellowstone that needs room to move. If given space, the bends migrate naturally and slowly where outside bends are dominated by cutbacks caused by erosion and inside bends are dominated by gravel bars where sediment is deposited. This process combined with wet soils and high water table adjacent to the river, creates a corridor called a riparian area. The river's floodplain is the low land next to the Yellowstone covered with water when it overflows its banks at flood stages (Montana Audubon, 2002). Many agriculturalists' property includes the riparian area and floodplain.

They rely on the river's continued presence. Despite seasonal changes, the Yellowstone River always has water. One agriculturalist stated, "It's a big river...at flood stage, it's really big...August to September, it gets really low...it never went dry..." The river is an important source for watering livestock and crops and is credited to maintaining the agricultural lifestyle. It is "an artery in your body...It is the lifeblood of the valley..." Many agriculturalists simply stated, "It supplies our way of life," and "...our livelihood."

Respect for the river's power is an evident as agriculturalists describe the river. They discussed physical damages to property (e.g. barns, homes, fences) and physical changes to land (e.g. erosion) during floods or ice jams. Sometimes the river's ability to destroy human property and human life was described as scary recognizing the inability of humans to control the water or ice. One agriculturalist commented, "The River is stronger than I am..." and another took a lighthearted approach, "if I had been awake at the time [of the ice jams breaking free and piling up 10 feet high], I would have been scared to death." Many stories about death by drowning or close-calls with the river were told. Varied descriptions attempted to capture the character of the river and included, "taken for granted," "sacred," "beautiful," "trashy," "a pain in the neck," "free-flowing," and "a mild-mannered beast" that "has a tendency to make its own way to where it wants to go."

Land Should be Productive

Land productivity is key theme in agriculturalists conversations. Productivity is measured by soil quality, crops and livestock production. "Production would be one way to describe my place...alpha, grains..." stated one agriculturalist as he discussed

his property. Significant to production is the river. When discussing crop production, one agriculturalist commented "...If it wasn't for the Yellowstone River, there wouldn't be anything here but desert" and another said, "Without the river, without irrigation, the farm wouldn't do anything."

Another significant factor to this theme is modification of the land, including the riverbanks, to enhance productivity. Leveling practices were described, "By leveling the land and making the irrigation more efficient, it accomplished two things: the land became more productive and we...use much less water." Bank stabilization practices to prevent erosion were discussed as another form of land modification. One agriculturalist summed it up this way, "They've wanted to reseed the cottonwoods...you are not going to let the cottonwoods grow in your field...you're going to tear it up and get it ready for next year's crop...the landowner [should] be able to stabilize his banks when needed." After all, "The gravel that the river washes out of its banks ends up in big gravel bars and islands...that are not productive for anything except for noxious weeds."

Agriculturalists perceive that productive land does contribute to the American food supply, yet they wonder if Americans recognize this. "People have never been hungry in this country. Have you ever seen a famine in the US?" an agriculturalist questioned as he discussed his agricultural practices and another commented, "I believe that the American consumer doesn't understand where their food comes from, really..."

These three themes are interrelated and shape how agriculturalists view themselves and their interactions with their environment. To guarantee their lifestyle, their land must be productive; to be productive, agriculturalists' land needs the Yellowstone River. Any perceived threat to their land or the river, threatens their lifestyle creating tension within the agriculturalists' world.

Implications of Tensions

Resource managers benefit from understanding major tensions evident in agriculturalists' discourse as they discuss the use of bank stabilization structures. Rip-rap is a source of tension and frustration. Agriculturalists in all geographic segments declared bank stabilization structures the answer to bank erosion. From what they had experienced with their own structures, seen and/or heard from their neighbors, "rip-rap" seemed

to work if "you do it right" but they admitted that it was not permanent and it had to be maintained; even then, "get a bad year, and it will wash it all out." Agriculturalists struggle with trying to control a powerful force of nature. Their lifestyle is intertwined with the Yellowstone River which is a dynamic system designed to flood. For them, the river symbolizes productivity for their livelihood resulting in a tension between the material and the symbolic as they attempt to control (e.g. rip-rap) it for their production needs. Yet, this same river makes the land unproductive through erosion or flood damage.

For agriculturalists, the Yellowstone River makes land unproductive in another way. Being near the Yellowstone River is a dream of many people that agriculturalists typically refer to as "city people," "folks who are out of town and got the bucks," "bigger money," "western characters that come in from California," or "outsiders." Agriculturalists perceive them as the anti-thesis to agriculture. Because these people are wealthy, they can let the land "go green" because they don't need it for production. Or they want "the river to run where it wants to run, [because they] don't pay for it." These people contradict a lifestyle agriculturalists value. They can spend enough money to take care of the land because they are not "dependent on cattle or hay prices" and remarks were made regarding multiple times ranches "change hands, one guy has it two or three years and he is gone...You don't get to know your neighbors"⁵ They perceive these people are not motivated to protect the land with bank stabilization structures as they are.

Agriculturalists frequently discussed the expense of rip-rap. Most commented on the high cost which prevented them from using rip-rap as an effective deterrent. This was yet another operating expense that contributed to the difficulty of making the financial ends meet and challenge the worth of productive land. Many agriculturalists would juxtapose the value of their productive land against the cost of rip-rap. One agriculturalist commented, "...to restructure an old jetty, and rip-rap was three to five times the cost of the land..." and another stated, "...you could easily spend a million and half dollars. You reach a point and ask, 'Is the land worth saving?'"

Finally, agriculturalists expressed great frustration with the permitting process for bank stabilization structures. Many expressed aggravation at the inability to exercise their individual rights to

protect their land in a timely manner. One agriculturalist summed it up best when he stated:

I've worried a time or two about some of these regulations that the government has...where you can't get some very simple things done in a timely fashion. By the time you wrestle with them, why, the condition has changed, or gotten worse...by the time you deal with all these government agencies, you can get a little bit goofy...and then you get disgusted, and then you get discouraged, and then you quit,...[and] just say, 'The hell with it, they are going to do what they want to do anyway...'

Knowledge of these tensions are potentially valuable to resource managers when managing controversy over bank stabilization structures and should help when devising opportunities for agriculturalists to voluntarily adopt BMPs and agree to fair and equitable regulatory mandates.

Collaboration Opportunities

Daniels & Walker (2001) discuss increasing public dissatisfaction toward policy and policy making in United States. They postulate that problems facing public policy makers are increasing in complexity because of diverse citizenry value systems, issues that cut across technical disciplines, and no single obvious correct answer. Additionally, attitudes toward public policy no longer embrace the notion that the best public policies are made by professional managers, "well trained in their technical specialties, working on behalf of the citizenry at large" (Daniels & Walker, 2001, p. xii).

Cox (2006, p. 84)) declares that one of the "most striking features of the U.S. political landscape during the last 35 years has been the growth of citizen, environmental organization, business group, scientist, and community activist" participation. Although great strides have occurred in the public participation arena, traditional modes of public participation have been criticized for shortcomings such as public participation occurring too late in the decision-making process, lacking appropriate forums for informed dialogue, and minimal, if any, impact of the public's input on the decisions outcomes (Cox, 2006). Spurred by frustration, alternative forms of public participation have emerged. One of these forms is collaboration. Daniels & Walker (2001)

state that collaboration involves "interdependent parties identifying issues of mutual interest, pooling their energy and resources, addressing their differences, charting a course for the future, and allocating implementation responsibilities among the group (p. 10).

Due to key steps taken after the 1996 and 1997 floods, agriculturalists and other stakeholders (e.g. environmentalists, recreationalists, residentialists, USACE, Montana Fish, Wildlife, & Parks) are potentially well-positioned for a collaborative approach in managing this conflict by developing a partnership with the Yellowstone River Conservation District Council. We first provide a brief history of the Council and second we use the 5 requirements for effective collaboration (Cox, 2006) to guide the recommendations.

The Council was formed in 1999 to concentrate on issues affecting the entire Yellowstone River. It is composed of representatives from twelve conservation districts bordering the main stem of the river; a thirteenth member represents the Montana Association of Conservation District. In 1999, the Water Resources Development Act directed the USACE to perform a cumulative effects study of the river. Together, they and the Council "entered a joint cost-sharing agreement to perform a \$5.8 million cumulative effects study" (U.S. Army Corps of Engineers and Yellowstone River Conservation District Council, 2006). Other agencies and individuals were included which set the stage for stakeholders to participate in problem-solving discussions regarding management issues of the river.

Effective collaboration requires the following (Cox, 2006):

Relevant stakeholders are at the table

Due to existing partnerships with various stakeholder groups, the Council has the potential to bring relevant stakeholders that are place-based to the table. Existing partnerships include the Department of Natural Resources and Conservation (DNRC), Department of Environmental Quality (DEQ), Natural Resources Conservation Service (NRCS), USACE, US Geological Survey (USGS), US Fish and Wildlife Service (USFWS), Yellowstone River Valley Conservation Forum, which represents environmental interests. The Council district representatives have working relationships with agriculturalists. Because the Council funded the 2006 Yellowstone River Cultural Inventory, they also have access to potential stakeholders from

recreationalists, residentialists, and civic officials groups. Agriculturalists see the Council as “the only one that can bring all the ideas together.” Agriculturalists commented, “You have got to build...the relationship. The relationship has got to be there between the sportsmen groups, the Fish and Game...the farmers and ranchers, and the landowners.” Conversations suggests that agriculturalists are willing to participate.

Participants adopt a problem solving approach

The Council’s goal is to “encourage communication and cooperation among all stakeholders on the Yellowstone River” and the list of common goals⁶ reflects the focus is potentially on the issues rather than on people. Since problem solving processes included discussion, conversation, and information, the Council could address some of agriculturalists’ frustrations regarding bank stabilization structures and capitalize on the deliberative process that introduces a systems thinking approach. It was interesting to note that when agriculturalists discussed rip-rap and shifting the problems elsewhere, most of the conversations focused on the impact it would have on other humans (e.g. neighbors or others downstream) but limited comments were made about non-human species. Very few, if any, discussions occurred about the riparian area or fish habitat. When fish were discussed, the agriculturalists’ explained hiding places for fish were gone or fishing improved because more fish were caught where there was rip-rap. Only one comment explained, “it changes the fish habitat...depending on the time of year, if it gets very hot, they need the rapids...” Through the deliberative process, agriculturalists have the potential to see interrelationship rather than cause-effect linear chains (Daniels & Walker, 2001).

All participants have access to necessary resources and opportunities to participate in discussions

The Council’s goal to “provide local leadership, assistance, and guidance for the wise use and conservation of the Yellowstone River’s natural resources,” is based on the need for 1) “scientific information on which to base management decisions, 2) broad-based local, regional, and national input, and 3) technical and financial assistance to address sustainable use issues on the Yellowstone River” (Yellowstone River Conservation District Council). This suggests that stakeholders including agriculturalists have the ability to access all meetings and information. It potentially provides an opportunity for stakeholder groups to be heard, to

challenge others views, question and provide input. Some agriculturalists’ conversations embraced the notion of exchanging ideas. One commented, “the more open you can be, and the more people you get involved, the better off you are. Even the environmental ones...might see a point to what you’re doing if you explain it to them and get them involved...I think that’s true. You can’t circle the wagons all the time...” Another agriculturalist hoped to educate the USACE so they understood the agriculturalists’ perspective on needing the river. It is important to note that an underlying suggestion is that if the agriculturalists educate others, the other parties will see the agriculturalists point of view. It would be a goal of the Council that information given to agriculturalists aids in their learning other groups’ points of view.

Decisions usually are reached by consensus

Recommendations should be made to the Council to develop guidelines for consensus and to encourage stakeholder consensus. Daniels & Walker (2001) suggests that consensus allows for “an outcome supported by all parties; shared decision space as dictated by the decision authority; participation structured by the parties; potential for negotiation; potential shared power and control; and guided by the philosophy of full support of the agreement” (p.71).

Relevant agencies are guided by the recommendations of the collaboration

When the Water Resources Development Act directed the USACE to perform a cumulative effects study of the river, they and the Council entered a joint cost-sharing agreement to perform a \$5.8 million cumulative effects study. This agreement potentially insures local input and direction through the Council, into a federal effort to study the river, and develop BMPs and project guidelines for use on a voluntary basis.

The collaborative approach potentially provides agriculturalists and other stakeholders full access to all meetings, information, and on-going opportunities to participate; opportunities to gain respect and consideration of all stakeholders’ perspectives. They have the opportunity to influence future visions for the river, set decision-making criteria, and contribute to a set of recommendations. The Council provides a forum where agriculturalist can engage in “problem-solving discussions, rather than advocacy and debate” (Cox, 2006, p. 10).

Summary

Agriculturalists' conversations about bank stabilization efforts provide an opportunity to understand the constitutive and pragmatic role environmental communication plays in shaping agriculturalists' perceptions about their environment, the "best ways" to prevent erosion, and their understanding of sustainable agricultural practices. James Cantrill (1993, p. 71) notes that cultural factors such as "deeply embedded environmental value systems" potentially influence the way people receive messages regarding their environment. Attention

must be paid to the potential shifts in cultural perspectives as they are found in the differing reaches of the river. Messages about voluntary adoption of BMPs and fair equitable regulatory mandates should include "social goals within the framework of traits deemed necessary for sustainable agriculture, thus encompassing small farms and rural communities" (Peterson, 1997). A collaborative approach to the bank stabilization controversy could increase agriculturalists' awareness of the connections between river management strategies, the overall health of the system, and their and others' individual goals.

Endnotes

¹ Common bank stabilization measures include armor, which is a cover of resistant material such as large rocks placed along the bank and extending into the river to protect the soil; channel structures are walls built into the active channel of the river to divert the fastest portion of the current away from the banks; vegetative methods usually use tree trunks angled into banks to redirect swift currents away from riverbanks. (Montana Audubon, 2002)

² Section 10 of the Rivers and Harbors Act and Section 404 of the Clean Water Act authorizes the U.S. Army Corps of Engineers to evaluate and regulate construction activities affecting rivers, streams, and wetlands.

³ **Example Protocol-Agricultural User (Gilbertz, 2006)**

1. How many years have you been in operation here?
 - i. Do you live here full time?
 - ii. IF NOT: How many months a year is your home occupied?
 - iii. How do you describe your place to people who have never been here (there)?
2. What was it about this site that made you (your family) want to locate here originally?
 - i. Is the river important to you?
 - ii. What do you like best about being near the river?
3. Are there any problems associated having property this close to the river?
 - i. What do you think is the most important problem?
4. Has there ever been erosion damage to your property?
 - i. (If yes) How much of your place was affected?
 - ii. Is there anything that should be or that can be done about erosion?
 - iii. Why would that be your course of action?
5. Looking ahead 10 years, what do you expect your place to be like?
 - i. Will the physical facilities change?
 - ii. Why is that?
 - iii. As you think about the next generation, what are your primary concerns?
6. Some people talk about the river corridor...How is the river corridor different from the river itself? (follow-up to explore "riparian" zone-with or without using that word)
7. Besides what you have already described, what are the various uses of the river?
 - i. How do you think the rights of all users can best be balanced?
8. What keeps you here?

Of everything we've talked about, what is most important to you?

⁴ Transcription of Segment 5 interviews are on-going at the time of writing this paper and will not be included in the analysis.

⁵ The recognition of this shift in value of land from production to recreation was clearly articulated in geographic segment II.

⁶ Maintain and improve water quality; Maintain and improve water quantity at critical times of low flow; Encourage and promote family farms and ranches along the Yellowstone River based on sustainable use of natural resources; Control non-indigenous species of plants and animals that are harmful to agriculture and natural systems; Develop and support recovery efforts for threatened and endangered river species with particular emphasis on efforts that sustain agriculture and other economic river uses; Enhance bird, fish and wildlife habitat and wildlife programs compatible with agriculture; Encourage partnerships with government and non-government groups; Enhance community involvement in river stewardship; Develop recommendations for "Best Management Practices" to maintain a naturally functioning river system

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Communicating Biodiversity in Swedish Park Management Organizations

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Abstract

This paper deals with the definition of biodiversity in urban areas as it is perceived by officials and other professionals in park administrations and park management in Sweden. The background is the Convention on Biodiversity, which states that biodiversity must be promoted and used in a sustainable way. Biodiversity in urban areas is rather high, especially where there are old trees and a large variety of horticultural and/or indigenous species. Mediating knowledge about promoting biodiversity in urban areas (parks) and implementation in park management organizations is a matter of communication. The purpose is to describe how knowledge and experience about biodiversity within the park administration is being communicated between different actors with different professions at different levels in the organization. The communication aspect is at a face-to-face level and leans to theories about learning organizations and social psychology. Why do plans and policies talk nicely about achieving large national and international goals and still why do workers involved in the practical maintenance of parks not change their ways of cleaning and weeding? Both groups have been asked about their attitudes and understanding about biodiversity; the problem seems to be missing links of communication, heavy trust in traditions, and different goals for park management.

