

# Environmental Communication as a Nexus

*Proceedings of the 10th Biennial  
Conference on Communication and the Environment*



Selected Papers from the 10th COCE Conference held at the  
University of Southern Maine, Portland, Maine, USA, June 27-30, 2009

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University of Maine

Conference Host: Department of Environmental Science  
University of Southern Maine  
106 Bailey Hall  
Gorham, ME, USA 04038

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<sup>1</sup> All material other than accepted papers were edited for accuracy and grammar. Accepted papers were reformatted for consistency, but no other changes were made to papers.

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## **Preface**

### *Environmental Communication as a Nexus*

Proceedings of the 10th Biennial Conference on Communication and the Environment

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The Conference on Communication and the Environment (COCE), a biennial conference, has been convening since 1991 when the first ever COE met in Alta, Utah. The 2009 COCE marks a very special milestone, the 10th biennial COCE. What makes this achievement especially laudable is that there is no official organization that runs the conferences; it is through dedication and tireless work by a handful of volunteers. Many scholars have chosen the crossroads metaphor to describe a potential turning point for an event or movement. Within this vein, 2009 marks a crossroads for COCE. Can COCE survive and thrive without an organizing body? If a more formal organizational structure is injected into COCE, will the structure adversely affect the very aspect of COCE that makes it a special conference? In June 2009, 116 scholars, practitioners, and interested individuals came to Portland, Maine to attend the 10th Biennial COCE. It is important to examine the attendee list: 18% were from outside the US; 49% were faculty and 42% were students; and for 20% this was only their first or second COCE. These data indicate that COCE appeal is becoming broader geographically and provides an important opportunity for scholars and various stages in their careers. As discussions and efforts move forward, a challenge will be to preserve this unique characteristic while promoting environmental scholarship.

Consequently, the selected theme for the conference was “Environmental Communication as a Nexus.” The intent of the theme was to answer the question, what role should Environmental Communication as a discipline play as concern over the environment has risen on the international, national, and local agendas. To help answer this question, David Hart of the University of Maine’s Sustainability Solutions Initiative was asked to give the keynote address. This was fitting as David is trained as a watershed scientist; he noted that addressing environmental problems must include a collaborative effort between environmental communication and environmental science. David set forth a call for action, “let’s join forces and collaborate!” He noted that science alone is ill prepared to push society to become more sustainable; environmental communication is crucial in assisting in overcoming disciplinary barriers, engaging more effectively with stakeholders, and the role of media studies and the use of technology to facilitate sustainability practices.

We wonder how the question, “what role has Environmental Communication as a discipline played to address environmental issues,” would be answered at the 20<sup>th</sup> biennial COCE.

# Acknowledgements

We would like to thank the following individuals for helping to make the 2009 COCE a success:

Steve Depoe, Barb Willard, and Gregg Walker for their advice and support.

Eleanor Seitz for organizing the papers and panel and managing the peer review process.

Sue Goodrich, the conference webmaster.

Amy Cabinass and Pete Johnson for organizing the Graduate Student Mixer.

Special thanks to all the voluntary paper/panel peer reviewers.

The COCE 2009 conference volunteers: Rob Sanford, Skye Wood, Malorie Pease, Tovar Ceruli, Erin Dalton, Amiee Howson, and Britney Carter.

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Hollie Smith, Todd Norton, & Ritch Woffinden, Washington State University

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Lisa-Anne Botticella & Michal Bardecki, Ryerson University, Canada.

#### **Contesting Property and Production: Dialectical Hegemony in the Case of The Earth Liberation Front**

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Terence Check, St. John's University

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**A Comparative Rhetorical Analysis of US and UK Newspaper Coverage of the Correlation Between Livestock Production and Climate Change**

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Laura Vernon, Utah State University

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## Conference Program

2009 Conference on Communication and the Environment  
University of Southern Maine, Portland, Maine, USA  
June 27 - 20, 2009

**An asterisk (\*) by the paper indicates that the paper appears in the Conference Proceedings.**

### Conference Director

Travis Wagner  
Department of Environmental Science  
University of Southern Maine

### Conference Co-Director

Laura Lindenfeld  
Department of Communication &  
Journalism and The Margaret Chase  
Smith Policy Center  
University of Maine

### Saturday, June 27

8:00

**Keynote Address** – *The Role of Communication Studies in Sustainable Development: A Call to Collaborative Action*

Dr. David Hart  
Director, Senator George J. Mitchell Center for Environmental and Watershed  
Research, University of Maine, Orono.

### Sunday, June 28

8:30-9:50

Session 1

A. *News Media Coverage and Environmental Issues*

**\*Definition by Dichotomy: News Coverage of the World Summit on Sustainable Development**

Cassie Smith, University of Colorado Boulder

**\*The Roads Less Traveled: Looking for Certainty in the Colorado Roadless Rule and Media Coverage**

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Gregg B. Walker, Oregon State University

**\*Role of Environmental Communication in Shaping Remedy at America's Largest Superfund  
Site**

Pat Munday, University of Montana, Butte

**10:00-11:45**    Session 2

*COCE's Next Ten: Where Do We Go From Here?*

**COCE: Time to Organize!**

Steve Depoe, University of Cincinnati

**Bridging the Gap to Common Ground**

Mike Liles, Andrea Feldpausch, Leigh Bernacchi, & Anna Munoz, Texas A&M University

**Vision 2029: Looking ahead to the Next Ten COCE's**

Barb Willard, DePaul University

**Opportunities and Pitfalls in the Next 10 Years: Situating "Our" Conference in an Increasingly  
Institutionalized and Professionalized Field**

Pete Bsumek, James Madison University

**Expanding the Reach and Reputation of Environmental Communication Scholarship**

Tracy Marafiote, SUNY Fredonia

**COCE's Next Ten: Comments from Overseas**

Nadarajah Sriskandarajah, Swedish University of Agricultural Sciences

1:10-2:30

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A. *Environmental Communication in Action: A Look at Theory-Practice Nexus*

**Responding to (Organizational) Climate Change: Facilitating the National Park Service's Transformation**

Jessica Thompson, Colorado State University

**Theory and Practice of Making Green Media**

Andy Opel, Florida State University

**\*Communication Consulting for a Sustainable Agriculture Initiative**

Joshua J. Frye, State University of New York at Oneonta

B. *Integrating Communication Studies into Issue-Driven Interdisciplinary Research: Maine's Sustainability Solutions Initiative as a Model*

Laura Lindenfeld, University of Maine

Charlie Colgan, University of Southern Maine

Rob Lilieholm, University of Maine

Jessica Leahy, University of Maine

Kathleen Bell, University of Maine

Linda Silka, University of Maine

Terry Porter, University of Maine

Shaleen Jain, University of Maine

2:40-4:00

Session 4

A. *Alienating People from Place by Divorcing Production from Consumption*

**The Forest Question: A Political-Economic Proposal for Interpreting the Connections between the Forest Industry, Climate Change and Environmental Communication**

Cristian Alarcón Ferrari & Nadarajah Sriskandarajah, Swedish University of Agricultural Sciences

**\*Animal, Vegetable or Mineral: Viewing Food Production through a TV Screen**

Jean P. Retzinger, University of California, Berkeley

**Hunting as Anachronistic Bridge for the Human-Nature Divide**

M. Nils Peterson, North Carolina State University; Hans Peter Hansen, Swedish University of Agricultural Sciences; & Markus J. Peterson, Texas A&M University

**\*Linking Production and Consumption with Deontologically Driven Symbolic Acts of Conservation and Humanitarianism**

Rachel Shellabarger, Nils Peterson, Erin Sills, & Sarah Warren, North Carolina State University

**Promoting Sustainability by Facilitating Discovery of the Interdependence between Production and Consumption of the Yellowstone River's Ecosystem Services**

Cristi Choat Horton, Tarleton State University; Damon Hall, Texas A&M University; & Susan J. Gilbertz, Montana State University-Billings

B. *Human Nature Interactions*

**\*A Theory of Naturalization: The Alchemist's Cookbook for Transforming the "Social" into the "Natural"—and Back Again**

Christopher Gamble, University of Washington

**\*The Rhetoric of <Military Readiness>: Public Discourse, Whales and Navy Sonar**

Terence Check, St. John's University

**Shoring up National Security: Beached Whales, Articulation and (Counter) Hegemonic Discourses**

Deborah Callister, University of Utah

4:10 – 5:30

Session 5

A. *Risk Communication*

**\*Seeking and Processing Information about Wildlife Disease Risk: A Proposed Model and Its Implications for Disease Management and Risk Communication:**

Chris Clarke, Cornell University

**\*Application of Integrative Crisis and Emergency Risk Communication Model**

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**NIMBY, Inverted Quarantine, and GHOST: A Comparative Look at Constructions of Environmental Risk and Their Implications for Environmental Action**

Judith Hendry, University of New Mexico

**College Students' Attitudes and Beliefs about Climate Change Mitigation: Implications for Communication**

Amy E. Chadwick, Pennsylvania State University

- 6:00-7:00** Reception sponsored by *Environmental Communication: A Journal of Nature and Culture*
- 6:45** Announcement of Next COCE Host
- 8:30-9:30** *Cross/Walking*, Performance by Jonny Gray

**Monday, June 29**

**8:30-9:50** Session 6

A. *Strategies for Communicating Environmental Issues*

**\*A Sublime Junkyard?! Placing the Sublime in Contemporary Environmentalism**

Lisa Slawter Volkening, University of Georgia

**\*Virtually Natural: Environmental Education in *Second Life***

Joseph S. Clark, Florida State University

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Diane Hope, Rochester Institute of Technology

**\*Influencing Decision Makers: Applying Psychology and Communication Research for Upstream Environmental Behavior Change**

Bruno Takahashi, SUNY Syracuse

B. *Understanding Different Communities*

**Damning the Dump, Banning the Burn: Understanding the Farmer's Dilemma in Agricultural Plastics Disposal in New York State**

Laura Rickard, Cornell University

**\*Vegan Soul Food: African-American Vegetarianism in Media**

Garrett Broad, University of Southern California

**The Impact of Communication on Belief in and Perceived Knowledge of Environmental Norms**

John C. Besley, David Whiteman, & Sonya H. Duhe, University of South Carolina

**10:00-11:20** Session 7

*Communication as a Tool for Development of Competence within Natural Resource Management*

**\*Communicative Skills Development of Administrators – A Necessary Step for Implementing Participatory Policies in Natural Resource Management**

Lotten Westberg, Lars Hallgren, & Agneta Setterwall, Swedish University of Agriculture

**Content and Didactics of Education in Environmental Communication - Experiences from One of the First Explicit EC – Master Program**

Lars Hallgren, Swedish University of Agriculture

**Implementing Nature Conservation Policy in the Name of Participation: Field-level Bureaucrats as a Lubricant**

Hanna L Bergeå & Magnus Ljung, Swedish University of Agricultural Sciences

**\*Landscape and Place Concepts Meeting through Encounters between Birdwatchers and Farmers**

Elvira Caselunghe, Helena Nordström Källström, & Johan Ahnström, Swedish University of Agricultural Sciences

**Exploring Landowner's Conceptions of Stewardship, Social Responsibility, and Property Rights**

Shari Rodriguez, Nils Peterson, Fred Cabbage, Erin Sills, North Carolina State University

**\*Natural Resources Management Approaches in Ethiopia in Retrospect**

Atakilte Beyene, Swedish University of Agricultural Sciences

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Lunch Presentation, **Music & Environmental Communication**

Dr. Paul Christiansen, University of Southern Maine, School of Music

**1:10-2:30**

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**Climate Change, Urban Microclimates and Local Decision-Making.**

Jessica Thompson, Colorado State University

**Resonating Climate Change Policy into Reality: Economic Development and the Deployment of Wind Energy in Texas**

Damon M. Hall, Texas A&M University

**Articulating “Resilient Habitats” in the Era of Climate Crisis: A Rhetorical Battle for Hegemony at the Nexus of the Material and Ideological “End of Nature”**

Pete Bsumek, James Madison University

**Beyond Green Consumerism: Communication at the Nexus of Climate Change and Consumption**

Steve Schwarze, The University of Montana

**B. Excavating Public Participation: Critical Perspectives on Social-Political Dimensions**

**Stakeholders or Citizens? A Probe into the Politics of Participation in Environmental Governance**

Hans Peter Hansen & Nadarajah Sriskandarajah, Swedish University of Agricultural Sciences

**How Inter-Community Communication Shapes Efforts to Achieve Sustainability on Military Installations**

Graise Lee, Nils Peterson, Fred Cabbage, and Jessica Jameson, North Carolina State University

**\*Colonizing participation: Land Use Management and Lifeworlds - Two Cases of Natural Resource Management in Sweden**

Per Haglund & Elin Ångman, Swedish University of Agricultural Sciences

**Feelings and Fellings – Considering the Importance of Embarrassment in a Swedish Forestry Conflict**

Elin Ångman, Lars Hallgren, and Eva-Maria Nordström, Swedish University of Agricultural Sciences

**\*‘The Void of Illegitimacy’: Grounding the Methodology of Dialogical Boundary Critique for the Facilitation of Stakeholder Planning in Philippines Integrated Coastal Management Policy**

Rasmus Klocker Larsen, Swedish University of Agricultural Sciences

**2:50-4:10**

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**A. Eco-cultural Manifestations and Reverberations: Discursively Negotiating the Human-Environment Nexus**

**Listening” to Nature and the Animals: A Blackfeet Discourse**

Donal Carbaugh, University of Massachusetts-Amherst

**Orcas and “Dorcas”: The Cultural Limits to Expressing Emotional Connection with Nature**

Tema Milstein, University of New Mexico

**\*The Tao of Food Activism: Using Institutions to Fight Institutions**

Maura Troester Nunez, University of Colorado-Boulder

**Learning to Howl: Canine-Human Communication on a Sled Team**

Emily Plec, Western Oregon University

**B. Discourses of Legitimacy in Three Canadian Cases of Environmental Policy Communication**

**Environmental Law as Ecological Communication: The Evolution of the Canadian Air Pollution Regime, 1958 to 2005**

Owen Temby, Carleton University, Canada



**Rhetorical Constructions of Community and Ethos in a Canadian Environmental Risk Assessment**

Philippa Spoel, Laurentian University, Canada

**Rhetorical Representations of Science in the Construction and Communication of Organizational Arguments in the Climate-Change Debate**

Graham Smart, Carleton University, Canada

4:20 – 5:20                      Session 10

A. Media Persuasion

**\*The Biosphere Metamorphosed as ‘Buyosphere’: The Human Footprint, Commercial Television, and Consumerism**

Matthew Killmeier, University of Southern Maine

**Evaluating Audience Resonance: Strategic Environmental Communication and Grid/Group Theory**

Michele Poff, University of Washington

**\*Struggling for Ideological Integrity in the Framing Process of U.S. Animal Rights Organization Food Campaigns**

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**\*Participant Visual Ethnography: The Experience of Environmental Art**

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**\*Powering Our Energy: Conceptions of Energy in Contemporary Oil Company Advertising**

Brian Cozen, University of Washington

|                         |
|-------------------------|
| <b>Tuesday, June 30</b> |
|-------------------------|

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**\*Communication, Conflict and Science in Natural Resource Collaboration: A Case Study of an Inactive Collaborative Group**

Aleta Rudeen, Colorado State University

**Crime Prevention and Urban Environmental Communication**

Erin Despard, Concordia University

**\*Politics on the Trail: A Rhetorical Critique of Hidden Canyon Trail in Zion National Park**

Samantha Senda-Cook, University of Utah

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**\*Taking Public Out of Participation: How Rhetorical Conventions of Environmental Impact Statements Discourage Citizen Action**

Laura Vernon, Utah State University

**Plant Trees. It's Good for the Economy, and it's Good for the Environment": Environmental Citizenship of George W. Bush**

Jessica M. Prody, University of Minnesota

**\*Public Participation in Energy Policy: A Case Study of the San Juan Citizens Alliance**

Andrea Marie Feldpausch, Texas A&M University

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Whitney Miller, University of Cincinnati

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Jenny Grubbs, American University

**Environment: In the Eyes of Different Worlds**

Collin Noronha, University of Cincinnati

B. *Management in Crisis: Endangered Species and Climate Change*

**Efforts for the Federally Endangered Ocelot: A Case Study of Incentive-Based Conservation Programs**

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**Sea Turtles and Climate Change: Putting All Their Eggs in One Basket**

Michael J. Liles, Texas A&M University

**The Grizzly Ideograph in the Yellowstone Delisting Debate**

Israel D. Parker, Texas A&M University

**In Commonness is the Preservation of the Bird: Endangered Birds and Endangered Birding Experiences**

Leigh A. Bernacchi, Texas A&M University

**Giving a Rip: Collaboration in the Face of a Changing Climate**

Anna M. Muñoz, Texas A&M University

## **Selected Papers**

**Definition by Dichotomy:  
News Coverage of the World Summit on Sustainable Development**

Cassie Smith  
University of Colorado at Boulder

**Abstract**

*In light of increasing global attention on development, particularly in terms of sustainability as a new buzzword and the United Nations Millennium Development Goals, attention needs to be directed on how the press actually represents sustainable development to the public at large. This study addresses the themes and frames embedded in The New York Times and Wall Street Journal's coverage of the 2002 World Summit on Sustainable Development. A qualitative textual analysis focusing on articles about the summit reveals discourses that both produce and challenge neoliberal approaches to globalization, sustainable development, and environmental regulation. News coverage struggled between whether to think of sustainable development as a legitimate approach to ending poverty and addressing environmental degradation, or as a ruse restricting pure economic progress. This paper demonstrates that sustainable development is not a simple subject to communicate; yet reveals that newspapers often attempt to reduce definitions and problems as dramatic dichotomies. Ultimately, the efficacy in communicating about sustainable development's global repercussions depends on such definitions.*

At the World Summit on Sustainable Development, an estimated four thousand journalists arrived in Johannesburg, South Africa to cover the weeklong summit held in the fall of 2002. Touted as the "Rio+10," the summit brought together diplomats and representatives from across the globe to discuss poverty, environmental degradation, and development goals. "We are in the process of creating hope," summarized Worldwatch Institute Chairman Oystein Dahle on the intentions of the summit. Yet in the midst of failed treaties, tense negotiations, and populist protests, what place did hope have in the story of development? In creating catchy media texts, hope failed to make the headlines. Instead, journalists capitalized on ruptures and pre-existing factions between activists and mainstream organizations such as the World Bank. Perhaps practicing journalists had difficulty explaining the complexities of nuanced negotiations in a 300-word article, but hope was not the enduring narrative.