Introduction

Sweden ratified the Convention on Biodiversity in 1993. The government commissioned measures and mediated assignments through the Ministry of Environment and the Swedish Environmental Protection Agency (and a few other departments) who in turn stays in contact with municipalities mostly through County Administrative Boards. Roughly, all of these authorities mostly and traditionally deal with *nature* in *countryside* areas in a typical Swedish top-down perspective. In the case administrations for management of *urban* green areas are involved in biodiversity promoting projects it has been by initiative from the local authority, more of a bottom-up perspective.

To promote biodiversity in urban areas, new knowledge and altered visions on parks and park management in different dimensions are required. One of the keys to change park management to fulfill two of the national environmental goals ("Good built environment" and "A rich life of flora and fauna") lies in better communication. In this research project¹, three cases of Swedish park administrations are explored. The purpose is to describe how knowledge and experience about biodiversity is being communicated within the park administrations, and between different actors with different professions² at different levels in the organization.

It has been difficult to grasp the issue since there is an apprehension that park administrations

do not deal often with biodiversity in urban areas. Biodiversity in urban areas is however rather high, especially where there are old trees and a large variety of horticultural and/or indigenous species. This also has to do with the *definition* of biodiversity, which is not always evident. A few municipalities were asked about their measures made to promote biodiversity. It showed that there are several projects with direct or indirect thoughts of promoting biodiversity in some municipalities while others have not had much thought about it. Biodiversity aspects are mentioned in policies and plans; certain spots in parks are treated differently than in traditional park management but there is a gap between plans and reality. And there is a gap between treating a small spot in a park differently and the traditional "cleaning and weeding" that still is the most common park maintenance tradition. Over the last fifteen years it has been rather easy to apply for and get funding from the Swedish government for projects of nature care; very few have been located within urban areas. I am also looking at how the dialogue goes on about everyday management in a long-term perspective. Projects as referred to above are often limited not only physically but also in time.

In order to be able to describe how biodiversity in an urban or park management context is being communicated, the question must be divided into two parts. The first important question is about defining what biodiversity is in an urban context. The next question is about patterns of communication. What characterizes the working cultures of a Park Administration? Eventually it

will be about synthesizing these two questions. This paper mainly focuses on how biodiversity is perceived in an urban context.

Theoretical Approach

Communication as a field of research is wide and extends over many different fields. Theories I am influenced by, which directly or indirectly deal with communication, relate to studies on working life and touch different aspects of mediation of knowledge in the new economy (Gibbons, 1994; Schön, 1983; Svensson, 2002). In this field, there is also research on learning organizations (Argyris, 1996; Nixon, 1997) and studies of communication between research and practice (Gustavsen, 2002; Lieberg, 2001; 2004; Persson, 1997; Svensson, 2001; 2002). Research within this field shows that the knowledge in demand is of a new kind, as is the way knowledge is mediated and communicated. It is something else than just more of traditional vocational education. The contextual aspect of knowledge and processes (the "knowledging") rather than the goal is emphasized. It is a question of handling situations and coherences characterized by uncertainty and unpredictability with cooperation and in dialogue with others. It is about structuring the "thinking" about wide fields of problems and activities where old roles of experts and old models for problem solving are no longer enough.

Collaborative Learning is another and related research area dealing with how practice is developing knowledge in collaboration with stakeholders (Argyris, 1996; Daniels S; Walker, 1996; Ljung, 2001). The field of Environmental Communication at the Swedish University of Agricultural Sciences is developing, in a Swedish context, knowledge about interaction between actors within the sectors of Agriculture, Nature care, and Food provisions. I have collected some inspiration from recent theses in social psychology and scientific methods (Hallgren, 2003; Ljung, 2001; Westberg, 2005).

Communication in an administrative organization is a part of something larger, a tradition, a culture or a discourse. In the cases explored, two sometimes different cultures and discourses distinguish Park management and Nature conservation. What I will try to discover is whether these cultures have different or partly similar patterns of communication or cultures of communication. In order to do so, the subject of biodiversity must be the focus. There is also the dimension of action built into this complex situation. What is done to implement knowledge and to promote biodiversity in practice in the parks? The dimension of action considering park management is represented by involving park workers in the study.

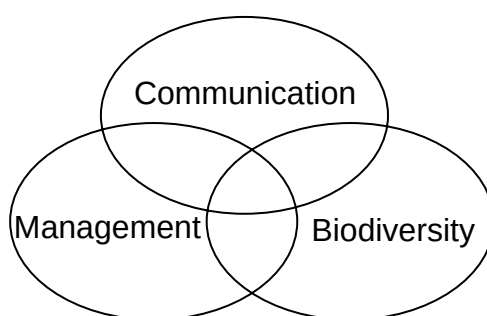


Illustration 1. Model of thoughts about how communication, park management, and biodiversity are tightly connected and dependent from each other. What happens in the intersections between the three components: communication, biodiversity, and management? Is it about old concepts like technique and knowledge or are there new concepts waiting to be formulated?

Methods and Materials

The results in this paper are based on two case studies.³ I have combined different methods of data collection, like participating observations and

interviews. The data are thus entirely qualitative and the methods for analysis have a hermeneutical, phenomenological approach. The method for analysis of data is about studying people's way of perceiving their surrounding world and certain phenomena. The phenomenographical technique (Larsson, 1986) is combined with an attitude of analysis of cultures (Ehn, 1982) since I study different cultures of work places but also different cultures of knowledge. The analysis reveals a number of different ways of perceiving and describing biodiversity in an urban context.

The empirical material I use is partly from a pilot study consisting of telephone interviews, visits to park administrations, and mainly from the two case studies consisting of diaries from participating observations (two working weeks), and also transcribed deep interviews (twelve interviews averaging 80 minutes). The texts contain a broad range of issues where some parts contribute to a contextual understanding of the cases and some parts explore the biodiversity aspects more specifically. In the study of perceptions of biodiversity in an urban context I searched for how many ways informants perceive and express biodiversity, either clearly spoken or interpreted (read between the lines). The result is presented as Biodiversity as something.

Results: Brief descriptions of Cases and Characteristics of Communication Patterns

The two cases this paper refers to are the Park Administrations of two municipalities in Sweden. I call them Small-town and Middle-town. Small-town has around 10,000 inhabitants and the Park

Administration consists of one official and 16 park workers organized in-house. The communication is characterized by closeness and yet also a hierarchical, authoritarian leadership. Around maintenance or even management, or other aspects where planning of the future is involved, they seldom communicate in other ways than face-to-face. They do not even make proper written plans when rebuilding or building new parks. Knowledge is mediated directly face-to-face. "It is all inside of us. We handle it within dialogue with each other, me and my park workers."⁴ However they lack some knowledge of ecology since it is such a small place with few officials.

In the other case, Middle-town represents a middle range sized municipality (Swedish measures!) with around 100,000 inhabitants. The park maintenance is outsourced to a few contractors. The communication between the park administrators and the contractors goes between one or two persons out of 15 in the office and the foremen of the contractors. Park workers seldom or never see the people from the administration office. I worked with a team maintaining the central parts of the town and interviewed two of them. They have much tacit and explicit knowledge due to many years of experience, and solid green educations, just as they do in the case of Small-town. However, the possibilities to communicate with people in the office seems limited since they were outsourced. Before 1993, they were organized in-house or at the Park Administration and had closer contact. The people working at both parts are mostly still the same, so the possibility of comparison is high.

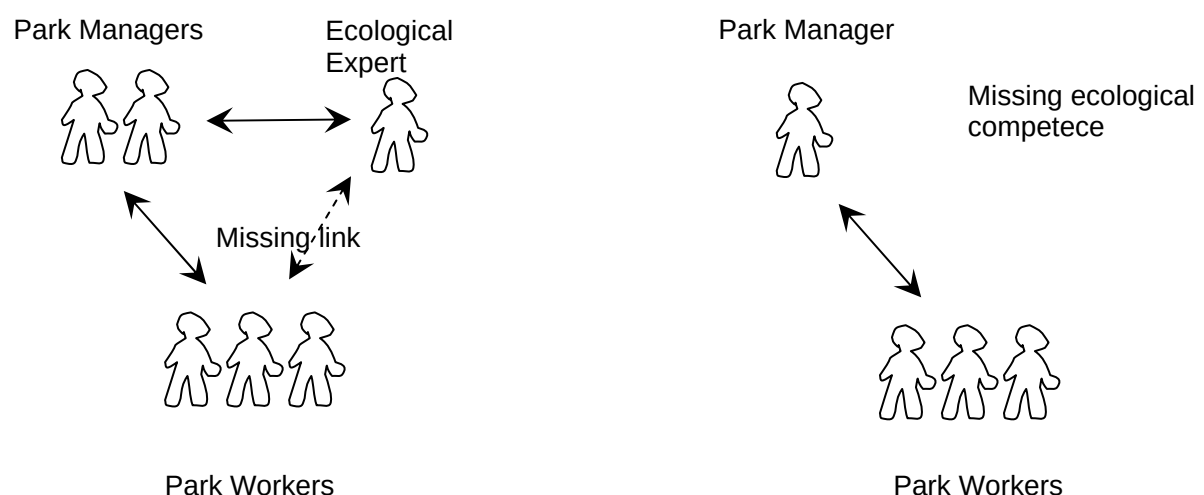


Illustration 2. Characteristics of communication patterns

Concepts of Biodiversity in an Urban Context

The concept of biodiversity plays on different arenas. First of all, it expresses something concrete or *objects*. Biodiversity is expressed as a variety of species and biotopes or as creations to promote biodiversity; I call them artifacts and will come back to them later.

Secondly, there are a group of concepts that express *actions* and *processes*: actions like effects of management and processes like the cycle in nature. Thirdly, there are a number of perceptions of biodiversity that are more or less *abstract*.

Perceptions of biodiversity in an urban context are a complex phenomenon, but it is possible to express in these three main categories 1) Objects, 2) Actions and processes, and 3) Abstract phenomena. Below those, there are the subcategories that are more exciting. They will be described in the following and exemplified by some citations from the two cases. Whether these perceptions correspond with current scientific perceptions of biodiversity or not is irrelevant at this stage since there are no rights and wrongs when it comes to perceptions of phenomena: they are all subjective (and matter in the way concepts are being used and communicated).

OBJECTS	ACTIONS & PROCESSES	ABSTRACT PHENOMENA
Biodiversity as species and biotopes	Biodiversity as the cycle in nature	Biodiversity as intrinsic value
Biodiversity as artifacts	Biodiversity as unconscious effect/effect from no management	Biodiversity as experience
	Biodiversity as effect from purposeful management	Biodiversity as knowledge
		Biodiversity as visions
		Biodiversity as competitor
		Biodiversity as disturbance
		Biodiversity as care
		Biodiversity as responsibility
		Biodiversity as interest

Table 1. Fourteen different ways of expressing what biodiversity is in an urban context, expressed by informants from two case studies in two different municipalities' park administrations in Sweden, 2005.

Biodiversity as Objects and Processes

The category *species and biotopes* and the category *artifacts* can also be split into natural, cultivated, or created objects. Natural species and biotopes will not need any further presentation. I do not intend to contribute to the debate about indigenous and immigrated species. Cultivated objects and created objects, on the other hand, are relevant to explain. By cultivated objects I mean plant species that are cultivated in the first place. In parks it often is a question of horticultural plant material and it is represented by all types of plants, from trees and ornamental shrubs to perennials, annuals, ornamental grasses, and bulbs. Created objects are of two kinds, built biotopes and artifacts. The later is my name for artificial environments created specially to promote biodiversity. Two examples of these are “fauna-depots” and “nesting boxes” with wet wood (mulm). The idea of building fauna-depots was coined after a storm when many old trees blew down in December 1999 in southern Sweden. An entomologist got an idea and sought cooperation with the municipality of Lund. They gathered some old coarse trunks in a suitable place and put a sign up informing the public that they were favoring insects living in dead wood. A subsequent idea, the nesting boxes with “mulm,” also favor insects, but this time insects that live in the mulm in cavities in old trees. The nesting boxes are here described by a project manager for nature conservation projects:⁵ “It is, somehow, a way of imitating nature and promotes rare insects. (They are) artificial high tree-stumps...”

The processes (see Table 1 above) that do not involve human actions are *Biodiversity as the cycle in nature* and *Biodiversity as unconscious effect/effect from no management*. These I summarize as successions. When talking about traditional park management it often is about intensive maintenance characterized by frequent tidying, weeding, and fighting against noxious insects. This does not, in the long run, promote biodiversity and it is resource consuming. In times of resource constraints it has been common to reduce or withdraw maintenance for some areas. This has, in the short term, increased biodiversity, but it is often said to be not a sustainable strategy. In a short term perspective, free growing plantations become “hang-outs” for birds and small mammals. In that way, you might say biodiversity increases, but in a longer perspective succession will make the area overgrown and species will

decrease again. Actions of management such as differentiated management or plantation of species specially chosen to increase biodiversity belongs to the process of *purposeful management*.

Biodiversity as Abstract Phenomena

In the following short descriptions, the different perceptions of biodiversity with an abstract nature are accounted for.

Biodiversity as Intrinsic Value

This is a biocentric perspective; the nature is there for its own sake. Statements that signal a view of nature, that nature rules itself and that it is not possible for man to govern nature, or that we should not try to govern it, describe this concept of intrinsic values. In cases where we do influence nature, which of course a built park is an example of, there are still statements showing that here “nature” rules itself or at least natural processes may continue in spite of man’s involvement. One park worker expressed it like this when we were talking about the intensive tidying as we were removing all sticks and branches from a perennial border:⁶ “The birds will probably find what they need for their nests (anyway).”

To let dead plant material stay where it falls, together with the opinion that you can’t promote biodiversity by management, are other statements that reflect biodiversity as an intrinsic value.

Biodiversity as Experience

This is a kind of opposite to the former category since it reflects an entirely anthropocentric perspective. Experiences of biodiversity are human experiences and may be described in many different ways. Sometimes the informants talk about their own experiences, about a passion for plants, about how exciting plant history can be or about discovering little bugs together with children or about their interest in exotic trees or wild grown environments. Sometimes it is about experience for the public; perceptions on pedagogy also end up here: there is a large educational value in parks.

Biodiversity as Knowledge

The voices in the cases also speak about knowledge of nature: for example, specific knowledge on taxonomy, to be able to name and distinguish different species and varieties from each other, both flora and fauna and both wild and cultivated. The category is close to species and biotopes in the group of object categories, but I define knowledge as an abstract phenomenon. To

this group also belong knowledge of ecological connections and the cycle of nature. Another type of knowledge that is more or less hidden is the tacit knowledge about professional skills, among other things.

Biodiversity is also expressed as attitude, sometimes through statements with a positive touch and sometimes through statements with a negative touch. There are also statements expressing a *change* in attitude from negative towards positive, a change that is an ongoing process. Attitudes often build on knowledge or ignorance. Therefore, biodiversity as attitudes is a subcategory to biodiversity as knowledge.

Biodiversity as Visions

Visions are expressed, among other things, in plans and programs and by the ones who have written these documents, like some of the informants. Visions express something they want to achieve that is not yet there in the physical world. It could be expressed as a wish, a direction of will or an abstraction of some kind. "Biodiversity is popular." The government contributes to projects promoting biodiversity. "I have a small motto," one representative of parks says, "more constructions in the forest and less construction in the park." Also perceptions about the national environmental goals fit into this category of visions.

Biodiversity as Competitor

Biodiversity competes with many other interests, of which one is aesthetics: a perception I discern between the lines is about biodiversity being a source of irritation. Taking biodiversity into consideration is a disturbance according to the traditional way of managing a park. Biodiversity becomes a disturbance when the traditional way of cleaning and weeding the park contradicts what is positive for biodiversity, thus leaving what in the traditional way is looked upon as ugly, untidy, and unaesthetic. A sick, broken tree in the middle of the livingroom does not fit in, while it does contribute by attracting insects, which in turn may attract birds. Biodiversity is also a competitor by competing for resources: one informant relates to the ambivalence in choosing between new asphalt on the cycling roads or planting meadows with spring bulbs and perennial borders.