The study of the media coverage of the World Summit on Sustainable Development is a study in politicized framing mechanisms. What is the nature of

the coverage according to publication—what dramatic narratives are emphasized, and what assumptions are expressed? Which institutions and actors are legitimized? I argue that sustainable development is a problematic subject for journalists to cover given the international scope, complexity of definition, and economic ideologies. Underlying the articles—and the journalists themselves writing copy to meet urgent deadlines—is economic theory. A study by Tammy Lewis (2000) found that the mainstream press framed sustainable development discourse within a mainstream economic growth model.<sup>i</sup> But different publications possess the ability to cover the same topic with subtly different frames. The coverage of the summit by the *New York Times* and *Wall Street Journal*, two of the leading newspapers in the United States, reveals general similarities as well as marked differences.<sup>ii</sup> Dramatic storylines are the constant. Meanwhile, rhetoric in these publications is part of a wider discourse that both produces and challenges neoliberal approaches to globalization, development, and environmental regulation.

According to JoAnn Meyer Valenti, sustainable development is perhaps the ultimate environment story, and it needs telling (2003). An environmental issue in the general sense, sustainable development unites diverse subjects including politics, poverty, globalization, business, personal consumption, and resource use/degradation. How the public perceives development is reliant partly on how the media communicates the related actors, institutions, and consequences. The relative attention given to the issue can impart collective action to solve social problems (Keilbowicz & Scherer, 1986), while a lack of on-going media interest in covering the environment becomes problematic. By understanding the themes and frames embedded in coverage of the 2002 World Summit on Sustainable Development, valuable information can be determined about the efficacy in communicating about the environment and development.

From the outset, the difficulty lies in defining sustainable development—W.M. Adams refers to this as “dilemma of sustainability” that serves a source of controversy for those seeking to attach meaning, power, or change to the term (2001). Likewise, Robert Chambers argues that the words we use to talk about development are neither self-evident nor obvious (2005). Relationships between the environment and people can be political, just as development can be attached to ideological interests. The most mainstream definition of sustainable development comes out the Brundtland Report, presented at the UN General Assembly in 1987 as part of *Our Common Future*: “Development that meets the needs of the present without compromising the ability of future generations to meet their own needs” (1987). This definition is actually cited in the UN’s summit press material in section titled, “What is sustainable development?” (2002). The Brundtland Report’s definition placed environmental issues, alongside world poverty and inequality, in the formal international political agenda that resonated

years later at the summit. Yet it gave centrality to technological determinism, with progress predicated on economic growth (Chambers, 2005).

Adams calls this mainstream development discourse, as it does not challenge the dominant capitalist, industrial model and assumes technological virtuosity (2001). The logic perpetuated by the press is that economic growth will improve environmental protection and increase quality of life (for rich and poor).<sup>iii</sup> Furthermore, source selection can also shape the discourse. Lewis’ study determined that “experts” in sustainable development—those most frequently used as a source in articles on the subject—were governmental officials, NGO representatives, business leaders, and UN representations (the majority of which are from developed nations). Thus the central frame is that only sources fluent in the language of economic growth, versus activists or even academics, are worthy of citation. Whether intentional or not, journalists created a narrow message; thereby excluding the perspectives of developing nations or alternative expressions.

Beyond source selection, how is environmental news constructed? Alison Anderson argued that environmental reporting creates an underlying moral structure through the use of symbols and metaphors (Anderson, 1997). The media organize particular issues in an interpretive “media package,” including catchphrases, metaphors, exemplars (historical examples from which lessons are drawn), visual images or icons, and depictions. Frames are embedded in a media packages, giving meaning to an issue. A package has an internal structure. At its core is a central organizing idea, or *frame*, for making sense of relevant events, suggesting what is at issue (Gamson & Modigliani, 1989). Frames act as an organizing device that allows journalists to more efficiently net, sort, and transmit information (Tuchman, 1978). Thus the frame is the organizing story line, and

the metaphor serves as rhetorical device within that story line. Both work in tandem, prompting the reader to comprehend a situation in a particular light. This idea of framing means that the mass media don't necessarily tell the public what to think, but *how* to think about issues.

In approaching an explanation of media discourse, assumptions can be made regarding the media's direct influence on public attitudes. Rather, audience and media interact with each other:

Media discourse is part of the process by which individuals construct meaning, and public opinion is part of the process by which journalists and other cultural entrepreneurs develop and crystallize meaning in public discourse. (Gamson and Modigliani, 1989)

The discourse cannot easily be assigned to lop-sided effects pitting public against media, or a transmission view assuming that environmental meanings are directed via a one-way stream from the media to the wider public. Instead, the relationships are complex. A larger constructivist framework enables a more comprehensive view of media roles in the construction of social problems. This approach focuses on the issues, rather than the media alone, helping to illustrate how wider cultural givens and resonances helps privilege the advancement of some issues and not others (Hansen, 1991). Public interest and participation in environmental problems such as pollution or climate change play a role in determining the salience of the issues, as well as growing out of relevant media coverage.

Some media theorists claim that the mass media are not neutral, wherein the organization of news production or frames reinforces the status quo (Gans, 1979). Media documents, such as newspaper articles and magazine texts, become interpretative battle sites. What is considered news and what gets the most attention? In the media, seemingly standard

journalistic practices or norms can be interpreted as a mode for the dominant ideology to retain its power. William Hoyne's PBS study (2002) found that norms of objectivity, standards of elite news, and the naturalized definition of truth make the press less likely to take risks. The press is also increasingly "silenced" by conservative claims of bias (Croteau and Hoynes, 1994). The selection of sources often reflects power elite interests, such as pro-trade economists, and gives those in positions of power considerable influence over what is covered in the news and who is endowed an authoritative voice in the coverage.<sup>iv</sup> By locking out any challengers to the established worldview, the press can be seen as a professional structure (inherently embodying social codes) upholding the hegemonic system of capitalist accumulation.

In light of increasing global attention on development, particularly in terms of sustainability as a new buzzword and the UN Millennium Development Goals, attention needs to be directed on how the press actually represents sustainable development to the public at large. Does the press fulfill its democratic duty as an independent voice to inform the public, or is it increasingly regurgitating the dominant, capitalist ideology? This paper will research the predominance of themes and underlying economic narratives to test Lewis's claim that the media sustain status quo definitions of development against updated articles in mainstream media accounts. These framing mechanisms will be analyzed in order to determine if the themes and characterizations challenge or embody development definitions.

## **Methods**

The data collection was performed through a quantitative textual analysis, focused on newspaper articles about World Summit on Sustainable Development held August 26 through September 4, 2002 in Johannesburg, South Africa. Analysis of content ran from August 1, 2002 to

December 31, 2002 to ensure that all articles pre and post-summit were included.

### *Sample*

Individual articles, as bodies of text, appearing in *The New York Times* and the *Wall Street Journal* were used as the unit of analysis. These two newspapers were chosen because they are considered the most influential newspapers in the country with respect to public opinion and policy implications (McChesney, 2000). Moreover, they not only have a considerable average daily circulation of over 3 million readers but they also influence news coverage of other smaller newspapers across the country and establish journalistic standards of newsworthiness.<sup>v</sup> Articles were accessed through the Lexis-Nexis database.<sup>vi</sup> Types of articles were classified as straight news stories and commentary. The selection procedure yielded 19 articles in total, including commentary and straight news stories.

### *Measures*

According to Chambers (2005), language possesses the ability to shape and interact with our cultural milieu. Certain words and terms associated with development can reflect the contemporaneous construction of meaning. The articles were analyzed to see if they fit into a mainstream sustainable development paradigm or a countercurrent sustainable development paradigm. As aforementioned, mainstream sustainable development is firmly anchored within the existing capitalist system of the industrialized North (Adams, 2001). In particular, I will examine articles to see if they support the three important groups of mainstream sustainable development identified by Adams (2001): market environmentalism, ecological modernization, and environmental populism.

Market environmentalism proposes that deregulating markets and rules about resource use will result in a greater efficiency in environmental management. Market environmentalism assumes

continued capitalist growth, and seeks to set prices for environmental “goods and services” such as water. A form of market environmentalism, ecological modernization theory posits that continued industrial development will offer the only way out of current and future global ecological crises. At its core is the belief that such crises can be overcome by technical solutions.

Additionally, industrialization, economic growth, and capitalism are not only potentially compatible with environmental sustainability, but they might drive environmental reform (Spaargaren and Mol, 1992). In this sense, “green capitalism” offers a path consistent with the model of growth and sustainability originally appropriated by the Brundtland Report. Lastly, environmental populism allows for the empowerment of ordinary people. In mainstream sustainable development, participatory approaches are emphasized. Working from Adams’ (2001) assessment of the three main categories of mainstream sustainable development, key ideas and phrases are identified in order to code articles as supporting mainstream sustainable development:

- Science solves human problems
- Planning, management, and regulation (of how humans use the environment)
- Economic development without excessive environmental costs
- Environmental degradation is a failure of environmental management
- Improved techniques and technologies
- “Greening” of corporate ethics and objectives
- Integrative frameworks for national regulation
- Partnerships between state and private enterprises
- Market-based incentives
- Natural capital and strong stocks of social capital<sup>vii</sup>

Adams also identifies counter movements in sustainable development (2001). Against the mainstream *modus operandi*, there are some more radical ideas that offer new



ideas and agendas. Neo-Malthusianism, deep ecology, ecosocialism, and biocentrism all offer critiques and challenges to the mainstream definition. The Neo-Malthusian argument theorizes a notion of population limits, with a very basic premise that the global population cannot continue to grow unchecked due to a finite capacity of global ecosystems. Ecosocialism includes concepts of communalism, decentralization, and equitable wealth distribution. The environment is an issue that concerns social justice and quality of life (alongside ecoanarcism and ecofeminism). Finally, biocentrism and deep ecology together assign intrinsic or moral value to non-human nature.