Biodiversity as Care

This is about the opposite of technique (i.e., the care for the growing life and the delicate skilled work by hand within maintenance). The category is close to purposeful management.

Biodiversity as Responsibility

Biodiversity as responsibility is in the empirics about people taking responsibility for following up on the projects they once started in order to promote biodiversity. I can see two parts in this responsibility: partly the economic responsibility (which could end up in the competitor-category) and partly a responsibility for continuously developing new visions of biodiversity promotion. Responsibility is also expressed as a concern for the future: biodiversity as a kind of life insurance. This is expressed by a landscape architect working outside the park department in Middle-town but together with some officials making plans for the green structure.⁷

And I think there is a responsibility for keeping a rich selection of plants and animals for coming generations and you never know what can be of use for people too, what role they will play in the circle of nature and also that we may need to extract substances or other things. There is a need for room for all kinds of life somehow.

Biodiversity as an Interest

This category consists of two components: on the one hand the informants talk about biodiversity being popular when appointing new employees and when financing new projects. On the other hand, biodiversity is an interest of a small elitist group separate from the public.

Discussion and Conclusions

The fourteen different categories of perceived biodiversity together paint a complex picture of what the professionals in the two cases consider as included in a description of biodiversity in an urban context. I found split purposes for the management of parks. It differs whether what function is put first and ranked as most important. Parks are cultural phenomena; they have been and still are, to begin with, for people to visit, enjoy, and use in different ways. The situation where there are large biological values and national and international responsibility to sustainably use and promote biodiversity however makes the goal for parks twofold (i.e., also giving room for nature in the cultural domain). This is something park managers are getting used to; the change in attitudes gives a signal about that. Still there is a gap between the goal of social function mainly for the public and the ecological function, as there is a gap between people working with the issues, who they work for, and what goals to achieve. One of the discrepancies

is about time. What seems to be the best decision in the short term could contradict the best decision for the long run. This turns into a political question, which this paper is not about.

The purpose was to describe how knowledge and experience about biodiversity within the park administration is communicated. There are many issues being communicated within park administrations that are not at all connected to biodiversity aspects, economic aspects, and divisions of duties for example. When looking into communication, I put “my biodiversity glasses” on but also glance a bit furtively into other subjects just because there are so many things a park administration deals with and they all paint a complex picture of contextual background understanding. One conclusion about communication is about closeness and distance, another is about the kinds of media communicated, the third about perspectives and glasses.

When workers work closely together, written media is less necessary. Sitting in the same corridor, frequent visits by colleagues’ promote the face-to-face mediation of knowledge. When park workers seldom meet their supervisors, they miss out on opportunities for communication. I have mentioned two examples of this. In one of the cases, Small-town, they seldom communicate in ways other than face-to-face. They do not even make written plans when building new parks. Knowledge is mediated directly face-to-face. In the example from the other case, Middle-town, a report

with an inventory of old trees with nesting holes lay on the table where the park workers gather to eat three times a day. They had not read it nor had instructions about what to do with it. And in Middle-town, the Park administration is well known for many biodiversity projects and makes plans and policies that agree with the national goals for biodiversity.

Communication characterizes, in social psychology, by exchange of perspectives. By trying to incorporate the other’s perspective, we have better possibilities to learn and to understand each other. It is like trying to look at the world through someone else’s glasses (Hallgren, 2003; Hallgren, 2005). But what makes us able to take on someone else’s perspective? Is it easier when we know each other or do we have to have the same or similar conceptions of the world, be a part of the same discourse? How much do prejudices matter? Is someone less open to learning and exchange of knowledge if they believe they already know what the other will say? I believe susceptibility to new perspectives is dependent on prejudices we have for each other, but also curiosity, knowledge from earlier experiences, etc. In what situations is it easier or harder to take on each other’s perspective? When are we susceptible to learning? How much do hierarchies and gender matter? Does a male official really listen to a female park worker with much lower wages but with solid work experience and education? These are some of the aspects I continue to work with since there is much weight put on communication in ongoing studies⁸.

Endnotes

¹ The research project referred to is an ongoing (2004-2008) PhD-project: Bengtsson, Petra, *Park Management and Biodiversity –on communication and dissemination of knowledge in Swedish Park Administrations*

² The professions are officials and workers with a field of work in park management and nature management.

³ Three case studies are included in the PhD-project. Two are conducted. The three cases are Park Administrations in municipalities of different size and with different form of organizing their park management: in-house, contractors and a mix of both.

⁴ Three case studies are included in the PhD-project. Two are conducted. The three cases are Park Administrations in municipalities of different size and with different form of organizing their park management: in-house, contractors and a mix of both.

⁵ Citation from interview within case study in Middle-town 2005.

⁶ Citation from participating observation within case study in Middle-town, 2004.

⁷ Citation from interview within case study in Middle-town 2005.

⁸ See note i.

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Advertising in Time Magazine During Oil Price Spikes: An Analysis of Print Ads in 1979-1980 and 2004-2005

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Abstract

This article examines green print advertisements by automotive and oil companies in Time magazine during periods of extraordinarily high oil prices. The two time periods covered are 1979-1980 and 2004-2005. Specifically, this article examines what messages are communicated during times of high oil prices, the similarities and differences in those messages, and what automotive and oil companies have done in response to rising oil prices. 207 ads are analyzed, and many of the messages are similar between the two time periods, except for obvious technological advancements. Claims remain vague in 2004-2005, and it is generally difficult to assess how companies act on their rhetoric because they do not define specific environmental objectives in ads.

Introduction

This research project analyzes green advertising in print ads that place automobiles or petroleum in the context of the environment; encourage green living through the use of a particular automobile, auto company product, or petroleum industry product; or seek to enhance an automobile or petroleum company's green image (Banerjee, Gulas, & Iyer, 1995). Specifically, this project examines green print ads from two, two-year segments (1979-1980 and 2004-2005) during two major historical periods of record high oil prices (late 1970s – mid 1980s and 2004 – 2005).

Beyond ad analysis, the study compares the content of the environmental ads to actions taken by companies sponsoring the environmental ads in the periods following oil price increases. For example, Ford advertised innovations to its Expedition SUV engines in 2005, yet a small footnote at the bottom of the ad informed readers that the gas mileage was still quite low, causing readers to question how much the mileage had actually improved. Thus, it would seem that Ford expended a lot of effort to advertise a green concept (fuel efficiency), yet it failed to make significant improvements in fuel economy.

This study poses three research questions intended to explore green advertising: messages offered during periods of high oil prices; similarities and differences in the messages and designs of ads of the two periods; and what auto manufacturers and oil companies do to implement actions in line with the rhetoric espoused in ads. Answers to these questions are a vital component of the current climate change debate. If manufacturers continue to delay the implementation of energy efficient technologies, the

climate may be adversely affected as the number of cars proliferates around the world. According to the US Environmental Protection Agency (EPA): "Most of these emissions, about 82%, are from burning fossil fuels to generate electricity and power our cars" ("Global Warming – Emissions," 2006). Further, emissions from internal combustion engines (the type used in cars) are thought to be a major contributor to climate change ("Global Warming Basics," 2006).

Banerjee, Gulas, and Iyer note an important justification for analyzing green ads: "Research is needed to help us understand how advertisers have perceived and utilized environmental issues in advertising their products and services because advertising is both a reflection of and a formative influence on our culture (Pollay 1986)" (1995). Another perspective, from Karna, Juslin, Ahonen and Hansen (2001) notes: "Given the heavy reliance of the consuming public on mass media and their general cynicism towards green advertising, there is a need to analyze green ads and how they reflect companies' level of environmental activity and performance" (Karna, Juslin, Ahonen, & Hansen, 2001).

Several other issues surround the use of green advertising, including whether manufacturers take actions consistent with their environmental messages. For example, despite the oil shocks of the late 1970s, Ford Motor Company's average miles per gallon (mpg) among its fleet of vehicles was 22.6 mpg as of 2003. This is compared to the average miles per gallon of Ford's famous Model T automobile, 100 years ago, of 25 mpg ("Driving Up the Heat," 2004).

Studying the consistency of action with advertising is important in order to establish consumer trust in organizations, and to determine how or whether companies should be held accountable for their products' contributions to global climate change. The former is a documented problem among researchers. Dagnoli, in a 1991 study, notes: "While almost three-fourths of respondents (72%) rated environmental labeling on consumer products as important, only 15% found current environmental packaging claims 'extremely or very believable' (14)."

Statement of the Problem

The United States has experienced two defined periods of oil price increases in recent history ("Crude Oil Prices 1861-2005," 2006). These periods are 1975-1985 and 2004-2005. For the purposes of this project, green advertising is analyzed in 1979-1980 ((the years during the 1975-1985 period during which oil prices were highest ("Crude Oil Prices 1861-2005," 2006)), and 2004-2005. Thus, two years from each period are analyzed.

Rising oil prices cause concern among consumers and auto manufacturers about new technology, and about fuel efficiency. News stories from 2004 and 2005 in the popular press discussed the rising price of oil and its effect on the automotive and oil industries (Connelly, 2005; Geist, 2005; Greenberg, 2005; Halliday, 2005).

In spite of rhetorical and advertising concentrations related to heightened oil prices, it remains to be seen how auto manufacturers and oil companies will react to the high oil prices *long term*. After all, gas-guzzling SUVs appeared in Americans' driveways en masse *after* the supposed "oil shocks" of the 1970s.

Rationale for the Problem: Possible Value

Green advertising was not a defined term during the 1970s, and an analysis of the similarities and differences among ads of 1979-1980 and 2004-2005 provides evidence of the roots of green advertising. In other words, this analysis contributes to the historical knowledge of the evolution of green advertising, which was just beginning to evolve as a concept in 1979-1980.

Further, answers to the research questions provide relevant information regarding the genuineness of auto manufacturers and oil companies with regard to their environmental policies and

initiatives. Determining whether the commercial messages of these corporations (in the form of advertising) are consistent with their actions is an essential component in assessing how seriously these industries address climate change ("Global Warming Basics," 2006).

Limitations

This study is limited to an analysis of print ads in *Time* magazine. Thus, findings are not generalizable to the realm of television and radio advertising, as well as other forms of corporate communication beyond advertising (i.e. media interviews, news releases, etc.).

Another important limitation is that much more information is available on the actions of auto manufacturers and oil companies following the 1979-1980 oil price increases than after the price increases of 2004-2005. This is simply because a greater amount of time following 1980 allows for the assessment of both long and short-term trends. By contrast, an analysis of current actions is limited to the fourth quarter of 2005, and available literature on this period is limited if not non-existent.

Finally, comparisons of the consistency of corporate actions with the commercial messages included in their ads are based on information available in the popular press. Therefore, proprietary actions taken by the companies, which are not made public, are not included in the analysis. For example, an automotive company might have invested a significant amount of funds into researching an alternative fuel in the 1980s, and because it was not feasible for market release, it never became public.

Literature Review & Theory

There is a great deal of information in popular literature about auto manufacturer reactions to rising oil prices (Connelly, 2005; Geist, 2005; Greenberg, 2005; Palmeri and Beucke, 2005). A major reaction from auto manufacturers appears in ads in 2005, which emphasize increases in fuel economy. Oil companies have responded by introducing public relations image ads telling a story about how they are addressing the pollution associated with fossil fuel consumption. A current example of this type of advertising is the BP "Man on the Street" campaign. The ads feature ordinary people talking about their environmental concerns juxtaposed with their realistic needs for energy production. The intent of the ad is to further the image of BP, in the minds of

consumers, as a company pursuing environmentally responsible energy production.

Green advertising is a relatively new concept. According to Banerjee, Gulas, & Iyer: "Though the volume of green advertising has increased dramatically, environmental claims are relatively new in advertising" (1995). However, given that many car companies (particularly foreign ones) rose to prominence during the previous oil price increases, it is logical to assume that "green advertising" of some form occurred during the first period of oil price increases, even if it had not been academically defined.

Expected Result: Ad Analysis

Though this exact study has not previously been conducted, previous similar studies produced some expected results that are useful in the context of this study. First, the same Banerjee study that produced the framework mentioned above also found that the most common theme in the ads studied was the promotion of a green image for the advertiser. However, promotion of a green image did not necessarily equate with details about how environmental goals were to be achieved, as evidenced by the study's finding that the level of greenness was rarely "deep."

Regarding appeals to the consumer-targets of green ads, the Banerjee study noted that companies frequently use emotional appeals, which included flattery of the values of consumers who pursue a green lifestyle or purchase the green products being promoted.

Another study of green ads, also conducted in part by Banerjee, again found that image ads comprise a large portion of green advertising. The study notes: "A majority of advertisers in the sample attempted to project a green corporate image rather than focusing on the environmental benefits of their product or service" (Kilbourne, Banerjee, Gulas, & Iyer, 1995).

Thus, it was expected that green ads examined in this study would also largely contain image-enhancing environmental information, rather than much real environmental substance.

Consistency – Do Oil & Auto Companies Act Consistently with Their Image?

Limited research exists on the consistency of actions with environmental advertising by major

corporations. One study examined the forestry industry in Finland; Karna, Juslin, Ahonen, and Hansen (2001) said "Findings suggest that there is a clear environmental substance behind environmental advertising claims in this industry." However, the specificity of this study does not allow a generalization to the automotive and petroleum industries. Still, it does indicate that corporate efforts exist to bring advertising and action into sync.

There is an interesting trail of logic following consumer demand for environmental products and consumer actions, which has probably not been lost on corporate decision-makers. An article by Dagnoli (1991) indicates that "The study found 83% of respondents said they prefer buying environmentally safe products.... (14)." However, another study conducted by Mandese (1991) in the same year notes "While the study does show consumers are sensitive to environmental issues, it also shows that being concerned doesn't mean consumers will change buying patterns (1)."

Thus, the message to corporations may be that as long as consumers feel that corporations are pursuing green options, they do not have to deviate from current purchasing patterns. Logically, when applied to the auto and petroleum industries, it may be enough for consumers to know that green products are being pursued and offered, as long as they don't have to use them or sacrifice current standards in order to be green.

Consumer Response to Green Ads

Another potentially interesting result is the changing perception of consumers toward green advertising. Though consumer surveys are beyond the scope of this study, Carlson, Grove, and Kangan note: "Results suggest that those claims which extol the environmental benefits of products and those that are designed to enhance the environmental image of an organization are most prone to be considered misleading and / or deceptive" (Carlson, Grove, & Kangan, 1993). Thus, the differences between environmental ads in 1979-1980 and in 2004-2005 can assist in gaining an understanding of whether or not companies responded to changing consumer tastes and perceptions in the interim period, during which environmental awareness (anecdotally) has undoubtedly increased.

In that vein, another study in 1995 examined whether or not consumers actually comprehend certain terms used by environmental ads:

Two national surveys, with a total of 2,004 respondents, were conducted to examine comprehension of the terms “recycled” and “recyclable.” Only about five percent of respondents exhibited a thorough understanding of “recycled” and “recyclable” consistent with EPA and FTC definitions. Moreover, respondents displayed a limited understanding of “pre-consumer waste,” assumed a high percentage of recycled content in products labeled “recycled,” and inferred widespread availability of recycling facilities whenever a “recyclable” claim was made. Less educated and lower income respondents displayed higher levels of miscomprehension than more advantaged respondents. These results suggest the need for regulation of environmental advertising and labeling claims and for consumer education (Morris, Hastak, & Mazis, 1995).

Consumer comprehension and understanding of green ads is important, given that auto manufacturers and oil companies are spending a great deal of money to apprise consumers of their environmental positions. If consumers, by and large, do not understand the intricacies of specific environmental terms, it would help to explain why Banerjee consistently finds high-level image ads as the primary focus of much green advertising. Further, it leads to similar expectations in this study.

Research Questions

The research questions below consider three important concepts related to green ads during times of high oil prices: the messages used by auto and oil companies, the similarities and differences in those messages between the two time periods examined in this study, and how or whether auto manufacturers and oil companies follow up on the environmental rhetoric in their ads.

What are the similarities and differences among ads of the 1979-1980 and 2004-2005 oil price increase eras?

Though ads in the late 1970s may not have been termed “green ads,” many of the messages, symbols,

and themes should be the same. Analysis of this question combines the specific terms outlined in the modified Banerjee framework with empirical observations noted during the data-gathering phase.

What messages do auto manufacturers, oil companies, and auto and oil associations include in their ads in times of high oil prices?