Anthropocentrism is rejected; nature holds intangible, transcendental spiritual qualities that cannot be reduced by development or human interference. Working from Adams' (2001) assessment of the four main countercurrents in sustainable development, key ideas and phrases are identified in order to code articles as challenging mainstream sustainable development:

- Contextualization of population growth
- Finite supply of natural resources
- Macro-revolution and social transformation
- Working class interests and voices
- Intrinsic value of natural world; wilderness ethic
- Self-sufficiency, egalitarianism
- Non-violent activism
- Decentralized, participatory democracies
- "Soft" technologies

Content was then analyzed according to such measures in order to understand if the construction of sustainable development supported or disputed mainstream sustainable development.

### **Analysis**

A key metaphor throughout the *New York Times* articles covering the summit is

that of binary opposition: rich nations versus poor, developing countries versus developed, and pro-trade advocates versus anti-globalization activists. Headlines such as "Protest for poor at U.N. forum in South Africa" (NYT, 31 August 2002), "U.N. diplomat seeks miracle: bring together rich and poor" (NYT, 27 August 2002), "Lack of basics threatens world's poor" (NYT, 28 August 2002), and "World development forum begins with a rebuke" (NYT, 26 August 2002) inflect the stories with drama. Enduring divisions are highlighted as to bring attention to inherent contrasts. In particular, relationships between rich countries (represented by the U.S. and the E.U.) and poor, developing nations (often represented by activists from the aforementioned rich countries) are depicted as antagonistic, even tense, and requiring delicate negotiations. For example, "Officials from the United States and the United Nations praised the [culminating plan], but it was sharply assailed by environmentalists and advocates for the poor, who complained that wealthy countries had weakened the language" (NYT, 4 September 2002). Environmentalists are aligned with the poor, which directly positions both parties as countercurrent to mainstream sustainable development.

Additionally, the aforementioned quotation suggests that wealthy countries alone have the power to direct policy (in this case, the resulting document produced from the summit that would highlight focus areas for development) while poor countries can only stand by and "complain." Poor countries are provided a voice in the context of the article. However, the voice is rendered subsidiary and hostile. The article provides context for why the U.S. faced such huge opposition and protests at the summit, and by providing quotes and perspectives from environmental and social activists, the article essentially reports that challenges to mainstream sustainable development are alive and well. But these challenges breakdown on specific party

lines: rich versus poor. Likewise, another article states:

Everyone here supports the summit meeting's overall goals of protecting plants and wildlife, reducing pollution and bring water, electricity and housing to the poor. But poor nations object to environmental targets or strong language that would require costly intervention on their part. Wealthy nations refuse to budge on subsidies that protect their industries. (NYT, 30 August 2002).

An important point to note is the inherent definition of sustainable development, referenced in light of the goals of a summit on sustainable development, as reducing pollution, environmental protection, and ensuring that basic needs can be met regardless of income. This extrapolated definition makes no mention of trade, economic growth, or globalization. In this sense, the text offers countercurrent voices and characterizations of sustainable development.

Meanwhile, *Wall Street Journal* coverage depicts such countercurrent voices as quibbling irritants. One article contends that activists were upset with the summit dealings because U.S. leadership represented a "pro-growth, pro-trade direction they didn't like" (WSJ, 6 September 2002). At the end of the summit, then-Secretary of State Colin Powell delivered a public address that "was heckled as he defended what he called the U.S.'s 'enduring commitment to sustainable development'" (WSJ, 5 September 2002). Such phrasing makes the jeers at Powell seem unsubstantiated, even ridiculous. How could anyone possibly heckle someone or some nation committed to sustainable development? Activists and protestors representing the countercurrent opinion are the real opposition to any progress, as they keep getting in the way with their sullen, reactive flare-ups.

In contrast, wealthy nations are seen as blocking or impeding summit progress in

*New York Times* coverage. The U.S. received much criticism and protest at the conference, due disagreements over agricultural subsidies and energy quotas such as the Kyoto Protocol.<sup>viii</sup> Finding the middle ground seems to be one of the key themes of the summit, with the U.S. making the process none too easy:

Some nations, including the United States and some members of the European Union, are resisting. American officials say they have already agreed to increase foreign aid to the poor, and developing nations should eliminate corruption and strengthen democratic institutions before more aid is committed. The United States, the world's biggest polluter, has also refused to commit to time frames for reducing greenhouse gas emissions or for converting to renewable energy sources, despite pressure from the developing world and the European Union. (NYT, 25 August 2002)

There are a few claims in this quotation that deserve attention. Even though inflexible and potentially obstructing development goals, the U.S. offers redemption in the form of aid. Thus the U.S. is able to vindicate itself through the simple action of giving, although any clarification as to where money flows or how it is (mis)managed is not stated. The underlying assumption is that an influx of money offers solutions. Furthermore, such solutions are contingent on the ability for developing nations to self-regulate and enforce governmental accountability. Aid is assumed to prompt development and end poverty. Conversely, developing nations are assumed to mishandle any aid that comes their way. In sum, enforced governmental intervention at either level is the best way to ensure successful development. The concept of planning, regulation, time frames, and global management as a means to addressing inequality and the

environment—implicated by the author in subtext—is a very basic mainstream sustainable development tenet.

Yet within the same article, “Linking poverty aid to the environment” (NYT, 25 August 2002), there are also indicators of countercurrent mainstream development values. The article contextualizes population growth while explaining efforts to encourage development:

The meeting in Johannesburg will be the third international effort in 30 years to find a way to promote human development without damaging the environment. After the first meeting, in Stockholm in 1972, wealthy nations began cleaning air and water, but continued to ravage forests and other resources elsewhere to maintain growth...Since then, the world's population has continued to surge, poverty has deepened in Africa, forests have retreated, fish stocks have decreased and concentrations of greenhouse gases have increased. (NYT, 25 August 2002)

The quote suggests that the traditional model of sustainable development is inherently flawed. While summits such as the one in Johannesburg work to fulfill the basic mainstream tenet that development can be achieved without any environmental costs (thus the summit itself is mainstream), this statement finds that philosophy problematic. There is mention of how wealthy nations have maintained growth while “ravaging” resources, which proposes a subtle yet solid challenge to mainstream sustainable development. Moreover, the quote states that population growth works in tandem with environmental problems and poverty. Any mention of population issues, especially when depicted as out of control or mushrooming, certainly correlates with the countercurrent, Neo-Malthusian argument that world ecosystems will eventually collapse under an unchecked global population crush.

Interestingly, the *Wall Street Journal* also provides commentary on population growth. Contrary to the *New York Times* coverage, this article looks at neo-Malthusian philosophy as falsely dire:

If you think that Johannesburg is about economic development, however, guess again. It is about ‘sustainable’ development—economic development constrained by ‘Limits to Growth’ considerations. According to a World Bank press release, the summitters will try to ‘reach agreement on steps that can be taken now to ensure that poverty-reducing growth does not come at a great cost to future generations.’ In other words, they will try to dream up more restrictions on human efforts to make a living. (WSJ, 27 August 2002a).

Population growth, in the context of development, is seen as a hoax. This is an outright rejection of countercurrent mainstream sustainable development. Furthermore, sustainable development itself restricts and impedes economic progress. Another article presents this argument:

Sustainability has become a catch-all word for a block on growth and development, inferring that change should always be such that it achieves harmony, balance and equilibrium, whatever they are...But we should remember that economic development through growth has been widening our options and opportunities since the first farmer planted a crop. (WSJ, 27 August 2002b).

Thus the publication is unabashedly open about its thoughts on development. Namely, sustainable development is a mythic construction that blocks free markets and enterprise, which are identified as “man’s natural instinct.” When looked at against mainstream sustainable development, this position is certainly countercurrent—in the

opposite spectrum from environmentalists. If mainstream sustainable development is the middle road, as evidenced by the summit's theme of pragmatic compromise, than the *Wall Street Journal's* definition of development swings to the far neo-liberal right.

A commonality in the coverage by both publications is the idea that language itself is a site of contestation. Texts and documents were the source of numerous disagreements at the summit, and many articles point to the problematic nature of language in crafting international agreements. Furthermore, the publications question the values and agendas attached to varying definitions of sustainable development. The *Wall Street Journal* writes that sustainability "is an empty word. It can be filled by the user with whatever sense provides advantage" (WSJ, 27 August 2002b). Even the function of a formal document is considered debatable: "To be sure, the Johannesburg meeting produced the usual volume of delicately negotiated texts in which rich countries pledged to help poor countries. The declarations are important...But they are not binding" (NYT, 5 September 2002). The suggestion is that the texts are more trouble than they are worth. While they are well meaning and potentially agenda-setting, the final documents that pave the way for sustainable development are more of a formality than functionality. In sum, words alone do not guarantee action or justice. But words and texts are still sites for serious contestation.

### **Discussion**

The coverage of the Johannesburg summit is a brief moment in time when sustainable development regularly appeared in the press. The examination of the two publications yielded inconclusive, nuanced results. Much like attempting to explain the inherent complexities in sustainable development, the publications varied in their overall discourses on the concept. In the case of the *Wall Street*

*Journal*, it did provide a challenge to mainstream sustainable development but in the form of extreme neo-liberalism. Meanwhile, the *New York Times* seemed slightly confused. Some of the texts and ideas challenged the mainstream approach, and some supported it. This likely speaks to the journalistic standard and norm of objectivity, in theory that all angles of an argument should be given equal representation. In this respect, providing different voices and theoretical perspectives is a sign of esteemed professionalism. The *Wall Street Journal*, however, is quite transparent in its one-sided pursuit of a pro-growth agenda.

A constant in both is the reduction of problems to simple dichotomies. In an effort to make the struggles seem comprehensibly "black and white," any murky gradations are omitted. This is a dangerous framing device, for readers then understand sustainable development in naive terms. And sustainable development is definitely *not* a simple subject. The definitions of sustainable development are reduced to dramatic dichotomies: rich versus poor. Developing nations versus developed nations. U.S. versus the world. Diplomats versus activists. Businesses versus environmentalists. How can complexity be accounted for? Journalists do not necessarily need to write a book (and are unable to do so given space constraints) on sustainable development, but even a few sentences on the complexity of the subject could allow for variations.

As a narrative weaves together observations, sources and findings to construct meaning over a temporal order of events, it becomes a site for struggle over its constructed social reality (Gamson et al, 1992). The struggle demonstrated in the summit coverage is between whether to think of sustainable development as a legitimate approach to ending poverty and addressing environmental degradation (*New York Times*), or as a ruse restricting pure economic progress (*Wall Street Journal*). The efficacy in communicating about

sustainable development, which has global repercussions, depends on such definitions.

This study was limited in its qualitative scope. A longitudinal quantitative content analysis of articles in *USA Today*, *Washington Post*, and other mainstream newspapers could yield further information on the nature of narratives and dichotomies in the framing of sustainable development. Additionally, a comparative analysis could examine the media packages between publications of developed and developing countries to better understand global characterizations of mainstream sustainable development.

The issue of sustainable development presents a unique entry point to a variety of political issues, both international and domestic, including gender equity, energy use, distribution of income, and corporate connections. Public attention has the potential to address, even shape, an entangled issue that has serious global implications. How the news media communicates a complex, variable and wide-reaching problem is at the heart of this study. A future study could certainly address audience reception of thematic coverage in order to determine which themes or narratives are most appealing to readers instead of most frequently reported by news institutions. A study of that nature could be beneficial in learning about audience reactions and interests in order to further understand which narratives inspire the most significant comprehension of the issue. Through informed awareness, necessary action can be implemented more effortlessly throughout the public arena should the public actually choose to care.

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### Notes

<sup>i</sup> Lewis (2000) conducted a qualitative analysis of the *Christian Science Monitor*, *Los Angeles Times*, *New York Times*, *Wall Street Journal*, and *Washington Post* from 1987 to 1997.

<sup>ii</sup> The *Wall Street Journal* and *The New York Times* are the second and third, respectively, most widely circulated newspapers in the U.S. after *USA Today*. "2007 Top 100

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Daily Newspapers in the U.S. by Circulation" (PDF). BurrellesLuce (2007-03-31). Retrieved on 2008-12-05.

<sup>iii</sup> Lewis calls this the status quo definition; not unlike post-World War II development that assume economic growth is equivalent with development, technology can solve most problems, and industrialized countries have been most successful in development (2000).

<sup>iv</sup> Likewise, a study by Craig Trumbo (1996) looked at the news coverage of climate change and found that scientists were quoted as sources most often about causes and problems of global warming. Trumbo determined that the sources quoted in the climate change coverage were a determining frame to how climate change became legitimized or de-legitimized in the public eye depending on the scientist interviewed (skeptics versus non-skeptics).

<sup>v</sup> See the second note for circulation data sourcing. Also, *USA Today* was not included in the analysis because in light of McChesney (2000), it is decidedly not influential in terms of opinion or policy. The elite press excludes *USA Today*, namely because this newspaper does not drive news agendas or break international news stories.

<sup>vi</sup> Lexis-Nexis is an online archival database. Parameters can be decided to limit or expand the search, and for this study the search terms included "sustainable and summit" in order to capture all articles on the summit.

<sup>vii</sup> Social capital fits into the idea of cultural capital, in which efficacy and quality of civil institutions, cooperative behavior, trust, social norms, and public's participation in decision making are all assigned worth or weight (Rao, 2000).

<sup>viii</sup> The Kyoto Protocol is an international agreement negotiated at the United Nations Framework Convention on Climate Change during the Earth Summit in Rio de Janeiro in 1992. The Protocol's goal is for industrialized countries to reduce their collective greenhouse gas emissions by 5.2% compared to the year 1990. Parties can either sign or ratify the Kyoto Protocol, but only ratification makes it a legally binding commitment. The U.S. has yet to ratify the Protocol, which is a source of controversy in the international community and with environmental activists.

### Appendix

#### Articles Cited in Text (chronological by newspaper)

NYT: *New York Times*

Swarns, R.L., Linking poverty aid to the environment. 25 August 2002.

Swarns, R.L., World development forum begins with a rebuke. 26 August 2002.

Swarns, R.L., U.S. shows off aid projects at U.N. development meeting. 29 August 2002.

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Swarns, R.L., Compromise brings accord on renewable energy closer. 2 September 2002.

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## **The Roads Less Traveled: Looking for Certainty in the Colorado Roadless Rule and Media Coverage**

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### **Abstract**

*While debates centering on people and their relationship to the environment have been an important point of controversy in environmental public policy arenas, there has also been significant debate about the devolution of governmental control of federal lands. Scholars, politicians, and special interest groups have long debated whether state and federal agencies manage public lands for increased economic or environmental benefits (Koontz, 2002). This paper presents a small piece of ongoing discussion, highlighting how the media portray contestation over land management between key stakeholders. To do this, researchers focused on one rule, the Colorado Roadless Rule (CRR), which is a unique site for exploring the debates surrounding proper use and management of federal lands, devolution of governmental control, and stakeholder contestation involved in environmental land management cases. Researchers used newspaper articles to examine how media professionals with different audiences (namely local, regional, and national) report the CRR controversy. This paper presents an overview of the debate surrounding roadless areas since their creation in 1999, and what themes and content were present in articles covering the CRR controversy during a 90-day public comment period in 2008.*

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### **Introduction**

Debates centering on people and their relationship to the environment have been and continue to be an important point of controversy because of the multiple perspectives concerning the proper use of environmental resources. While concurrently there has also been significant debate about the devolution of governmental control of federal lands. Scholars, politicians, and special interest groups have long debated if state and federal agencies manage public lands for economic gain or environmental preservation (Koontz, 2002). This paper presents a small piece of this ongoing discussion, highlighting how the media frames this unique issue and how it portrays contestation over land management between key stakeholders. To do this, researchers focused on one rulemaking, the Colorado Roadless Rule (CRR).

In this analysis, researchers examined the CRR, a unique case for

analyzing the debates surrounding proper use and management of federal lands, devolution of governmental control, and stakeholder contestation involved in environmental land management cases. Researchers used newspaper articles to examine how media professionals with different audiences (namely local, regional, and national) report the CRR controversy. This paper presents an overview of the debate surrounding roadless areas since their creation in 1999, and what themes and content were present in articles covering the CRR controversy during a 90-day public comment period in 2008.

### **History**

In 1999, US president William J. Clinton's administration proposed a plan that would prohibit road building and tree cutting on millions of acres of National Forest lands (Sanger & Verhovek, 1999). In this proposal, the administration created a new classification for forests that have few



or limited roads called Roadless Areas (Sanger & Verhovek, 1999). These areas would receive less protection than Wilderness Areas. Wilderness Areas, however, can only be designated by congressional approval. The administration recognized that such approval would be “virtually impossible to obtain” and proposed this new category as a way to give similar protections to these lands without congressional approval (Sanger & Verhovek, 1999). In 2001, the Forest Service published the Roadless Area Conservation Rule, which was based on the 1999 proposal (Borenstein, 2001). The rule banned the creation of new roads on nearly 60 million acres of National Forest land (Borenstein, 2001). Since its inception, the rule has been a topic of controversy among multiple environmental stakeholders and lawmakers. To complicate the issue, in 2005 the Clinton rule was enjoined by a federal judge, Judge Brimmer. The Bush administration then enacted the State Petitions Rule. The enjoining of the rule by Judge Brimmer opened up the previously protected forest to road construction for logging and drilling in accordance to local forest management plans. State governors had 18 months to submit a petition for a state-specific roadless area rule. Petitions, if accepted, would have then been reviewed by a national advisory committee before being instated. In September 2006, a federal judge reinstated Clinton’s rule, on the grounds that the Bush administration did not comply with environmental impact assessment regulations, therefore invalidating the 2005 Bush policy and the subsequent state-specific roadless rule petitions (Harden & Eilperin, 2006). The injunction immediately stopped all action that was contrary to the 2001 rule that did not undergo environmental assessments consistent with the court’s opinion (United States District Court, Northern District of California, 2006).