Technological differences in the two eras are accounted for in this study. For example, the only environmentally friendly technology available to auto manufacturers in the late 1970s may have been to increase fuel efficiency (miles per gallon); whereas in 2004-2005, manufacturers could promise hybrid electric vehicles, or the use of alternative fuels. Similar to the analysis of the first research question, information utilized for the analysis of this question is based on observations collected during data analysis, and specific observable points from the Banerjee framework.

Did manufacturers pursue clean energy technology and a reduction in overall miles per gallon in response to the 1970s era or 2004-2005 price increases?

While the second question seeks to determine what technologies are discussed *during the ads in periods of high oil prices*, this question asks what technologies are developed and implemented *after oil prices settle down*. For example, after 1980 did car manufacturers continually pursue better fuel efficiency and alternative technologies to the internal combustion engine? Anecdotal evidence says that at least American auto manufacturers did not – after all, the rise of gas-guzzling SUVs such as the GMC Yukon and Ford Excursion came 10-15 years after the “oil shocks” of the 1970s and 1980s. While only limited longitudinal evidence is available for the 2004-2005 time period, this question adds both depth and opportunities for future research to the project.

Method: Method of Analysis

The analysis is based on original issues of *Time*, which were analyzed manually in the spring of 2006. Issue numbers were randomly generated, and each auto manufacturer, oil producer, and auto or oil industry association ad was analyzed according to the framework below (see **Exhibit I**).

Exhibit I

Banerjee conducted a study in 1995 that analyzed green ads of all types utilizing a version of

the framework shown below. The framework used was new at the time, and this project utilizes a slightly adapted version. The adapted framework is broken into sections (A-E), and sections **A** and **C** contain the bulk of the modifications. Modifications are marked **in bold** where appropriate.

This study applies the framework to the ads identified in the **sample** (see below), and this allows an assessment of the ads' level of greenness, among other things.

The Framework

A) Characteristics

1. Type of advertiser (**auto manufacturer, oil company, oil or auto manufacturer association**)
2. Product or service being promoted
3. Characters in the ad

B) Greenness

1. "Shallow"
2. "Moderate"
3. "Deep"

C) Ad Objective (4 advertisement goals)

1. Promotion of product or service as being green
2. Promotion of a green company image
3. **Calls to action (collapsed original categories 3& 4, which dealt with general calls for consumer behavioral changes and calls for organizational membership, respectively)**

D) 7 Types of Ad Appeals by Advertisers to Meet Their Objectives

1. Zeitgeist
2. Emotional appeals (5 types – fear, guilt, humor, self-esteem, warmth)
3. Rational appeals, including financial appeals to environmentalism
4. Organic appeals
5. Corporate greenness
6. Testimonial appeals
7. Comparative benefit appeals

E) 7 Environmental Ad Issues

1. Atmospheric pollution
2. Solid waste problems
3. Water pollution
4. Wildlife preservation
5. Planet preservation
6. Combinations of 1-5
7. General state of the planet (no specific environmental issue)

Both quantitative and qualitative data analysis procedures are used. Quantitatively, some basic descriptive statistics provide useful information for comparison of the two time periods.

Perhaps more importantly, qualitative themes emerge from the ads that allow for a discussion of

how the symbols and slogans of ads changed over time.

Finally, the actual environmental initiatives undertaken by auto manufacturers and oil companies during both time periods are analyzed to determine whether or not the advertising is legitimized with action. Addressing consistency is a difficult endeavor because it is impossible to collect all corporate

documents on intentions, strategies, and considerations regarding environmental actions (see **Limitations**). According to Banerjee (2001), an exhaustive analysis would require “environmental auditing,” which is beyond the scope of this study (p.39).

However, from a consumer perspective it is relatively simple to gain an understanding of the actions a company takes relative to its environmental claims because what consumers can see is also likely available in the popular press.

Sample

The sample in this study is Time magazine. Time magazine is used because it includes print ads available to a wide audience, and it has been a news magazine of record throughout both time periods examined. These two factors have resulted in major corporations, including auto manufacturers and oil companies, placing ads in the magazine consistently at least since the 1979-1980 time period examined in this study.

Time has produced approximately 52 issues per year since at least 1979 (the first year of analysis for this study). The random number generator allowed a random sampling of Time issues (<http://www.random.org>), which was combined with calendars created for 1979, 1980, 2004, and 2005, via [timeanddate.com](http://www.timeanddate.com) (<http://www.timeanddate.com>). Finally, the weeks of the year were labeled in a linear numerical fashion so that the issue date corresponded with the randomly generated week number of the year. For example, randomly generated issue number 63 corresponds with the March 24, 1980 and March 14, 2005 editions of Time. See **Exhibit II** below for additional source information.

Exhibit II (<http://www.random.org>)

- There are a possibility of 104 issues of Time over 2 years (weeks – 52 weeks *times* 2 years) – issues are published as a Monday date, so randomly generated week numbers are matched with the corresponding number of Mondays
- Analysis of 15 issues over each two year span
- The same randomly generated numbers (shown below) are applied to both sets of years: 1979-1980 and 2004-2005

Edition Specifics

<u>Time</u> –				
63	67	11	67	65
102	96	36	90	28
98	81	19	96	87
76	93	69	1	53
69	90	89	53	97
30	44	100	46	99

Results

During the analysis phase, 207 ads were examined in Time magazine over both time periods (1979-1980 and 2004-2005). The ads are from auto manufacturers, auto industry associations, oil companies, oil industry associations, or alternative fuel organizations. However, the vast majority of ads, 96%, are from either auto manufacturers or oil companies.

The modified Banerjee framework is used for “environmental” ads, which comprise approximately 43% of the total sample of ads. Ads are deemed environmental when they include an environmental reference as noted in the framework. In the 1979-1980 set of ads, this is primarily a mention of EPA estimated fuel economy. However, it is important to remember that the notion of fuel-efficient cars was still a somewhat revolutionary concept in 1979, even though it is a top priority of many car buyers today.

The remaining 57% of the ads are deemed “non-environmental” because they do not mention anything regarding the environment or energy efficiency. This does not mean that these ads do not feature some aspect of nature, such as a mountainous backdrop behind an SUV, but the ad copy itself does not provide any information related to the environment or the product’s energy efficiency.

Similarities & Differences

The first research question examines the similarities and differences among ads of the 1979-1980 and 2004-2005 periods. Though the term “green advertising” was not prevalent in 1979-1980, many elements of the environmental ads in this period are similar to the ads of 2004-2005. Thus, the Banerjee framework is used as a tool for analysis for ads in both periods in an effort to ensure consistency in analysis. Certain empirical differences are noted in the analysis, but the differences are recorded in

modified-Banerjee terms, which is another method for ensuring consistency of analysis between the two time periods.

Number of Ads

The first observable difference between the two time periods is the number of auto manufacturer and oil company ads. As mentioned in the introduction to the Results section, 96% of the ads examined are from auto or oil companies. Further, auto manufacturers comprise the majority of that statistic, with approximately 84% of the total number of ads.

The 1979-1980 time period has 63 environmental ads, compared to only 25 in 2004-2005. A complementary effect is noted with regard to non-environmental ads. In 2004-2005, there are 72 non-environmental ads, compared to only 47 in 1979-1980.

These differences suggest that auto manufacturers and oil companies were more concerned about including environmental topics in their ad space in 1979-1980 than in 2004-2005. This could be attributed to the fact that the oil price increases in 1979-1980 were the first major oil price shocks in recent history, which could have prompted corporations to communicate their environmental strategies to consumers out of a sense of panic, or fear for the future.

However, a more likely explanation is the breadth of product lines. The largest American car manufacturers have acquired multiple brands since 1980. For example, Ford has acquired Jaguar, Land Rover, and Volvo. Also, Chrysler has “merged” with Mercedes-Benz, creating an enormous automotive group. With these mergers, consumers in 2004-2005 had many more choices of automobiles that ranged from very small and efficient cars to gas-guzzling SUVs. In 1979-1980 however, manufacturers were much more concerned with the limited number of models available. They did not have the luxury of advertising a small car in one publication and a large one in another publication. As a result, *every* ad had to speak to environmental concerns.

Use of Nature

A striking and interesting similarity between the ads of 1979-1980 and 2004-2005 is the use of nature. Among environmental ads, 38% feature a nature scene or landscape in conjunction with the automobile or oil rig. Nature is a logical thing to include in an ad that is touting environmental

benefits, and in fact, it is surprising that only 38% of the ads feature some form of nature.

In the ads lacking some form of nature, the space is populated by “beauty shots” of the product, or by facts and figures, or even satisfied consumers. It seems that, even when advertising about environmental benefits, companies cannot resist taking up the largest portions of their ad dollars with an emphasis on the products themselves.

Rational Appeals

The modified Banerjee framework utilized in this study allows seven types of ad appeals by advertisers. Examples include emotional appeals, organic appeals, and corporate greenness. The idea of corporate greenness, or corporations trying to convince the public of their lofty environmental values, is noted by Banerjee in his studies as being a primary feature of many green ads.

According to this analysis, Banerjee’s findings are confirmed by the ads of 2004-2005; however, corporate greenness is not the focus of the ads in 1979-1980. Rather, these ads concentrate on rational appeals and product comparisons versus competitors. The rational appeals consist of appeals to consumers to save money on gasoline by purchasing X car or X brand of gasoline. In fact, in 1979-1980, 76% of the environmental ads are based on rational appeals, versus only 13% that attempt to foster a sense of corporate greenness among consumers.

This evidence seems to suggest that advertisers in 1979-1980 focus primarily on economic appeals for introducing environmentally friendly initiatives (such as better gas mileage). The increase in corporate greenness ads and other techniques that evoke emotional ties to the environment in the 2004-2005 ads suggests that environmental causes are more prevalent in this time period, and consumer education about environmental concerns is much higher in 2004-2005 than in 1979-1980.

Messages Used During Periods of High Oil Prices

The second research question asks what messages auto manufacturers and oil companies include in ads during times of high oil prices. As mentioned above, it is apparent that in 2004-2005, advertisers feel more comfortable advertising without alluding to the high oil prices, as evidenced by the lack of environmental ads compared to non-environmental ads.

The use of nature was also mentioned above, and nature is certainly a common theme in both 1979-1980 and 2004-2005. Another more subtle message is the use of environmental color schemes. An excellent example of this from 2004-2005 (and continuing in 2006, at the time this article is being written) is BP's green and yellow logo. These colors evoke a sense of environmentally friendliness – especially when juxtaposed with the dark color of crude oil or coal.

The messages used in 1979-1980 rely primarily upon economic, or rational appeals, while the messages from 2004-2005 are more advanced. However, this is probably due more to technology than advertiser intent. For example, in 1979 the options for auto manufacturers to make a car environmentally friendly were constrained to fuel efficiency. This is evidenced in the data by the proliferation of ads from smaller, foreign car manufacturers such as Honda during 1979-1980. In 2004-2005, by contrast, manufacturers had introduced cars such as the hybrid electric-gas Toyota Prius. Were the Prius technologically possible in 1979-1980, it surely would appear in advertisements. An interesting note that furthers this point is an ad by Datsun in 1980 that uses the word "hybrid" to describe the unique blend of fuel economy and style; thus the word "hybrid" is completely redefined for consumers, by oil and auto companies, between 1980 and 2004.

Companies use a lot of what Banerjee calls empty environmental phrases. Examples, available in the data from both 1979-1980 and 2004-2005, include "high mileage," and "...crisp, aerodynamic lines that help cut wind resistance." These phrases are vague, and don't really explain much, yet they help consumers to feel as though they are purchasing a product that is somehow more Eco-, or at least energy-friendly than some other product.

Finally, auto manufacturers and oil companies tout a lot of technological innovations that, they claim, improve their environmental credentials. A 1980 General Motors ad states: "It allows GM to achieve the *highest* Corporate Average Fuel Economy (CAFE) in GM history, while also reducing automobile exhaust emissions to the *lowest* in GM history" (emphasis in original). More recently, in 2004, Toyota promotes the technology that powers its clean lineup of cars with the following claim: "State-of-the-earth technology. When it comes to cleaner cars, Toyota believes actions speak louder than words." Whether the technology in the claims actually exists provides a transition to the third and final piece of analysis in this study: whether

manufacturers actually follow through on their environmental rhetoric.

Following Ads With Action

One important fact to note at the outset of this discussion is that most advertisers in either time period (1979-1980 or 2004-2005) don't make long-term promises with regard to environmental commitment. This has the effect of avoiding accountability for following through on environmental ad claims. Even in the 1979-1980 period, when all the environmental information given consists of basic EPA fuel estimates, auto manufacturers and oil companies are able to hide behind another source of information for their accountability: in this case, the EPA. If mileage estimates do not work out in the consumers' favor, the advertising company can blame the EPA's faulty estimates.

A rare exception to this notion is a 2005 ad from Ford, which claims that: "By 2010, we will produce 250,000 hybrids a year." However, the level of specificity in this claim is by far the exception and not the rule. Most claims are vaguer, such as this one by BP in 2005: "Natural gas is the clean bridge to renewable energy." This type of vague claim is hard to prove or disprove, which has the effect of reducing the accountability on BP to actually develop renewable energy sources. Ford's, on the other hand, is completely verifiable: if there are not 250,000 Ford-produced hybrid automobiles on the road by 2010, consumers can hold Ford accountable for that statement.

Another method by which oil companies and auto manufacturers avoid following through with environmental action is to propose collective solutions. For example, an ad from the Atlantic Richfield Company in 1979 exclaims: "It's time we all went on an energy diet." A 2005 ad from BP notes: "It's time to go on a low-carbon diet." Other ads suggest working together with company X to produce long-term solutions. While it will certainly take a collective effort to make any real changes that are positive for the environment, this tactic also gives oil and auto companies an escape route if environmental promises do not come to fruition. It would be simple to claim that the market simply does not demand alternative energy products, when in fact the market may not have been offered appropriate alternative energy products.

Finally, there are blatant examples of auto and oil companies failing to follow through on

environmental claims. Of course, it should be noted, in line with the above discussion, that specific claims are rarely made. However, when a company spends a great deal of time and money to advertise its green image, it seems that there should be some substance behind the image. For example, a 2005 ad by Ford spends a great deal of space and time discussing the value of more added horsepower with greater fuel efficiency. Yet, at the bottom of the ad, the consumer learns that the gas mileage of this Ford Expedition SUV is still 14 miles per gallon (mpg) city / 18 mpg highway. While this may be an improvement, it is still significantly below the EPA average fuel consumption for light-duty vehicles (the category of SUVs), which was just under 21 mpg in 2004 (<http://www.epa.gov>).

Future Research

Future research should expand the data analysis to other publications. Suggested publications include **The New York Times** (reputation as a prestigious newspaper of record), **The Los Angeles Times** (a West Coast newspaper of record), and the **Detroit Free Press** (known for in-depth coverage of auto-related issues, given its proximity to the automotive industry). The expanded volume of information should lead to the ability to confirm or amend the assertions made in the **Results** section.

Conclusion

This study explores green advertising in two separate periods of time. The first period, 1979-1980, occurs before the term “green advertising” shows up in academic literature or the popular press. However, it has been demonstrated that a modern framework for the analysis of green advertising can also be used to analyze ads that ran well before consumers or scholars were familiar with the term.

In line with earlier findings from Banerjee and others, corporate green image ads are very prevalent, though not among ads from the 1979-1980 period. Another key difference in the two time periods is that in 1979-1980, the primary environmental message is fuel economy, and the appeals to consumers are thus rational – i.e., purchase our product, which saves you gas, which saves you money.

Ads in 2004-2005 have the luxury of two decades of technological development, and thus are able to tout environmentally friendly technologies more readily than their predecessors. However, this strategy assumes that the general public (or at least Time readers) is educated with regard to the

environmental technologies being discussed. Auto and oil companies also feature many less environmentally themed ads as a percentage of their overall ad mix in 2004-2005. It is unclear exactly why, although it is perhaps a reflection of the proliferation of car designs since 1980.

It is extremely hard to pin down auto and oil companies regarding whether they follow through on environmental claims because for the most part, their ads don’t make deep or specific claims. With some notable exceptions, accountability is either shared (among consumers, the government, and auto or oil companies), or not mentioned.