One of the states significantly impacted by the frequent policy change was Colorado because of its more than four

million acres of National Forest land. This impact was evident as Colorado was one of the few states that petitioned the federal government to create its own roadless rule, the Colorado Roadless Rule, when the 2005 Bush policy was enacted. When the Clinton rule was reinstated in 2006, Colorado resubmitted its 2005 petition as an “insurance policy” to protect some of the state’s forest land in case the Clinton rule was again overturned amid the legal uncertainty (Kohler, 2008).

### **The Importance of Stakeholder Contestation**

The CRR was chosen as a case of study because it exemplifies the contestation that is always present between multiple stakeholders over the proper use of federal lands. The case is unique in that it is one of the few times in which the federal government has allowed states to influence policy regarding federal land management and use within their boundaries. This process becomes more complex as certain stakeholders have strategically changed their positions because of the uncertainty of the national policy implementation amid the continuing legal battles concerning the rule. For example, under the Bush policy environmental groups were supportive of the state-specific petition, yet when the policy returned to the 2001 Clinton rule, those groups fought against the implementation of the state-specific rule, which they themselves assisted in creating. This case warrants study because it exemplifies the complexity of public land management and contestation, and also is an exemplar of how strategic and contextual relationships between multiple stakeholders are. This case could be used as a benchmark for future policy decisions regarding the interplay between state and federal government concerning the management of federal land.

### **Research Questions**

This study looked at how the print media, specifically newspaper outlets,

identified voices of certain stakeholders and framed the contestation. It aimed to raise awareness to how print media frames environmental public policy issues and portrays participants' voices on a local, regional, and national level. This study posited the following questions:

RQ1: What issues are identified in print media stories surrounding the CRR?

RQ2: Is there a difference in how groups are identified in national, regional, and local newspaper coverage? And if so, what are they?

RQ3: Are certain stakeholders being cited more frequently than others in such outlets?

By addressing these questions, this article will create a better understanding of how newspapers frame and portray environmental issues and stakeholders in the participation process.

### **Data Collection**

In order to understand the history behind the events leading up to the creation of the CRR and the current ways in which the CRR had been framed by newspaper outlets, archival methods were used. Archival methods were appropriate because they allow researchers to see "the long view" of issues and identify the dynamic, reflexive, and interconnected nature between societal and political issues (Hill, 1993, p.5). In addition, archival methods were appropriate to find contemporary newspaper articles, as many are archived shortly after their creation. Researchers used this method to find and understand how newspaper articles from the past had framed this issue since 1999, when the Roadless Area Conservation Rule was proposed.

The primary data for this study was newspaper articles collected from July 23 to October 24, 2008. The researchers' rationale for choosing this time period was that it coincided with the period that public comment was solicited by the federal

government on the CRR. The data was local, regional, and national newspaper articles that reported about the CRR. For the purpose of this study, local is defined as any newspaper with a primary circulation within the state boundaries of Colorado; regional is defined as any newspaper circulating primarily in the Intermountain region (including the *Denver Post*); national is defined as a newspaper with significant circulation across ten or more states (e.g. *New York Times*, *LA Times*, *USA Today*, etc.). Data consisted of articles only written by paid newspaper or AP reporters; all opinion articles, editorials, and letters to the editor were omitted.

The U.S. Forest Service's Regional Office had been archiving print media coverage of the CRR controversy. It provided the researchers links to the archived coverage as a starting point. Researchers then monitored online coverage of the CRR controversy in local, regional, and national newspaper outlets. Researchers used LexisNexis and Google News to retrieve the data, using search terms including "Colorado Roadless Rule" and "Roadless Rule". The researchers deemed it necessary to use Google News as a resource because LexisNexis was not retrieving all the local articles that Google News monitored. The researchers relied on secondary data comprised of newspaper articles dating back to 2001 in order to understand how the CRR had been framed in the past; these articles were used as reference and were not analyzed for their content.

Researchers chose newspapers as a site of discursive participation surrounding CRR. One primary reason for choosing newspapers was that researchers have argued news is just the information that is transmitted from representatives of major institutions, such as government officials or corporate spokespersons, to audiences (Gitlin, 1980, p. 251; Mason, 2007). Indeed, newspapers can be viewed "as a symbolic site on which various stakeholders contend" (Miller 1997, p. 373; Crawley, 2007). The

bulk of media-discourse projects use national and international newspapers of repute where the staff becomes part of structures of dominance (Norton, 2008; Eubanks, 1999; Lazar, 2000). While researchers included all regional and national articles in the data set, the overwhelming majority of data analyzed were originally published in local newspapers representing small communities throughout Colorado. Researchers found that local newspapers published more than double the amount of articles about CRR than regional or national outlets. In community newspapers such as these, “the community of practitioners has a chance to interact more directly with the audience it serves. This proximity affords us another vantage point from which to scrutinize media discourse processes, practices, and impacts”(Carter, 2001, p. 430). The data were used to examine the voices given to certain participating stakeholders. Our study follows discourse analysts who examine community news (Carter, 2001) as sites of contestation (Norton, 2008; Huckin, 1995, 2002).

### **Data Analysis**

Researchers analyzed the data using two different qualitative methods: thematic analysis and content analysis. Thematic analysis allowed researchers to identify the overarching issues that the media presented in the CRR controversy, the complex relationship among them, and the patterns in their presentation (Creswell, 2007). Content analysis allowed researchers to more specifically identify categories of stakeholders who participated in the mediated discourse surrounding the CRR. Thematic analysis was used to address *RQ1*, while content analysis was used to address *RQ2* and *RQ3*.

Data analysis for *RQ1* began with the process of open coding through which concepts were derived and developed through the data (Corbin & Strauss, 2008). The data were analyzed and coded using open coding methods. Once coded,

researchers used an analytic process of comparing different pieces of data for similarities and differences known as *constant comparison* (Corbin & Strauss, 2008). Using this method, each code in the data was compared with other codes for similarities and differences (Corbin & Strauss, 2008). Incidents found to be similar were categorized and grouped together under a theme. These themes illustrated the way in which newspapers articles identified the voices of certain stakeholders and framed the CRR.

Data analysis for *RQ2* and *RQ3* also began with the process of open coding (Corbin & Strauss, 2008), yet the pieces of data were categorized and grouped together under sources, not themes. These sources were representative of the voices present in newspaper coverage of the roadless rule controversy. Having categorized sources, researchers then compared the number of times each source was cited within a specific article, and within the three overarching article categories (local, regional, and national) more broadly. This allowed researchers to understand if certain stakeholders were being cited more frequently than others, and the degree to which it was happening.

### **Findings**

The following section describes the themes and content identified during the analysis of data. There was an overarching interest in how the print media, specifically newspaper outlets, identified voices of certain stakeholders and the CRR. In order to address this interest, three investigative research questions were used. The following section explores the data as it answered the research questions and addressed the overarching interest of this study.

Participants’ Concerns: Uncertainty, Insurance, Public Comment, and Discourse

Research question one asked: *What issues are being identified in print media stories surrounding the CRR?* To respond to this question, researchers coded the data and

grouped similar codes to create themes. What emerged were multiple issues regarding the CRR, including: Un/Certainty about CRR specifics, the use of the rule as an insurance policy, questionable public comment processes, and the ambiguity or lack of definitions included in the rule.

A majority of articles directly or indirectly referenced concerns about certainty. People were uncertain about multiple aspects of the CRR including its creation, its content, the public comment process, and the meaning or “definition” of a roadless area. The following section discusses specific examples of how this issue of uncertainty emerged in the data.

*Content* – One issue of uncertainty in the data was concerning the content of the CRR. Participants described the language use and structure of the rule as “unclear” and “full of loopholes” (Frey, 2008; Staff Report, 2008). Some stated there were a “significant number of exceptions” and “too much is left to interpretation,” which put “too much up in the air” (Kohler, 2008; Boush, 2008). One participant stated, “The devil is in the details, and there aren’t that many details” (Boush, 2008).

A specific issue of uncertainty in the rule was the exemptions or exceptions it contained. The CRR allowed special exemptions on more than 200,000 acres of forest land for building roads for wildfire prevention, utility infrastructure, ranchers, ski areas (allowed on 8,000 acres), and coal mines (allowed on 35,000 acres) (Hanel, 2008; Kohler, 2008). Participants were worried about these exemptions because they didn’t know what would and would not be protected. One conservation group stated, “It is unclear if any roadless areas would actually be protected” (Staff Report, 2008).

Individuals and groups were uncertain about the content of the CRR and were looking for more concrete language and details, or at least answers to what these exemptions meant.

*An Insurance Policy* – The issue of reducing uncertainty did not stop with conservation

and community groups but also emerged in the data among Colorado government officials, specifically the governor’s office. Before discussing this issue, a little history surrounding the CRR is needed. When the 2005 Rule came into effect, it allowed governors 18 months to request preservation of any roadless areas under guidelines created by the U.S. Forest Service (Times Wires, 2005).

The rationale was that the Forest Service would work closely with governors to meet the needs of local communities but also have the final say over managing the National Forests (Times Wires, 2005). The governor’s office in Colorado put together a task force to create the petition (which included conservation groups) and submitted the petition to the federal government. In 2006, the Bush Rule was rescinded and the Clinton Rule reinstated (Harden & Eilperin, 2006). Colorado was one of two states that resubmitted their petitions to the federal government under the Administrative Procedures Act. Colorado’s governor said he did this because the rule is an “insurance policy” meant to protect these lands in case federal rules fail to do so (Frey, 2008). In essence, the creation of the CRR was a way for the governor to have some control over what happens to Colorado’s forests. Even when the Clinton Rule was reinstated, which would protect more forest land than the petition, the governor’s office resubmitted the petition as an “insurance policy”. In short, the governor was willing to give up some protections on Colorado’s forests under the Clinton Rule in order to have certainty or policy to fall back on as insurance.