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Appendix I

Case Number _____
Publication Name _____
Publication Date _____

A) Characteristics

Type of advertiser

Auto manufacturer / Auto industry assoc / Oil company / Oil industry assoc

Product or service being promoted

Characters in the ad (male, female, children, racial mix)

B) Greenness

“Shallow” (vague in environmental claims, ie *earth friendly & biodegradable*)

“Moderate” (mention specific issues, ie *recycling*)

“Deep” (in depth description of a firm’s pollution equipment or mention environmental behaviors not widely practiced)

C) Ad Objective (advertisement goals)

Promotion of product or service as being green

Promotion of a green company image

Calls to action

D) 7 Types of Ad Appeals by Advertisers to Meet Their Objectives

Zeitgeist (appeals reflecting the mood – ie empty earth-friendly slogans)

Emotional appeals (5 types – fear, guilt, humor, self-esteem, warmth)

Rational appeals, including financial appeals to environmentalism (ie coupons or premiums)

Organic appeals (highlighting health appeals of environmentalism)

Corporate greenness (advertiser’s sense of social responsibility)

Testimonial appeals

Comparative benefit appeals (direct comparison of one’s product to another)

E) 7 Environmental Ad Issues

Atmospheric pollution

Solid waste problems

Water pollution

Wildlife preservation

Planet preservation

Combinations of 1-5

General state of the planet (no specific environmental issue)

Ambivalent Naturism: Prejudice and the Treatment of Nature Inside and Outside a Mall

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Abstract

The mall's relationship to nature is largely characterized by the contrasting benevolent interior and hostile exterior treatment of nature. This contrasting treatment of nature parallels other forms of ambivalent prejudice and is thus referred to as "ambivalent naturism." The present paper argues that the two components of ambivalent naturism act together to legitimize (and thus perpetuate) the destruction of the environment in service of consumption. Drawing from social psychological theories, it is asserted that the psychology of industrial capitalist societies is in part defined by a fear of and need to control nature that is discernable in the patterns and content of nature representations at the mall. Finally, the concluding remarks argue that halting continued environmental destruction likely requires a fundamental re-orientation of our society's human-nature relations.

If asked to think of a nature-friendly location, the local shopping mall is likely not the first place that springs to mind for most people. And yet, a visit to the mall can be reminiscent of a stroll through a veritable Garden of Eden. Most mall entrances, for instance, are "announced with canopies, columns, and glass atria, surrounded by lush vegetation, all suggestive of an oasis or sanctuary inside" (Goss, 1993, p.32). Inside, tropical trees and a variety of plants and other vegetation abound, as well as fountains and mock landscapes. The Mall of America, which Goss (1999) argues "represents nothing less than the imagined totality of the geography and history of the consumer world" (p. 45), is replete with flowers, flowing waters, and a variety of plants and trees. At the time of Goss's exploration in 1999, its shoppers could even pet real animals or purchase "the most endangered species of sea turtle on the planet" (p. 61).

On the outside, the mall's relationship with nature contrasts rather starkly with the exalted depiction on the interior. Indeed, the mall is arguably the apotheosis of modern industrial capitalism, an economic system driven by profit and expansion. By many accounts, this relentless pursuit of the bottom line is taking a devastating toll on local and global environments. For instance, 90% of large predatory fish have disappeared from the oceans within the past 50 years (Myers & Worm, 2003), and if present fishing trends continue those remaining are expected to be virtually gone as well within the next 40 years (Worm et al., 2006). In North America alone, 75% of wildwood ecosystems have been eradicated (Glendinning, 2006) and 844 species are known to have become extinct since the arrival of the first Europeans (Pickrell, 2005).

While these figures are shocking, they are not difficult to explain economically. In his book *The Corporation*, Canadian law professor Joel Bakan (2004) points out that, by law, corporations are legally obligated to serve the bottom line and the interests of their shareholders above all else, thus rendering corporate social responsibility illegal—"at least when it is genuine" (p. 35). Because most malls are run by corporations (Goss, 1993, p. 22), and the rest are in competition with them, genuine concern for nature is either illegal or (economically) foolhardy. Even the consumer-friendly International Council of Shopping Centers acknowledges that malls have a "tremendous bearing on water tables and other elements of local ecosystems" (McCown, 2006). Given that the mall exists by exploiting nature's "resources" and converting them into manufactured "goods" for profit, the exalted interior portrayal of nature is rather peculiar, which raises the question: why do malls portray such a friendly relationship with nature on the inside when the external treatment of nature is so starkly hostile?

Drawing from social psychological literature, the present paper argues that the mall's ambivalent treatment of nature is a manifestation of the psychology of individuals in industrial societies. This psychology appears to be characterized by a profound fear of and need to control nature. The mall was selected as a site of observation and analysis of the psychology of human-nature relations in this psychology for several reasons. First, the mall is arguably the quintessential manifestation of modern industrial capitalism and, as such, various forms of this psychology will likely be on display. In addition, based on calculations of figures from several sources

(Department of Interior, 2006; Nair, 2006; Soriano, 2006), the typical American makes 24 times as many visits to malls than to all of the federal lands managed by the Department of the Interior combined. In other words, malls are the site of a substantial portion of Americans' contact with nature, thus meriting examination.

The present paper is based primarily on observations and analyses of nature in the Nittany Mall in State College, PA. State College is in many ways a typical small American town and the pattern and function of nature displays shoppers encounter at Nittany are likely representative of the experience of a large number of Americans.

Based on such observations, and the theoretical framework developed below, the present paper makes the following three main arguments. First, malls offer tangible evidence of fundamental aspects of the psychology of human-nature relations in this society as evidenced by the pattern of the appearance (or not) of nature displays, as well by as their content. Second, the relationship between the mall and nature is largely defined by a contrasting ostensibly benevolent display of nature on the interior with an overtly hostile and destructive treatment of nature on the exterior—a relationship referred to as ambivalent naturism. Third, ambivalent naturism functions ultimately to legitimize and perpetuate capitalism and its continued destruction and toxification of nature by subtly reinforcing the idea that nature should be dominated and controlled by humans.

Prior Nature-Mall Analyses

Although not a vast body of literature, noteworthy prior mall-nature analyses do exist. The present section briefly examines some of the relevant findings of these analyses as a point of departure for the arguments developed subsequently. Prior analyses have argued that nature representations at the mall “naturalize” consumption and affirm shoppers' ideas of nature. Following a brief examination of such analyses, this section concludes by arguing that nature displays also serve to reinforce human dominance over nature and thus legitimize its manipulation.

As has been frequently noted in both business and critical theory journals, shoppers reliably spend more money at the mall the longer the visit. Thus, the fundamental aim of mall architecture is to disorient shoppers and trap them inside for as long as possible (Goss, 1993), an aim which every element of mall architecture is meant to serve. In this regard,

nature is no exception. As Goss (1993) argues, malls employ nature to soothe shoppers with fresh, clean evocations of a natural outdoor landscape. “More importantly,” he says, “the presence of nature, albeit tamed in a garden setting, naturalizes consumption...” (p. 36). This latter use is reminiscent of how members of the English ruling class in the eighteenth century designed their estates in an ostensibly nature-friendly manner in order to naturalize their social status and power (Davis, 1995, p. 212).

Price (1995) builds on Goss's (1993) argument with her observations at Nature Company stores, where the “stated mission is to connect [its customers] to nature” (p. 194). Thus, the Nature Company places its products (e.g., bird feeders, nature mood music, amethyst geodes, Zuni fetishes, as well as “dinosaur everything”) low on the shelves, and “often out of their boxes, inviting [customers] to touch, experience” (p.195).

As Price (1995) aptly points out, however, “[The Nature Company] products actually connect [its customers] less to nature itself than to *what nature means*” to them (emphasis added) (p. 194). More specifically, she argues, “the entire inventory stands as a monument to [the customers'] vision of ‘nature’” (p. 189). Thus, it is not so much nature per se that is simulated as it is specific *ideas* of nature that retail and mall owners believe their customers possess. As a result, Price argues, the appeal of the Nature Company is in large part that the products enable customers to reinforce and legitimize the ideas of nature they project onto society, thereby reaffirming their place in it. In this way, the “mood music” CDs present nature as soothing and omit the often shrill or desperate nature noises; the Native American products (like the Native American displays at the Mall of America) act to fulfill the customer's desire to feel close to “authentic” and “primitive” life (Price, 1995, p. 188); and the dinosaurs seem to make possible a close encounter with the rawest, most brutal embodiment of nature, of course in a wholly safe setting.

Price (1995) also notes the profound ambivalence inherent in any existing relationship between nature and a business establishment when she pointedly exhumes the fundamental ironies and contradictions implicated in the commodification of nature:

The Nature Company markets twelve thousand products that, on the one hand, sustain American

middle-class ideas of nature that mitigate the materialism and artifice of modern capitalist society and, on the other hand, sustain, through the creation of artifice, the capitalist overconsumption of resources that underpins American middle-class life. (p. 201)

Both Price (1995) and Goss (1999) offer compelling evidence of how malls use nature to create simulated “authentic” or exotic settings in order to naturalize the shopping activity and affirm shoppers’ conceptions of nature. However, neither analysis stresses a third function of nature at the mall, which is to reinforce a sense of human domination over it. The Nature Company may well sell products that attempt to “connect their customers to nature.” Yet these nature representations are anything but “authentic,” given that they have been severed from their natural context and otherwise altered. Such products, then, do not so much represent what shoppers believe nature *is* as what they believe it *should be*. Similarly, the soothing fountains and trees on the walkways may naturalize the shopping experience, but ironically they likely also “naturalize” the idea that nature *should be* manipulated and instrumentalized by humans. Building on this distinction, the present paper thus argues that, contrary to Price’s assertion, the representations of nature at the mall do not serve to “mitigate the materialism and artifice of modern capitalism.” Instead, they serve to legitimize them by reinforcing the idea that nature should be dominated and controlled. The following section, based mainly on observations of nature on the walkway at Nittany mall, offers an illustration of how ostensibly benevolent nature displays serve this function.

Ambivalent Naturism Observations

As noted above, the term ambivalent naturism denotes the contrasting overtly hostile and destructive treatment of nature on the exterior of malls with the (ostensibly) benevolent display of nature on the interior. The term was chosen due to the rather striking parallels between this treatment of nature and ambivalent sexism, a social psychological term that characterizes modern sexism as comprised also of a hostile and benevolent component. According to Glick and Fiske (e.g., 1996; 2001), these two components act together to justify and maintain female subjugation. Based on observations of nature at the mall presented in what follows, the present paper argues that just as ambivalent sexism serves to maintain male dominance over—and continued

hostile maltreatment of—women, ambivalent naturism functions to maintain human dominance over—and continued destruction of—nature.

Hostile treatment of women is pervasive across many societies, on both institutional and interpersonal levels (e.g., United Nations Development Programme, 1998). In the United States, for instance, women occupy fewer high-power jobs than men, are far more frequently the targets of sexual harassment, and even overt sexual violence towards women is disturbingly common (Unger & Crawford, 1992). Although public displays of overt hostile sexism (e.g., statements such as, “Women are less intelligent than men”) are less common than they were a century ago, they nevertheless have not disappeared. When displayed, note Glick and Fiske (2001), such hostility is elicited by women who are perceived to directly threaten men’s relative greater power or privilege (e.g., feminists, women seeking high-power jobs, “seductresses”) and functions to not-so-subtly punish them for such efforts and to portray them as deserving harsh responsive treatment (by calling them “bitch,” “cold,” “manipulative” etc.).

As (at least the public) displays of hostile sexism have become relatively less common, a subtler, ostensibly benevolent form of sexism has emerged in its place (Glick & Fiske, 1996; 2001). Glick and Fiske (2001) argue, moreover, that this “benevolent sexism” also functions to justify and perpetuate the patriarchal status quo. For instance, a man “chivalrously” going out of his way to open the door for a woman who does not appear to need the help, they note serves to “benevolently” portray women as *requiring* male protection, thus reinforcing female dependence on males.

The most conspicuous displays of nature at the typical mall, found on the main walkway, offer a poignant illustration of the parallel between benevolent sexism and “benevolent naturism.” As in many other malls, shoppers at Nittany stroll amongst a variety of trees and plants that adorn the main walkway. Each display is comprised of a single tree in a large white ceramic pot. The trees stand directly beneath a circular ceiling window, next to plants that are also in white pots. Often the tree is surrounded by four white benches, on which the customers can relax in proximity to some greenery.

Although the trees and plants on display here appear exceedingly healthy, closer inspection reveals that they have been carefully pruned and manicured and thus are a heavily domesticated, manipulated,

“tamer” form of trees and plants than one encounters in the wild. Because these trees and plants appear so happy (i.e., healthy), the message of such displays is that nature consents to human objectification and dominance. Indeed, such displays portray nature as *dependent* on humans for its well-being, just as chivalry portrays women as dependent on men for theirs.

Not all women are treated in a “benevolent sexist” manner, however, and the pattern of treatment reveals how benevolent sexism functions to justify and perpetuate overtly *hostile* maltreatment of women as well. As Glick and Fiske (2001) point out, “benevolent sexism is directed toward women who reinforce conventional gender relations and serve men as wives, mothers, and romantic objects (e.g., homemakers)” (p. 113). By reinforcing the notion that women who conform to patriarchal standards of behavior should be rewarded, the implication is that women who do not conform to such standards are less deserving of kind treatment and perhaps even merit harsh treatment. Indeed, research has demonstrated that individuals—including women—who endorse benevolent sexist attitudes, are also more likely to excuse overtly hostile treatment of women than those who do not (Glick & Fiske, 2001).

The same is arguably true regarding benevolent naturism. That is, another message implicit in the nature displays on mall walkways is that *only* human-altered, domesticated nature should be celebrated, while “wild” nature should not. In other words, perhaps “wild” nature is seen by some as deserving hostile treatment because it exists in a state of defiance of human dominance, similar to women who seek independence from male hegemony. Consistent with this, Kaplan and Kaplan (1989) found that individuals unfamiliar with wilderness (and thus highly familiar with manipulated forms of nature) reported fearful responses to it. Bixler and Floyd (1997) found that urban youth commonly experience fear and discomfort on mandatory wilderness school trips. Cultivated nature, however—that is, nature that has been manipulated by humans—does not appear to elicit such fear (Koole & Van den Berg, 2004). This suggests that wild, non-domesticated nature arouses a feeling of discomfort in some, especially in those most identified with modern, “civilized” society, because it thrives independent of human intervention “assistance.”

Another notable parallel between ambivalent naturism and ambivalent sexism is that in both the benevolent component is prominently on display, while the hostile component tends to be relatively

hidden from view. As discussed above, nature is objectified at the mall in the form of domesticated vegetation, exotic settings, and dinosaur replicas. Among these objects of nature there is no vestige of discontent. The trees and plants look exceedingly healthy and the dinosaurs fierce but untroubled. Likewise, ubiquitous images of women are strewn about malls in a manner intended to beautify the setting and increase sales. Indeed, numerous poster advertisements depict women in sexually provocative poses—always appearing to happily consent to the accuracy of such objectification. As social psychologists Goldenberg and Roberts (2004) note in a chapter examining women and nature, “Women’s body parts are used as decorative, ‘beautifying’ features all around us—to sell sports cars and beer, to adorn trucker’s [sic] mud flaps, or to stand in a beaded gown and present prizes on a game show” (p. 76).

At the same time, as Guterson (1993) points out, malls have been deliberately designed and organized so as to conceal the tangible links of their truck with nature. Thus, the products arrive and are stocked on shelves during after-hours, as if nature’s hand magically placed them there itself. No trace of the mall’s large-scale destruction of nature is to be found on display. Similarly, there are no indications of hostile maltreatment of women evident in mall architecture, even though malls are replete with images objectifying women in a manner that ostensibly celebrates their physical beauty and sensuality.

In short, just as ostensibly benevolent sexism serves to reinforce the notion that women should be dominated (and “protected”) by men, ostensibly benevolent nature displays act to subtly reinforce the notion that nature should be dominated by humans. Moreover, this ostensible benevolence appears to function in both cases to legitimize and perpetuate hostile treatment. In the next section, I draw from another social psychological theory to examine some possible core psychological motives fueling the desire to dominate nature.

Terror Management Theory and Human Dominance of Nature

Previous sections of the present paper have argued that ostensibly benevolent displays of nature in shopping malls function to justify and thus perpetuate the mall’s large-scale environmental destruction on behalf of capitalist “consumer society.” Such displays do so, it has been argued, by subtly reinforcing the notion that nature *should* be

manipulated and dominated by humans. While the toll of such devastation has been amply documented, discussion of the psychology of human-nature relations driving such domination and destruction is often absent. Drawing from terror management theory, what follows argues that the psychology of human-nature relations observable at the mall (as elsewhere) is characterized fundamentally by a fear of and need to control nature. Moreover, will be examined shortly, the pattern of benevolent naturism displays throughout the mall appear in many ways to reflect precisely what terror management theory would predict regarding the psychology of industrial capitalism.