*The Public Comment Process* – Stakeholders expressed significant concern regarding the comment process surrounding CRR. The Forest Service had a 90-day comment period for the public, where it held open house style meetings where participants could come and ask questions and write or verbalize comments on the CRR. The data demonstrated that some

individuals did not believe this process was conducted properly. Because of this, participants in the data were uncertain about the motives behind the process and did not believe it was legitimate. One participant stated:

My big thing on this is the process. It's not very democratic, and it doesn't include the people that are interested in protecting the forest. Our comments are not being heard in a constructive way. It almost seems like our right to comment is being stifled (Callicott, 2008).

This individual did not feel like their voice was being heard in this process and even if it was, in a very limited way. The idea of having a voice in this process emerged as an issue. Another person stated,

[The open house] doesn't necessarily give you the opportunity to hear what your neighbor has to say about this. It's kind of a one-way conduit of information. They have been as well advertised as we had hoped and quite frankly there's been low turnout at these meetings (Williams, 2008).

The ability to hear others' ideas in the community and being able to talk to others seemed to be an important part of this comment process. Specifically, participants felt like these open house meetings were not the appropriate structure for such a comment process, but that public hearings should have been held. This issue of only having an open house rather than a public hearing was a consistent theme. As one article stated,

The Forest Service is holding open-house meetings around the state as it considers how to manage the 4.1 million acres of roadless lands in the state's forests. Public hearings aren't on the schedule, though, and Pete Kolbensschlag of the Colorado

Environmental Coalition said that is unfortunate. 'It gives people the opportunity to make their case, and it would require the Forest Service to listen,' he said. A similar process in Idaho included open houses and hearings, 'and Colorado has three times the population of Idaho,' he said." (Harmon, 2008)

This statement exemplifies some citizens' assumption that public hearings are a better way to approach the public comment process. The source uses Idaho's public comment process as a way to support his claim. Idaho was the only other state to resubmit its petition after the Bush rule was rescinded. Since Idaho had recently finished its public comment process, it was often used as a benchmark for Colorado's process. A participant stated, "The state of Idaho just finished a similar process. They had 16 public events. We have about three times the population of Idaho, and we have eight events" (Mulkern & Jaffe, 2008). These statements exemplify the unfavorable view stakeholders held of public participation processes in the CRR process.

Overall, there was concern by participants about the "democratic" process, the type of meetings chosen by the Forest Service, how the public could comment, the number of meetings held, and how it measured up to Idaho. These issues created uncertainty about the comment process and the credibility of the Forest Service.

**Definition of "Roadless" and "Temporary"** – Citizens expressed a desire for clarification when it came to definitions of a "roadless area", especially when it related to the idea of "long-term temporary roads". A roadless area was defined in the Clinton policy as an area of at least 5,000 acres that has no roads (but in reality many of them had roads because they were made using out of date land inventories) (Callicott, 2008). However, as was discussed earlier, the proposed CRR allows certain exceptions for building roads and allows for "long-term

temporary roads” to be built by industry. As one article stated,

Long-term temporary roads are roads that would be used for oil and gas drilling or coal mining and are intended for reclamation once they outlive their value to the industry, said Pam Skeels of the Forest Service. . . .“They could be in place for 10 to 30 years,” as opposed to the temporary roads the Forest Service generally deals with. Those roads tend to have two- or three-year life spans, she said. . . . Environmental interests, though, don’t like long-term temporary roads. “There are highways in Colorado that don’t last 30 years,” said Jason Sorter of the Theodore Roosevelt Conservation Partnership. (Harmon, 2008)

Even having temporary roads going through these areas was an issue for participants as they felt even these roads violated the definition of a roadless area. The idea of a “long-term temporary road” was an even bigger cause for concern as participants discussed the impact these roads would have on wildlife, the environment, and local communities. One individual stated,

What is the biggest concern to residents of Garfield County is that a lot of these ‘long term temporary roads’ are going to be in our backyards, said Bastable, adding the ‘long-term temporary’ roads may last for 30 years. We are talking about roads in landscapes right next to our communities that are supposed to be roadless. (Yates, 2008)

The participant cited in the quote above had a clear conceptualization of what a roadless area should be. But not a very clear conception of what was in the proposed rule. What is interesting is long terms

temporary roads were only going to be allowed where there were valid existing rights for oil and gas leases. Conservation groups, community members, energy companies, and the federal government all had certain interpretations and understandings of what it meant for an area to be roadless and how to manage such an area. The meaning behind what was a roadless area was uncertain, and groups discussed what it meant to them and how their meanings were being challenged by the meanings of other groups.

The themes explored above provide an interesting look into what stakeholders are discussing through the use of media outlets. The complexity of each theme exemplifies that there is no simple solution to creating environmental policies that are collaborative and satisfactory to all stakeholders. The intermingling of various interest groups and their interpretations of key terms and definitions proves the need for specificity and careful discursive choices when creating, explaining, and implementing environmental policy.

#### Who's Talking Now - Source Citation & Frequency

The next research question we addressed was to determine if certain stakeholders were being cited more frequently than other in local, regional, and national newspaper articles. We analyzed the 51 newspaper articles (46 local, 7 regional, and 5 national) that appeared during the Forest Service’s 90-day public comment period. We examined all the articles and coded each source present. Sources were counted once per article, and then each source’s utterances were recorded. For example, if the governor of Colorado was a source for an article, but was referenced to as a source 6 times, the count would be 1 source, 6 utterances. Documents were also coded as sources and grouped with the parent institution from which they were released (i.e. a Forest Service press release was coded as a citation of the Forest Service). All sources

were coded into one of 8 categories that emerged throughout the analysis (See Table 2). The 8 emergent categories were:

*Unnamed Critics/Environmentalists* – These sources were cited 32 times, primarily in local articles. The vague terms of “environmentalists” and “critics” were used as an overarching categorization of people who oppose the proposed state-specific roadless rule. The sources become noteworthy as they outnumber the citations of private corporations, citizens, or Colorado business owners by more than two to one. The space given to these unnamed sources was often in the lead of the news stories, portraying the case first and foremost from the “environmentalist” perspective.

*Local Non-Profit Organizations* – These organizations appeared 69 times in the data, primarily in local articles. Surprisingly, this categorization had the most diversity among its sources. There were 13 different organizations cited throughout the data, although they all voiced opinions of opposition to and criticism of the CRR. Local non-profit organizations were categorized as being Colorado-based organizations that serve local communities throughout the state of Colorado. These sources were overwhelmingly identified as environmental non-profit organizations, such as Environment Colorado, the Colorado Mountain Club, the Central Colorado Wilderness Alliance, etc. This category also includes councils of governments and citizens who are not formally affiliated with any local or state government, such as the San Juan Citizens Alliance, the Ridgway/Ouray Community Council, etc. These councils of governments and citizens are not unbiased parties however, as they often identified themselves as being aligned with the same viewpoints as environmental organizations.

*Regional Non-Profit Organizations* – These organizations, which are based in and serve the Intermountain United States, were the least cited, only appearing twice in the analysis. Both citations appeared in a regional newspaper, while the

overwhelming majority of newspapers favored citing local or national non-profit organizations.

*Nationally Affiliated Non-Profit Organizations* – These sources appeared to be the primary source of information for journalists writing about the CRR, as they were cited the most frequently out of all 8 categories. The sources were spokespeople with ties to a national parent non-profit organization, such as the Wilderness Society, Pew Environmental Group, etc. A total of 96 citations were recorded within this category, outnumbering any other source by almost 20 citations.

*Federal Government Agency or Affiliate* – Sources from this category were the third most cited in the data. Federal government officials served as authoritative mouthpieces for the federal agencies involved in the CRR. Although sources were cited 74 times, there appeared to be little diversity in sources, with only four officials being cited with all 74 utterances. Also included in this category were documents released by federal judges who presided over the roadless rule legal cases and documents from the Bush Administration’s lawyers.

*State Government Agency or Affiliate* – The second most cited group behind nationally affiliated non-profits were state government agencies or affiliates; 7 state government sources were cited 77 times. This proved to be an important source for news writers as officials in this category were frequently cited as answering questions about the status of the CRR, as well addressing concerns brought up by groups that criticized the rule.

*Colorado Business Owners & Private Citizens* – This proved to be a category that was underrepresented in the majority of articles, and appeared minimally in any articles that cited business owners or private citizens. Only 15 citations were recorded by 6 sources, while all business owners cited identified their businesses as being based on hunting or similar outdoor recreational activities. Only one private citizen was cited who was not identified as

having a hobby such as hunting. The invisibility of this group is interesting as researchers noted that private citizens submitted more than 140,000 comments to the Forest Service during the official public comment period.

*Private Corporations* – This category is comprised of three companies; two companies who primarily deal with energy, and one timber corporation. This category was notably absent in the majority of the articles, having only 10 utterances overall.