The history of Western thought is replete with statements by prominent thinkers expressing their desire to dominate and control nature (see, e.g., Easlea, 1981). Francis Bacon, for instance, feminized nature in starkly sexual language when he boasted that his “experimental philosophy” would usher in the “masculine birth of time” by enabling mankind [sic] to “penetrate” nature in order to “conquer and subdue her, to shake her to her foundations” and to “bind her to your service and make her your slave” (Easlea, 1981, p. 84). Given the level of environmental destruction wrought by “civilized” society since the scientific revolution, it seems that more than a few took Bacon’s sentiment to heart.

Yet why do so many, at least in our society, appear bent on “conquering” nature? Ernest Becker (e.g., 1973; 1975) and the Terror Management Theory (TMT) research it inspired (for a review of this theory, see Pyszczynski et al., 2004) offer a possible explanation. Becker (1973) argued that people are “gods that shit” (p. 58), meaning that we exist on both a spiritual and a physical plane. All organisms, according to Becker, are imbued with an instinct for self-preservation but what fundamentally distinguishes people from other animals, he wrote, is that we are conscious of the fact that we will die. Because such awareness is unbearable for a being who is ultimately driven to stay alive, we respond by denying it and inventing cultures, says Becker, which are symbolic forms of identity that will live on beyond our physical death. In this way, religious, national, consumer and other symbolic cultural identities serve, according to Becker, to buffer us from death-related anxiety by allowing us to believe that we are (symbolically) immortal.

Well over 100 TMT studies have provided impressive evidence supporting key aspects of Becker’s thesis. These studies demonstrate that

making participants’ sense of mortality salient (typically by having them write about their imagined experience of death) results in increased worldview defense, which translates into variously re-affirming one’s symbolic cultural identification (for a review of this see Pyszczynski et al., 2004). Given that shopping is a core means of affirming one’s symbolic consumer identity, and that doing so provides a sense of agency and control over nature, such identity performance may effectively subdue anxiety about one’s mortality. After 9/11, for instance, there was a general increase in support for capitalism and consumer purchasing increased significantly as well, particularly for “patriotic” products such as US flags and pro-US bumper stickers (Arndt et al., 2004, p. 207). Some research findings offer direct support for a causal link between consumption as mitigation of death anxiety. For example, a mortality salience manipulation significantly increased participants’ attraction to high-status products like a Rolex watch and Lexus automobile but not to low-status products like a Geo-Metro or Pringles Potato chips, because the former confer self-esteem to individuals who identify strongly with consumerism (Arndt et al., 2004). In sum, Arndt et al. (2004) note:

...concerns about mortality should often intensify materialistic desires in people for whom such pursuits are a salient barometer of self-worth. And when consumerism is woven deeply into a cultural fabric (as in the United State), we should expect materialistic routes of symbolic transcendence to be pervasive in general, and especially in response to reminders of death. (p. 204)

More recent TMT research has illuminated a link between denying one’s mortality and a need to control nature. In a series of studies, Koole and Van den Berg (2005) demonstrated that prior to a mortality salience prime, participants rated a wild nature landscape as significantly more beautiful than a cultivated nature landscape. Following the prime, however, that significant difference disappeared. In other words, participants responded to a mortality salience prime with more favorable perceptions of nature that had been manipulated by humans. The mortality salience prime produced the same effects even for individuals who were pre-tested for low levels of wilderness-related fears, however. Importantly, a pain prime did not influence people’s nature landscape beauty ratings. This finding suggests that one way people in this society respond

to fear of death is by exerting control over nature. This response is understandable, within the logic of TMT, given that “nature” (i.e., biology or nature’s laws) has determined that physical death is inescapable. It follows, then, that if we can manage to fully control nature, we can determine our own destiny (and ultimately avoid death).

In other words, this finding could provide further evidence for why the mall presents such a heavily domesticated, cultivated form of nature instead of a wilder version, which may well frighten many customers away. If many Americans shop in order to subdue death-anxiety then crude reminders of such anxiety (e.g., in the form of wild, undomesticated nature) would likely thwart their efforts. Perhaps for this reason, malls portray nature in a manner that conceals the wild by converting it into a benevolently dominated form.

Based on such a rationale, the greater a given store risks evoking a wild idea of nature the more likely one should find a benevolent portrayal operating to mask it. Conversely, the less a given store risks evoking a wild idea of nature, the less of a need that store should have for a mask, and thus the less likely one should be to find benevolent nature displays. Observations at Nittany mall reveal precisely this predicted pattern. For instance, “technology stores” like Radio Shack, cell phone and video game stores have little to no apparent nature iconography or plants, perhaps because their high-tech products sufficiently reinforce the friendly dominance over nature already, given that technology inherently serves to distance people from as well as control nature. Further, the absence of nature or nature iconography at Jewelry stores that sell diamonds and other carefully cut and polished minerals is perhaps explained by the fact that these products are also already sufficiently altered from their natural form to avoid arousing anxiety in the shopper.

On the other hand, the perimeter of every food store at Nittany mall is lined with hanging plants (and photos of nature landscapes are common). Perhaps these benevolent nature displays are present at such stores because food is a carnal reminder of one’s creatureliness and animal constitution and thus of one’s subjection to the laws of nature (including inescapable death), which the shiny well-pruned plants mollify. Further observation and analysis is needed, but based on observations at Nittany Mall, which appear to be consistent with observations at other malls, the pattern of the benevolent portrayal of nature inside the mall seems quite decipherable and

stable. In the following section I test additional aspects of terror management theory by examining patterns of nature iconography at clothing stores.

Nature Iconography in Clothing Stores

Another TMT claim can also be put to test via examinations of nature representations at the mall. Namely, that full personhood is defined in part by one’s ability to control nature (i.e., because greater control of nature enables greater self-determination). That is, more developed, mature individuals should be portrayed as more able to control or dominate nature than less mature or developed individuals. Clothing stores offer an ideal testing site for this claim for a number of reasons. For one thing, they target customers of all ages and both genders, allowing comparisons across such demographics. They also represent the third largest retail share of sales of any store type in malls, behind department stores and superstores (Shopping Center-Inclined Sales, 2004), and thus there is no shortage of stores to examine.

Moreover, clothes are clearly an important aspect of modern individuals’ identity performance. From the perspective of TMT, this importance makes sense given that by masking our “savage” nakedness, clothes are a rather obvious means of materially and symbolically distinguishing ourselves from “uncivilized,” “primitive” humans. While jewelry ornaments may serve to further reinforce human distinction from (other) animals, clothes are part of what helps construct and assert this distinction to begin with. It is thus no surprise that clothing stores display a great deal of ostensibly benevolent nature iconography. The following observations reveal that the age and gendered pattern of such iconography on clothing is again consistent with what TMT would predict.

Although nature iconography appears on clothing in many stores, it is most pervasive in children’s stores where images of lizards, sharks and other creatures abound. At Gymboree, for instance, a children’s clothing store with 537 outlets across the U.S. (Annual Report, 2006, p. 3), the whole interior is defined by a tropical paradise theme, complete with hanging cardboard images of lizards and numerous colorful posters of palm trees, parrots, and huts. Animal and other nature iconography feature prominently on almost all of Gymboree clothing and appear conspicuously on the items on sale at other children’s clothing stores as well.

Overall, it appears that the older the targeted

demographic of a given clothing store, the fewer the animal signs. Nature iconography is thus markedly less common (though still visible) at clothing stores that target young adults than at those that target children. All of the clothing stores at Nittany that (exclusively) target young adults have few prominent nature images on their products, yet all of them still possess zoological logos, which are sewn onto many of the clothes: American Eagle has the Eagle, Abercrombie & Fitch a standing moose, Hollister's a flying seagull, and Aeropostale has a bulldog for boys and a butterfly for girls.

Similarly, the more sophisticated the image of a store's clothing, the sparser the animal iconography. The Gap, for instance, which targets a similar, though slightly older demographic than American Eagle, and has manufactured a more sophisticated image, does not have an animal logo, nor do their clothes feature other nature iconography. The clothes at the Gap Kids store, however, which targets the same demographic as Gymboree, do. While Gap Kids clothes are overall plainer than Gymboree (consistent with the Gap image), animal signs are nevertheless observable. Finally, nature imagery appears to be generally absent from designer clothing stores (and their clothes), which target the most sophisticated customers.

There is also a discernable gendered pattern in clothing stores' nature iconography. At Gymboree, for instance, although there are differences across the age categories within genders (Gymboree divides its clothes into three separate age categories for boys and girls, from newborns to 10 year olds), the images and words printed on the boys' apparel consistently communicate a more active and agentic message. Specifically, the boys' clothes display sharks, stingrays, swordfish, and lizards, while the girls' display images of flowers, butterflies, fruit, ice cream, and other candies. Moreover, when the girls' clothes do have an animal on them, it tends to be more passive, like a sea turtle. When the boys' shirts display a sea turtle, the image is accompanied by the words, "Discover the Adventure: Underwater World Exploration." The girls' sea turtles, on the other hand, are accompanied by flowers. And when their shirts have words, they say things like, "I love grandpa/grandma" or "My sweetheart." In short, Gymboree is selling clothes to boys that encourage adventure and that portray nature and animals as awaiting their discovery and exploration. By contrast, the nature signs on the girls' clothing communicate a passive, aesthetic message. The same gendered pattern is also evident at Gap Kids, as well other children's clothing stores.

In sum, while there is no inherent connection between animals and clothing, many clothing stores engineer one. The result offers compelling evidence of the ways in which malls use nature signs to reflect and reproduce societies' age- and gender-related notions of human-nature relations. The more feminine the clothes, the more they display passive, aesthetic nature signs; the more masculine the clothing, the more they display adventure and discovery. Likewise, the younger the age demographic the more pervasive the nature signs, while the older and more sophisticated the demographic, the sparser they become. In other words, as people mature or become manlier, our society considers them more agentic, which is defined, at least in part, by greater dominance of nature. Consistent with what terror management theory would predict, full maturity is apparently marked by complete independence from nature. Thus, once again society's ideas of nature have been projected into the mall. And once again, the idea of nature that is projected is characterized by an endearing dominance of it.

Concluding Remarks

The psychology of our society appears to be in part defined by a profound fear of death, which fuels a need to control and dominate nature. Shopping malls are perhaps the epitome of industrial capitalism and as such it is likely not surprising that in them one finds this psychology tangibly reflected. Specifically, the pattern of the appearance (or not) of benevolent nature displays reflect what Terror Management Theory (TMT) would expect. Moreover, the gendered and age patterns of nature iconography on clothing reflect TMT's implied notions of personhood. Based on the striking parallels between ambivalent naturism and ambivalent sexism, this paper argues that the benevolent interior representations of nature function to legitimize and perpetuate capitalism and its destruction and toxification of nature. They appear to do so by continuously reinforcing in the minds of consumers the notion that "good" nature is the kind that is manipulated by humans while "bad" nature is the kind that is not.

While the above examinations were restricted to the mall, the observed patterns of nature displays likely generalize beyond the mall. In fact, the more any cultural space risks eliciting fear of death, the more likely one should find in such spaces benevolent nature displays acting to subdue the

anxiety.

One final remark is warranted regarding the implications of the findings presented above. Terror management theorists acknowledge that large cultural and individual differences exist in responses to mortality salience, even as these responses relate to ideas of nature and animals (see Goldenberg et al., 2000). Nevertheless, they maintain the essentialist view that fear of death is a fundamental part of human psychology and is thus a cultural universal (e.g., Pyszczynski et al., 2004). The implication of this view is that human domination of nature is inevitable as it is simply a given aspect of humanity (because nature is what has made us mortal and mortality must be denied).

An ecofeminist perspective, however, challenges TMT's claim about the universality of fear of death (and nature). Rather than locating such fear inside people's heads (as TMT does), ecofeminists (e.g., Griffin, 2001; Warren, 1994) situate it within the human-nature relations of a given society, which vary widely across cultures. Consistent with their assertion, anthropologists have found that a focus on the notion of death—and on the afterlife—is virtually absent in gatherer-hunter societies (e.g., Bellah, 1964; Bond, 1992; Woodburn, 1982).

Perhaps the relative lack of concern about death in non-agricultural societies can be attributed to the

fact that human-nature relations in such societies are less mediated by technology (and its infrastructure) than is the case in agricultural societies. That is, in non-agricultural societies, individuals depend primarily (and directly) on the land itself for survival and sustenance, whereas individuals in agricultural societies like the United States depend, for their survival and sustenance, primarily on the technology and infrastructure that stock the grocery stores with food (and mall shelves with "goods"). Perhaps this dependence on technology for survival creates or reinforces a separation between people and nature that results in the objectification of nature as something that needs to be dominated and controlled in order to survive. As Raymond Williams (1980) put it, "nature has to be thought of...as separate from man [sic], before any question of intervention or command, and the method and ethics of either, can arise" (p.75). By grounding this society's fear of death in its human-nature relations instead of locating it within human constitution, we can perhaps contextualize the problem in a manner that points to a potential (though, granted, by no means facile) solution. That is, fundamentally re-orienting our society's relationship to—and thus conception of—nature to one that embraces human embeddedness in it, could potentially eliminate the problem of fear of death as well as the increasingly devastating environmental effects of this fear

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Bridging Ecocentrism and Anthropocentrism Discursively and Materially: Ecopreneurship as (Gendered) Sustainable Development

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Abstract

This essay attempts to bridge ecocentrism and anthropocentrism to explore further Peterson's (1997) discussion of sustainable development. I discuss sustainable development vis-à-vis ecopreneurship as an alternative business model. In principle, ecopreneurship may be able to bridge the discursive and material gap between natural systems and technical/human systems since it is rooted in an ecocentric ethos and yet is also anthropocentric, due to the economic/entrepreneurial roots of the ecopreneur. I further explore ecopreneurship's potential by gendering the discourse of entrepreneurship and addressing the material implications of certain gendered performances of entrepreneurship. Drawing on standpoint theory and ecofeminism, I suggest that women are uniquely positioned to take entrepreneurship in a more eco-dedicated direction. Further directions for communication and environmental research are suggested.

Organizations are perhaps the most central figures in environmental and sustainability discussions, since "work" has been and continues to be the main organizing factor of people's lives, even in a post-industrial society (Marquardt, 2002). However, traditional management literature has only minimally begun to address sustainability issues, and often does so using an anthropocentric ethic, where "ecological integrity is important because of its instrumental value for human use" (Peterson, 1997, p. 1, emphasis added). In this sense, the potential for pro-environmental change is limited in that environmental options are often perceived in light of a bounded, technical system. This is in contrast to an ecocentric ethic, where "nature is valuable in itself, entailing some instances in which human interests should be sacrificed to ecological values" (Peterson, p. 1). Unfortunately, these two ethics of environmental integrity "[promote] dichotomous approaches that encourage competitive scenarios wherein some participants win, while their opponents lose" (Peterson, p. 1).

Peterson's (1997) observation that these dual rhetorics emphasize competition is particularly germane to a discussion of organizational sustainability, given that organizations operate from a competitive, market-based discourse that is rooted in neo-liberal economics. The neo-liberal "model...is characterized by deregulated markets and privately owned enterprises, with minimal involvement of the State in the economic sector" (Roper & Cheney, 2005, p. 96). Privatization and deregulation leave organizations largely unchecked in their green efforts and green rhetoric, allowing them to capitalize on an ambiguous and competitive definition of

sustainability, precisely in the name of "competitiveness" and "development."

These linkages between organizations, "the market," and environmental care require critical examination for how organizations frame their relative greenness and for how the "work" of business has reacted to the rhetoric of ecology. Specifically, communication scholars have begun to explore this relationship, including the rhetoric of corporate responses to global warming (Livesey, 2002), corporate annual reports (Livesey & Kearins, 2002), green marketing (Todd, 2004), metaphors for sustainability (Milne, Kearins, & Walton, 2006), the Sierra Club's framing of activist rhetoric (Reber & Berger, 2005), and, writ large, corporate social responsibility (May, Cheney, & Roper, 2007). This is not surprising since communication scholars are in a unique position to understand the rhetorical and discursive aspects of the debate that result in issue construction and framing; the rhetoric and organization of social movements (e.g. Deluca, 2005); material implications for ostensibly discursive issues (Bullis, 1997), consumer responses and activist alternatives to corporate social (ir)responsibility (Kendall, Gill, & Cheney, 2007), and alternative organizational forms and business models.

It is precisely communication studies' ability to bridge discursive and material practices that lends communication to the study of sustainability. However, Bullis (1997) cautions communication scholars to not get lost in the discursive aspect of this issue, since this would cause environmental issues to be conceptualized as not having "real" important and material consequences. For Bullis, communication

scholars are neglecting the material conditions of the environment by utilizing theories that only highlight the social construction of the environment. This paper is an explicit response to Bullis's (1997, 2004) call to "start seeing sustainability" in our work, especially in regard to her challenge to highlight and develop alternative models of theory and practices (2004, p. 455).

In this paper, I suggest entrepreneurship – specifically, *ecopreneurship* – as an alternative business practice with the potential to embrace a more holistic version of sustainability. Peterson (1997) suggests that the label "sustainability" bridges ecocentric and anthropocentric environmental frames, since it "offers a conceptualization of ecological integrity which includes humanity. Rather than attempting to displace anthropocentric perspectives with ecocentric perspectives (or vice versa) it suggests integrating human concerns into the larger biosphere" (p. 1). Ecopreneurship, as a material practice, may be a business model that encourages such integration of ecocentrism and anthropocentrism. In addition, ecopreneurship is an interesting business model to explore given the prevalence and generally positive valence of entrepreneurship and entrepreneurial discourse in U.S. economic ideology. To this discussion, however, I add that we must attend to gender – specifically, women's ecopreneurship potential – given the gendered discourses and material implications of entrepreneurship.

In this essay, I pursue the thesis that ecopreneurship is a potential paradigm for bridging "sustainability" and "development;" one which is founded on an ecocentric ethos but which operates within the ethos of anthropocentrism. In this sense, it is a potentially subversive yet empowering business model, and particularly for nature-identified women. First, I offer a brief critique of current management-centered ecological thinking. Next, I introduce ecopreneurship as a business practice and consider who may be best suited for ecopreneurship, based on material realities of bodies and performance. I conclude with discussing the gendered and communicative implications for ecopreneurship, and offering suggestions for further exploration.

Organizational Sustainability

For some time, scientists, activists, and scholars have cautioned organizations, governments, and individuals about the effects of human life on the environment, sometimes predicting disastrous effects on the environment if action to reduce and reuse are

not taken seriously. However, as Bullis (1997) reminds us, individuals' efforts have much less to do with "fixing" environmental issues as do organizations and the traditional capitalist organizational model. Indeed, though "sustainability" is often posited as the solution to environmental mismanagement and as a return to nature, it is often suggested as an addition to the organizational model and is not taken seriously as a call to radically change the nature of the organization. This is particularly worrisome, since scholars have suggested that corporations are the only potential saviors of the environment (Coddington, in Levy, 1997).

Corporations are notorious for protecting their own self-interest and longevity. Despite this, they have been known to make minor concessions to consumer demand (Kendall, Gill, & Cheney, 2007) and to change when government policy requires it (Schick, Marxen, & Freimann, 2002). Recently, more and more demands and policies have focused on fostering environmental change and sustainability, and organizations have faced the fact that they are required to meet minimum environmental standards and that they will need to address consumer demands. As a result of progressive consumer desires, the structures, practices, and rhetoric of organizations are becoming imbued with eco-friendliness. However, such attempts are flawed from the beginning since they utilize an "add-and-stir" approach.

One such approach has been to rename sustainable development as "sustainable growth." Holliday, Schmidheiny, and Watts (2002) describe sustainable development as an inherent challenge to business because of its focus on the future of social justice, as well as its challenging systemic nature. But while businesses are turned off from sustainable development practices since they do not "understand what it means for their companies" (p. 14-15), they are turned on to the concept of sustainable growth. Companies who adopted the term "sustainable growth" found a wider reception to the concept than using terms such as sustainability, sustainable development, and sustainable business because of the pro-corporate term "growth:"

Some business leaders were drawn to the concept as they realized that not only was it not anti-growth but also it called for serious economic growth to meet the needs of the current population. Also, some warmed to the idea as they compared the issues involved in sustaining a planet with those

involved in sustaining a corporation. (Holliday, Schmidheiny, & Watts, 2002, p. 15)

While “growth” appears to be a pat rhetorical solution to convincing corporations to truly go green, this term unfortunately suggests that the only way to “solve” sustainability is via growth. Such a term also implicitly reifies a neo-liberal market discourse that does not adequately take natural systems into consideration; again, such discourse perpetuates ecocentric vs. anthropocentric competition.

As a rhetorical term, however, “sustainable growth” may help managers, developers, and stakeholders to understand the necessity for environmental consideration, at least minimally. Another management angle on sustainability that may do this, as well, is environmental management (EM). In business management, EM has been offered as a solution to greening business. Levy (1997) defines EM as “the development and implementation of management practices that address environmental goals while furthering private corporate interests” (p. 126). The debate, as characterized by Levy, is that some believe that EM is truly an innovative and “major step toward environmental sustainability” while “others disparage it as cynical and tokenistic ‘greenwashing’ that masks business as usual” (p. 126). Levy’s ultimate conclusion is that, indeed, EM serves to “accommodate” public demands for green practices and choices, but that it does not truly work to re-envision the place of the environment in corporate practices and consumer lifestyles. In this sense, it is merely political sustainability.

In addition to corporate terms and management strategies, other green tactics and material practices directly involve product enhancement and consumer marketing. More specifically, we have seen organizations attempting to *rhetorically* “green” their businesses, and also adopting the use of corporate sustainability reports. Ford Motor Company, for example, has attempted to justify its continuing position “as the world’s foremost source of sports utility vehicles (SUVs)” (Luke, 2001, p. 311) by adopting sustainability rhetoric. Ford makes it clear on their website that it is possible for the company to achieve the necessary “balance” between being “both an environmentalist and an auto enthusiast” (p. 317). However, as Luke points out, Ford’s greening activities “fall short of what is needed from big business to help create a more ecological society” (p. 311) since merely adopting the discourse of sustainability does not guarantee sustainable material

practices. And it is the material implications, again, that Bullis (1997, 2004) urges organizational scholars to attend to.

Likewise, much of big-business now incorporates sustainability reports into their practices (Livesey & Kearins, 2002), but the question remains if such reports are truly intended to create organizational change in practices, or if they are created to ideally placate concerned consumers. Livesey and Kearins point out that there is much ambiguity surrounding corporate sustainability reports, such as how sustainability is defined and just how much corporate reporting can lead to improvements. Ultimately, corporate sustainability reports maintain the centrality and viability of the market, though they do discuss how to incorporate greening and sustainability into the organization. Yet, “corporate voluntarism alone will not be sufficient to correct fundamental failures in the market system; government regulation as well as informal regulation by advocacy and citizen groups will continue to have a critical part to play” (p. 253).

What we are seeing, then, is a dramatic increase in organizational management rhetoric and practices that suggest that sustainable development is best handled by incorporating environmental terminology into organizational rhetoric, thereby often giving lip service to sustainability and environmental concerns, or at best offering a band-aid solution to environmental concerns. These rhetorics and practices attempt to address green, environmentally-friendly issues, but do so in a manner that sustains anthropocentric notions of nature and natural systems. Extrapolating from Levy (1997), these tactics “[function] on an ideological level to legitimize the role of corporate management as stewards of the environment, deflecting the threat of more radical change to the economic and social system” (Levy, 1997, p. 141).

The Potential for Entrepreneurship to Create Change

As we see in the above discussion, management theory may not go far enough in adopting or building upon sustainable thinking and practices. An organizational model needs to offer a radical change from the traditional bureaucratic or hierarchical thinking in order to *begin* with sustainability as an organizational value. Rather than an add-and-stir method of sustainability, organizations must be *founded on* sustainability. To this end, I introduce ecopreneurship as a model for organizational (communication) scholars to consider. In this next

section, I make the case for entrepreneurship as a key focal area for creating sustainable change, and then lay out a model of ecopreneurship and discuss the benefits and detractors of ecopreneurship for the ecopreneur.

Entrepreneurship, broadly defined¹ as the ownership or creation of a business that is opportunity-driven (Bygrave, 1997), has been established as a major driving force of economies; *The Economist's* Crook (1992) notes that "enterprise and entrepreneurship [are the] irreplaceable engines of capitalist growth" (¶ 19). The Kauffman Foundation recently reported that from 1996 to 2004, an average of 36% adults created a new business each month, representing approximately 550,000 new businesses per month. The rate of entrepreneurship rose through the turn of the century, as well, from 36% in 1996 to 40% in 2004 (Fairlie, 2005). In particular, women's entrepreneurial rates are rising; between 1997 and 2004 the estimated growth rate in the number of women-owned firms was nearly twice that of all firms; 17% compared to 9%. In addition, women-owned firms employ 19.1 million people and generate \$2.5 trillion in sales (Center for Women's Business Research, 2004).

In addition, entrepreneurship is more and more also conceived in terms of social or mission-driven entrepreneurship. As Roper and Cheney (2005) explain, market-driven economies have led to the inability for states and governments to "afford to provide social welfare to the extent that it was provided under the Keynesian model" (p. 96). Roper and Cheney further explain that, "these fundamental problems have contributed to the rise of a range of societal trends, organizational structures, and individual initiatives, all of which come under the generic umbrella term of 'social entrepreneurship'" (p. 97).

The foundational role that entrepreneurship plays in the structuring of organizations and in the economy is one that offers a prime site at which to address sustainability vis-à-vis organizations. Entrepreneurial discourse posits the entrepreneur as being a risk-taker, having vision and passion, having a desire for independence and autonomy, and seeking opportunities upon which to capitalize (Gill & Ganesh, 2007.). As such, entrepreneurship is commonly perceived as a "solution" to dissatisfied organizational members since it ostensibly allows one to be one's own boss and to tailor organizational decisions; this is despite claims that even entrepreneurs are constricted by traditional business models (Schick, Marxen, & Freimann, 2002) and

organizational discourse (Tracy & Trethwey, 2005). Despite that entrepreneurs still need to adhere to traditional business norms, scholars have noted the potential for entrepreneurs to *become* their business, and vice versa. While in some cases, entrepreneurs become personally involved with their businesses to a dangerous degree (Gill, 2006), this phenomena is evidence that entrepreneurs do have an extensive amount of say in the values and structure of their business, and that the relationship between an entrepreneur and her business is an intimate one. Thus, *given the entrepreneur's ability to build her business based on her own values, and the incredible role that small businesses play in driving the larger economy, we must explore the potential for entrepreneurs to make and follow-through with sustainable business choices.*

Ecopreneurship as an Entrepreneurial, Alternative Business Model

Ecopreneurship has emerged as a specific business model that merges entrepreneurship and ecological principles from the start of the business. Also known as *environmental entrepreneurship* and *green-green business*,² relatively little has been written on ecopreneurship, though ecopreneurial business and literature is growing. Generally found in management disciplines, ecopreneur scholars are interested in understanding the nuances of ecopreneurship and the role of the ecopreneur in sustainable business. Ecopreneurs often point to Ben & Jerry's and The Body Shop as ecopreneurial businesses, though others have noted that these famous cases may more accurately reflect the environmental management practices critiqued above. Scholars have also studied smaller businesses, such as natural pesticide companies in India, to explore the role of ecopreneurship in communities and for individuals, and also what challenges ecopreneurship may bring (e.g. Pastakia, 2002). Ecopreneurship is still in an infant stage, however, as Issak (2002) has noted that "less than 20% of North American and European companies can be described as proactive in their commitment to improve environmental performance in alignment with sustainable development objectives" (p. 86).

Noting that the ecopreneur is one who values sustainability but also recognizes the impossibility of a *pure* ecopreneurial model, Issak (1999, 2002) defines ecopreneurship and the ecopreneur in the following discussion:

Ecopreneurship is a Weberian ideal type that refers to a person who

seeks to transform a sector of the economy towards sustainability by *starting up* a business in that sector with a green design, with green processes and with a life-long commitment to sustainability in everything that is said and done. To become an ecopreneur is an existentialist commitment in which the entrepreneur knows he or she will never reach the ideal; but that the very ideal of sustainability gives meaning to everything the ecopreneur does on the earth. (Issak, 2002, p. 82, emphasis mine).

The existentialist turn in the ecopreneurial business model is particularly relevant to sustainability because it rejects the Cartesian mind-body dualism and instead seeks to reconcile systems of nature with systems of technology.

Issak's (2002) definition importantly states that ecopreneurship is ecological from its inception. Issak does not make a distinction between the ecopreneur's values and the intended values of the company; ostensibly, the ecopreneur is able to influence her business by instilling her own personal values into her work. The ecopreneurial, or green-green business, *begins* with green values, rather than adopts or incorporates them later on in the life of the business; this is markedly different from corporations that, attempting to meet consumer demands, greenwash their business or generate ambiguous corporate sustainability reports.

Schick, Marxen, and Freimann (2002) reinforce the notion that ecopreneurial businesses are those that are green from the inception, noting that "the promotion of sustainability in start-up businesses seems to be a more promising approach, for a number of reasons. New businesses have yet to develop an organisational culture ... it should be easier to 'infect' founders of new businesses with the idea of sustainability than to rebuild the established corporate cultures of existing companies" (p. 60). Exploring the relative ease or difficulty for businesses to begin with green values, Schick, Marxen, and Freimann demarcate three different types of entrepreneurial businesses: eco-dedicated, eco-open, and eco-reluctant. The characteristics of each business type are outlined in table one.

As we can see from the table, the eco-dedicated start-ups are holistic in their business approach, not

only incorporating ecological principles into their products but also into a fundamental way of doing business. However, eco-open businesses, which we could argue are making an effort to incorporate sustainability into their existing practices, are not as close to embracing a holistic ecological approach due to a piece-meal, add-and-stir approach. Eco-reluctant ventures are even more distant from ecocentric approaches, seemingly only making changes when they are required or beneficial to the business.

Lest we make the mistake of equating *sustainable values* with *non-profitability*, as Holliday, Schmidheiny, and Watts (2002) would argue is the rhetorical problem with the term sustainability, I now turn to Pastakia's (1998) delineation of two types of ecopreneurial ventures. Whereas Schick, Marxen, and Freimann (2002) categorized differing *ecological orientations* to start-up ventures, Pastakia suggests that there are two *business orientations* to ecopreneurial ventures: the commercial venture and the social venture. The commercial venture is more focused on bottom-line gains, and is identified as "those who seek to maximize personal (or organizational) gains by identifying green business opportunities (i.e. eco-friendly products and processes) and transforming them into viable business ventures" (Issak, 2002, p. 84). The commercial ventures, then, incorporate green values from the beginning, though the driving force behind the business is more traditionally measured. On the other hand, social ventures – more in line with social entrepreneurship – are driven more by the idea or desire to offer alternative products to the market. Social ventures are "those who seek to promote eco-friendly ideas, products or technologies either through market routes or non-market routes. [For example,] given the deep spirituality in many areas of India, the idealist notion of social ecopreneurship is of particular importance as it defines an existential choice that is not dependent on material rewards but that leads to spiritual fulfillment and, surprisingly often, to worldly success in the long term" (Issak, p. 84).

Both the commercial venture and the social venture can be ecopreneurial, or in Schick, Marxen, and Freimann's (2002) terms, eco-dedicated, and the profitability of a venture does not necessarily constitute an organization's relative eco-dedication vs. eco-reluctancy. This is contrary to what might be a common assumption that the eco-dedicated, or ecopreneurial, business will not be as corporate or profit-driven. Indeed, the classic cases of Ben & Jerry's and The Body Shop indicate that eco-

Eco-dedicated	Eco-open	Eco-reluctant
Description:		
<i>These companies consistently adopt environmentally friendly business practices</i>	<i>These companies partially adopt environmentally friendly business practices</i>	<i>These companies adopt environmentally friendly business practices to comply with regulations</i>
Environmentally friendly measures encountered in the start-up business:		
Use of "closed loops" to re-use material waste for the generation of energy The production of semi-finished and finished materials with use of renewable raw materials Consistent use of environmentally friendly materials The sale of environmentally friendly products and services Safe disposal of hazardous waste materials The use of a washing machine for paintbrushes and other working appliances Waste sorting The recycling of packaging	Use of solar power Introduction of additional, environmentally friendly, products to the product range The sale of environmentally friendly products and services Use of biodegradable detergents Installing of energy-efficient light bulbs The use of recycled paper Waste sorting The safe storage and disposal of hazardous materials The offering of discounts for environmental and social groups Oil separation Recycling of oil cloths	Compliance with environmental regulations Waste sorting Use of energy-efficiency measures within the premises Oil separation

Table One: Different Categories of Ecological Orientation among Start-Up Ventures
Adapted from Schick, Marxen, and Freimann, 2002, p. 65

dedicated ventures can blossom in corporate status and make an impressive profit.

Obstacles to Ecopreneurship

Ecopreneurialism, or eco-dedication, however, posit ideals that may be unreachable. As Issak (2002) noted, this is why the ecopreneurial business is ultimately existentialist in nature. Like any entrepreneurial venture, the ecopreneurial business will face obstacles in implementing the business, though such obstacles may deviate from more common entrepreneurial challenges such as finding funding and actually operating the business.³ Some obstacles that are unique to ecopreneurialism include:

- 1) Lack of an ecopreneurial community and information, as well as "best-practice" examples;
- 2) Consumer resistance to alternative products, technology, and systems;

3) Legal environments that "could be considered restrictive when there are strong legal and bureaucratic controls on the manufacturing, marketing or use of the products /technology concerned" (Pastakia, 1998, p. 168);

4) Financing and funding ecopreneurial businesses, especially since the creation of new products and technologies can incur unmanageable costs and public funding may be suspicious of ecopreneurial business products and services; and

5) Difficulty in persuading consumers to switch to alternative products and processes which can hamper profits in the early stages, since "the new goods and services do not reach the necessary volumes to achieve competitive prices. As a

consequence, expensive green goods and services have to compete with cheaper conventional products” (Schick, Marxen, & Freimann, 2002, p. 64).

What is perhaps most telling about the potential for entrepreneurs to become ecopreneurs is that, at least empirically, *the attitude of the entrepreneur* is one of the most important factors in “determining whether or not ecological operating measures are put into practice” in a nascent venture (Schick, Marxen, & Freimann, 2002, p. 69). According to this line of thinking, then, individuals who are eco-dedicated or eco-open are more easily swayed to incorporate ecopreneurial ideas into their ventures than are eco-reluctant individuals, regardless of the regulations, industry, or opportunities one has. In this way, then, the attitude of the entrepreneur is also an obstacle to widespread ecopreneurship.

Thus far, I have introduced ecopreneurship as an alternative business model for organizational communication scholars to consider vis-à-vis sustainability. This model, like traditional entrepreneurship, offers its own challenges, but also speaks to the potential to bridge ecocentric and anthropocentric approaches to environmental concerns in a manner that is more holistic and truly deserving of the “sustainable development” label. *If entrepreneurial businesses are indeed the engines of the capitalist economy, then it is reasonable to theorize that more eco-dedicated, or ecopreneurial, business can create a sea change that sees more traditional businesses and start-ups being and going green-green.*

From the perspective of communication, ecopreneurship offers a particularly rich site of study. Discursive and material practices shape how individuals, communities, and other audiences conceive of and react to this alternative business model that – ideologically – operates within the realm of a neo-liberal market society but which is also founded on social entrepreneurial and environmental ethics. To offer a critical focus on ecopreneurship, further enriching our understanding of how this alternative business model can address sustainable development, I next gender the business of ecopreneurship.

Gendering Ecopreneurship

While ecopreneurship has the potential for holistic sustainable development, we must further interrogate this business model for its position at the

crossroads of a natural system and technological system: if ecopreneurship truly considers nature and natural systems in profit seeking and yet still attempts to operate in traditional markets, we need to be critical of how it discursively and materially interpellates the entrepreneur or ecopreneur. Specifically, I explore the possibility of ecopreneurship as a potentially woman-identified endeavor, and discuss this below.

Feminist approaches to organizations demonstrate that organizations are inherently gendered entities (e.g. Acker, 1990). Created, maintained, and fostered by male bodies and a masculine ethos, organizations and an organizational society are ultimately gendered male. This argument applies to entrepreneurship, as well. Critical management and organizational scholars have suggested that an androcentric bias in entrepreneurial research has celebrated masculine entrepreneurs (e.g. Bill Gates, Donald Trump) and has also contributed to the notion that masculinity is the defining characteristic of entrepreneurship. Thus, entrepreneurial discourse, along with the actual “doing” of entrepreneurship, have been gendered masculine (Ahl, 2004; Bird & Brush, 2002; Gill & Ganesh, 2007; Fielden & Davidson, 2005).

The normalization of male bodies in entrepreneurship has created obstacles to women embracing entrepreneurship. For example, the “Horatio Alger” myth of entrepreneurship creates glass barriers for women seeking to be successful entrepreneurs (Langowitz & Morgan, 2003). Women do not as easily conceive of themselves as capable of becoming entrepreneurs, and they often feel as though they must meet a particular (male) standard in business (Holmer Nadesan & Trethewey, 2000). Despite this, entrepreneurship is perceived and framed as potentially empowering for women who are seeking more decision-making power at work, desire control over work-life issue, or feel passionate about particular work opportunities (Gill & Ganesh, 2007).

At the nexus of gender and ecopreneurship, therefore, we can recognize that: 1) ecopreneurship is potentially revolutionary business; 2) entrepreneurship potentially *empowers* women; and 3) statistics show that more women see entrepreneurship as career option. This combination suggests that we might look to women entrepreneurs as a potential “first wave” of ecopreneurs. I unpack this claim below.

Women and the Environment

For better or for worse, gender is inextricably part of the larger “environmentalism” debate, as women are characterized as the “nurturing” gender and men are characterized as more apt to “plunder the environment” (Bradley, 2006). Regardless of one’s opinion of the relative truth in these claims, and acknowledging that such claims are ultimately essentialist, I propose that we at least investigate such claims as to how they can inform ecopreneurship.

According to Bradley (2006), women are perceived to be the more environmentally-friendly sex. A 2003 Rachel’s Network study found that “women are more likely to support pro-environmental government spending; women are less sympathetic to business than men are when it comes to environmental regulation; and women are more concerned than men are about environment problems that create health and safety risks, particularly where children are involved” (Bradley, p. 61). Men, on the other hand, tend to be more conservative in their views on the environment, and perceive environmentalism as a leftist and women’s issue.

Such a lens on men’s and women’s environmental stances not only suggests that there are material differences between men and women, but also suggests that like entrepreneurship, environmentalism is a gendered phenomenon. However, while entrepreneurship is gendered masculine, environmentalism is gendered feminine. The discourse of environmentalism often feminizes environmentalists as “tree huggers” (Bradley, 2006), or as “hysterical women” (Killingsworth & Palmer, 1995).

Understanding this gendered nature on environmentalism has implications for entrepreneurship and ecopreneurship. This may indicate that male entrepreneurs are less likely to develop eco-dedicated businesses, given the masculine ethos of entrepreneurship and the feminine ethos of the environment. Likewise, might we suggest that female entrepreneurs who find empowerment in entrepreneurship are more likely to develop eco-dedicated businesses? Put more directly, I hypothesize that: *women – already the environmentalists – need to be encouraged towards entrepreneurship; and men – already the entrepreneurs – need to be encouraged towards environmentalism.*

Feminist Standpoints and Ecofeminism

The suggestion that women are socialized towards environmentalism and men are socialized towards entrepreneurship is not entirely outlandish. While acknowledging the dangers of essentializing genders, I also suggest that the standpoint of women, as stemming from a particular gendered, raced, and classed position in society (Wood, 2007), has paired women as natural stewards of the environment. That is, if women are not biologically tied to the earth, they are at least often socialized to be, given broad assumptions of women as nurturers and care-givers.

Ecofeminists, in particular, often posit this relationship between women and the environment. As discussed by Mies and Shiva (1993), ecofeminism is “about connectedness and wholeness of theory and practice. It asserts the special strength and integrity of every living thing ... we are a woman identified movement” (p. 14). Put more succinctly, “ecofeminists...perceive a connection between effort to control and subordinate women and the quest to dominate nature” (Wood, 2007, p. 72).

Central to ecofeminist principles is the belief that women possess particular knowledges of a natural system and of the potential bridging of natural and technical/human systems. The seemingly “natural” divide between a system of nature and a technical/human system has its roots in patriarchy, where patriarchy assumes that 1) nature is unproductive; 2) agriculture and farming based on renewable cycles is for “poor” communities or creates “poor” societies, and that 3) like nature, women are unproductive since legitimate production can only occur when “mediated by technologies” (Shiva, 1988, p. 4). The feminine-in-nature, then, is extremely central to ecofeminism and to understanding the claim that women-identified women are also nature-identified. Indeed, Shiva (1994) quite strongly identifies women as change agents in understanding and incorporating sustainability into the cycles of life and work:

Because of their location on the fringes, and their role in producing sustenance, women from Third World societies are often able to offer ecological insights that are deeper and richer than the technocratic recipes of international experts or the responses of men in their own societies. There are two reasons for this. Firstly, these responses come from cultures in

which maintenance of life has been the civilizing force; secondly, the gender division of labor, introduced or aggravated by the development process, has increasingly pushed women to work for the production of sustenance, while men have been drawn into military and profit-seeking activities. (p. 1)

Though Shiva's project is in regards to Third World women, her claims can be extrapolated to women world-wide. In many societies, women have, to some degree, been subordinated to men and can claim a subjugated subject position. Even in "developed" countries, women tend to be more involved with – or *are at least perceived as* – processes of child rearing and environmental regulations that affect communities and children. While women are not all nature-identified, the discursive construction of women as nurturers and caretakers give women more leeway to address environmental issues. For example, a study by Schiller and Crewson (1997) reported that women's traditional sex-roles has offered them more flexibility for entrepreneurship because there is not as much societal pressure for them to "succeed" in particular ways as there is for men. This is in line with notions of hegemonic masculinity where an ideal-type "real" masculinity (which may involve land conservation for human use, but not necessarily sustainability) is perpetuated for men but has implications for women's roles, as well. We might say, then, that just as hegemonic masculinity precludes many men from making environmental choices, it simultaneously gives women more freedom to make supposedly "unmanly" choices in regards to nature and the environment.

Thus, the discursive construction of women as nature-identified, along with the feminization of environmentalism, has implications for the enactment and performance of ecopreneurship. It may be that women are able to overcome some of the obstacles to ecopreneurship more easily as a result of the assumption that they're good at "doing" earth and sustainability: 1) women may be given more credibility as ecopreneurs; 2) women may enjoy easier access to public funding in eco-dedicated businesses; and 3) women may draw on women-identified networks more easily, thus creating more community support for ecobusiness (women entrepreneurs are reported to both use *and create* networks for both personal and business support; Gill & Ganesh, 2007). Relatedly, some claim that it is precisely women's knowledges and marginalization

that has made them *inventive* and *willing to take on risk* (Montero, 2006).

From this discussion, therefore, we may find that the potential for women to become voices for the environment through ecopreneurship is substantial. And, given entrepreneurship's centrality to economic development, women's ecopreneurship can boost struggling economies at the same time that they are addressing environmental issues. Thus, women's ecopreneurship may bridge natural and technical/human systems. Montero (2006) suggests this is possible when reporting that women entrepreneurs in Afghanistan "are building a better Afghanistan, often in small and subtle ways" and "their efforts...are indispensable in the struggle to reverse decades of depravation in Afghanistan" (§ 8, 5).

A Communicative Perspective on Ecopreneurship

As this essay theorizes, ecopreneurship draws on both the discourse of entrepreneurship and the discourse of environmentalism. Each discourse is gendered in contradictory ways: environmentalism with a feminine ethos and entrepreneurship with a masculine ethos. I argue that women may be best positioned to navigate these discourses, based on their standpoint in society as subordinate to men (thus potentially operating subversively under the radar), their relative "freedom" from some of the confines of hegemonic masculinity (in that expectations for business and gender performances may not be as strict), and the empowering aspect of entrepreneurship for women. But also in this argument is an acknowledgement of the material aspect of women's ecopreneurship: the very discourses that affect women's literal experiences in life *may* serve to empower them as candidates for ecopreneurship. In addition, their physical bodies may cause them to be perceived as inherently credible speakers for nature (though they may not be or may not desire to be). Given this, I now suggest a few directions for communication, organizational, and environmental scholars to contribute to this discussion.

First, communication can further interrogate the discursive and symbolic aspects of organizational sustainability and ecopreneurship. The gendered nature of both entrepreneurship and environmentalism offer a way for organizational scholars to understand the relationship between a masculine work ethos and a feminine land ethos. Such an understanding has implications for policy and support development, as it can be used to justify

funding and state-sponsored programs to encourage women into entrepreneurship and men into more environmentally friendly businesses.

In addition, a communication perspective can contribute to eco-education, spanning environmental and organizational curriculum. Business textbooks, in particular, will be a useful site to explore for gendered assumptions on environmentalism and entrepreneurship. Scholars can assess the role that Environmental Management, for example, plays in offering alternative business models, and ecopreneurial (eco-dedicated, in particular) models can be compared. Indeed, a growing body of ecopreneurial research can find its way into the classroom in the form of a supplemental article, a case study, or a textbook chapter.

From a more organizational perspective, the ecopreneurial model needs to be further studied by organizational communication theorists and practitioners so that we can better understand how the structure and practices of ecobusinesses may “work” in comparison to conventional businesses. We may surmise that organizational structure, hierarchy, culture, and so on in ecopreneurial businesses will necessarily reflect aspects from *both* traditional and feminist organizational structures: a hybrid of sorts, given that ecopreneurship incorporates or combines ecocentrism and anthropocentrism.

Likewise, the framing of entrepreneurial choice and identity will prove an interesting area of study, given that, ideally, ecopreneurial businesses *start green*. If this is indeed the case, what is the relationship of the ecopreneur’s values and vision to the eco-business? Like social entrepreneurship, is the business driven by a value-oriented mission, or is it a more traditional profit-oriented mission? Alongside this, questions of green-green organizational leadership and followership are raised. Decision-making and employee participation need to be examined within green-green businesses to understand further the process of going green and

staying green. Finally, how will eco-dedicated businesses come to rhetorically position or market themselves as similar and/or different to “greenwashed” organizations?

Second, the implications for material changes are great. At a base level, theorizing the relationship between communication and ecopreneurship can have healthy benefits for both a natural system and technical/human system, together. While ecopreneurship is not the only solution, and while it is admittedly idealistic, green-green businesses do possess the capacity to change how business is done, and to improve communities, lives, and environments through cleaner products and processes. In addition, this understanding may have the potential to influence the educational discourse of entrepreneurship and the business world. Women, in particular, can impact and be impacted by ecopreneurship. Taking control of their work experiences and in turn, bettering their lives, women’s material conditions may be improved through communicative strategies such as networking and coalition building. It is possible that recognizing women’s entrepreneurship and ecopreneurship will have lasting positive effects on both women and the environment.

Practically, educating women and men about entrepreneurship and ecopreneurship is necessary, and continuing to build support for ecopreneurial outlets, mentor programs, and networks can aid individuals with the more practical obstacles of finding funding and getting the business up and running. This is particularly important, as Pastakia (1998) notes that:

The approach of ecopreneurship embodies [proactive] action. As the movements for greening agriculture and industry spread, more and more entrepreneurs will realize that the only business worth pursuing in the long run is green business. (p. 172)

Endnotes

¹ I emphasize “broadly defined” to acknowledge that historical definitions of entrepreneurship are strict in defining entrepreneurs as innovators, change-agents, and risk takers. While some contemporary definitions of entrepreneurship suggest that it encompasses all business owners, the self-employed, etc., other definitions continue to adhere strictly to the mythos of entrepreneurship as “breaking with the past” (McFarling, 2000). Consider, for example, the insistence on uniqueness: “to be entrepreneurial, an enterprise needs to have special characteristics over and above being small. It needs to create something new, something different that would change the rule of the game and transmute values” (Bhattacharyya, 2006, p. 108).

² As opposed to simply “green business,” green-green businesses are “really” or “truly” green businesses.

³ One entrepreneur self-help website indicates that the responsibilities that come with operating the business include: “employees, marketing and advertising, sales, communications, public relations, legal needs, government regulations, equipping the office, risk management, disaster planning, crisis management, insurance, technology, hardware, software, the internet, and the financial aspects of the company - bookkeeping, managing debt, taxes, and barter” (Kautz, n.d., ¶5).

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