#### Local, Regional, and National Sources

In comparing the citation of sources in local, regional, and national newspapers, researchers found that “environmentalists” and non-profit agencies were used most frequently as sources in local newspapers, yet federal and state government agencies and affiliates were used most frequently in regional and national newspapers (see Table 2).

Non-profit agencies, both local and national, dominated local articles, with 19 different non-profit organizations being cited with a total of 146 utterances. The next most frequently cited sources were federal and state government agencies and affiliates, with 8 different sources being cited with 114 utterances. The disparity between the diversity of non-profit organizations and governmental organizations is notable, as there were twice as many non-profit organizations cited within local articles. Almost all non-profit agencies in the articles were aligned with “environmentalists” and opposed the state-specific rule.

Regional articles followed this trend of non-profit diversity on a relatively smaller scale, with 9 non-profit organizations being cited with 17 utterances. Yet, the regional articles did cite federal and state government agencies and affiliates the most frequently, with 5 sources being cited with 23 utterances.

National articles had the least amount of diversity among sources in all categories. Coverage favored sources from federal and state government agencies and

affiliates, with 3 sources being cited with 14 utterances. Non-profit agencies were the second most frequently used sources with 3 sources being cited with 4 utterances.

One of the least highlighted groups in the data was that of local business owners and private citizens. In local articles, business owners and private citizens comprised 4 sources with a total of 5 utterances. This was contrary to researchers’ predictions that local articles would emphasize effects to local business and most frequently cite local community members. This group was notably underrepresented in all of the articles, having little to no appearance as a source for publication-worthy news. As with local articles, local business owners and private citizens were cited far less frequently than other sources, with only 2 sources with 10 utterances appearing in regional articles. In national articles, local business owners and private citizens were never cited as sources. This category was all but silenced in the collective media coverage, having been cited a mere 15 times out of the 375 utterances recorded.

Another notably absent category was that of private corporations. Throughout all the articles only 3 private corporations were cited with 10 utterances. This was the least used category of sources and surprisingly only appeared in local and regional articles, with national newspapers not citing any private corporations in their articles; this is of interest because private energy and timber corporations are stakeholders in the roadless rule proposition. Indeed, the majority of the debate is surrounding whether or not the management of public lands should allow energy and timber development. Sachsman, Simon, & Valenti (2006) found that the majority of reporters in the United States covering environmental issues said it was necessary to be fair to both corporations and environmental activists. These private corporations’ notable absence makes researchers wonder if their silence is a purposeful and strategic move, or if it was



the result of source selection choices made by the varying journalists covering the roadless rule proposal.

Researchers did anticipate that national and regional newspapers would cite national organizations most frequently, which was true in the case of non-profit organizations, with nationally affiliated non-profit organizations being cited more than any other category of non-profit organizations (see Table 1). Interestingly, researchers also anticipated that local newspapers would cite local sources most frequently, which was not the case when comparing the number of local sources cited to national sources. In the majority of the data, national organizations' citations outnumbered local organizations' citations, the only notable exception being that of state government agencies and affiliates being cited more frequently than the federal government agencies and affiliates in regional and national articles.

One interesting and unexpected finding was the use of unnamed sources in local articles. The data showed unnamed "environmentalists" or "critics" being cited 28 times, with the terms representing a broad category of people who oppose the roadless rule proposal.

The variety of sources used across local, regional, and national newspaper coverage showed that media coverage highly favored non-profit organizations that most frequently expressed pro-environmental concerns and opposed federal land development. While government officials came in second for most frequent source citation, the majority of pro-environmental groups being cited as sources of information as fit to print for mass consumption presents interesting questions about source selection and equality. It also brings to light the important point that all stakeholders are not represented equally when it comes to media coverage. In fact, some stakeholders are barely visible in any of the articles, such as private corporations and private citizens of Colorado.

## Discussion

This study aimed to raise awareness to how print media portrays environmental stakeholders' voices on a local, regional, and national level. In addressing this, multiple issues emerged that revolved around a main theme of uncertainty. In addition, the data demonstrated that newspaper articles represented the interests of a limited number of stakeholders.

The primary problem seen throughout the content analysis was the disparate coverage among stakeholders. Governmental organizations, both at the state and federal level, and non-profit agencies and "environmentalists" were overwhelmingly cited as sources, while private companies and regular citizens with no ties to interest organizations were rarely, if ever, represented.

Similarly, private corporations are clearly absent from the newspaper text. This raises questions regarding why and whose interests were served by the lack of representation. In the present study, environmental activists were given far more priority in media discourse than private corporations. These corporations' notable absences bring into question if their silence is purposeful, if it was the result of source selection choices made by the varying journalists covering the roadless rule proposal, or if they were not interested because it is a public land issue. Were there motivations and private interests involved in keeping private companies out of the newspapers? While there may be many reasons for this lack of participation, an important dimension of it is the wording of the 2005 rule. The policy puts the protection of land into the hands of a collaborative relationship between the states, federal government, and national advisory committee that weighs in to represent the national interest. This is interesting because more power was given to the states to fight against the interests they didn't see beneficial to their lands. While the Bush policy does allow for states to protect the

lands' use, it is up to the state to push an agenda that the federal government will approve. This could be seen as a political move as it has certain assumptions behind it; this system may be setting up states to create agendas that favor interests that are supported and will be approved in Washington D.C. Trying to protect more than four million acres of land from commercial use and development is a daunting task. What a difference it would make if the legislation stated it was up to the states to decide how to develop this land and that all the land not designated for commercial use would be protected. Now, those who have commercial interests are the ones who *need* to utilize the opportunity for public comment and get people rallied together to support their cause. Overall, the language of the policy puts a lot of responsibility to the states for rulemaking, but the states are still not free to design a policy specifically suited to local interests because the federal government has to sign off on every decision that is made.

One issue at the heart of this whole process is that while the public comment period may influence the decision of the Forest Service on the management of roadless areas, it is not mandatory for the Forest Service to adopt the CRR. In fact, the capacity for the Forest Service to enact public ideas is strained by the rather divergent interests and heterogeneity of values stakeholders expressed. Such difference is likewise reflected in the roadless plans handed down from the executive branch: Clinton policy tends to favor environmental groups more than the Bush policy which tends to favor large industry development. The stakeholders involved recognize this power balance and therefore want as much specificity as possible so that they can use it to empower them by allowing the federal government to limit its scope via legislation. The groups want serious, specific rules and guidelines so that they can understand exactly how this is going to pan out. Doing this, however, would limit the Forest Service's requirement

to address all public comments (NEPA 1970). This idea is illustrated poignantly in a statement made by a National Forest planner as she discussed the need for the Forest Service to have "flexibility" in building temporary roads in the legislation: "It still protects the characteristics and values of the roadless areas, while allowing us to manage the forests if needed. If we do build a road, it's for a good, particular reason (Terrell, 2008)." This language assumes a kind of trust or legitimacy that the Forest Service has the best in mind for the forests. The problem is that other groups might not consider the reasons for building roads in roadless areas by the Forest Service as "good." This "flexibility" approach is dangerous to these groups because it allows for ambiguity and uncertainty. Also, the Forest Service does not have to negotiate with these groups because of the way in which the rulemaking has been constructed. Therefore, it is in the best interest of stakeholders in Colorado forests to try and get specifics and limit the exceptions allowed in the CRR before their ability to participate in public policy creation is ended.

However, once the CRR is finalized it will then be up for scrutiny by government officials. Yet if individuals do not feel like their concerns and ideas were taken into consideration in the final product of the CRR, the researchers believe lawsuits and litigation will ensue. Therefore, it is in the interest of the Forest Service to recognize, identify and work closely with environmental stakeholders to make sure the final product of the CRR takes these stakeholders' concerns into consideration. In addition, the researchers recommend the Forest Service identify ways to create and send messages through the media that will reduce uncertainty surrounding the CRR with the public and stakeholders in the environment.

This research and its findings do have limitations that need to be noted, namely this study is not a comprehensive analysis of the CRR creation and implementation, nor did it fully investigate all

components of this complex case. It provides insight only into how it is framed vis-à-vis print media, specifically newspaper articles, over a 90-day period.

The analysis was limited by the identification of sources based upon journalists' discretion. Without having direct access to sources, it is impossible to know if all the sources cited have more organizational associations than the ones identified in the articles. Similarly, researchers lacked access to the journalists who wrote the articles analyzed; it would be noteworthy to find out the journalists' justifications for their source selection and amount of space given to each source. Without knowledge of each source selection circumstance, researchers cannot assume that every source selection was neither purposeful nor representative. And just as in source affiliation, researchers have no way of knowing if journalists covering the roadless rule proposal have political or civic affiliations that may affect their selection of sources and coverage.

However, this data does identify potential issues for future research and studies on the CRR. In order to gain a better understanding of the creation and implementation of the CRR the researchers recommend future studies that focus on a larger and more representative sample of the stakeholders involved. In addition, future studies should also attempt to identify the deeply embedded meanings that were involved in the creation and implementation of the CRR.

As researchers, we recognize that this study and its conclusion is not a definitive description of this complicated public policy controversy, nor does it examine all of the variables that intersect in this case; it serves only as a beginning for future research delving into the contestation surrounding natural resource management and environmental public policy.

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## **Planning the Waterfront: An Examination of Diversity in Newspaper Content and Coverage**

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### **Abstract**

*Diversity in newspapers does not always equate to a competitive marketplace of ideas. This paper examines the coverage in eight Toronto newspapers of the issues related to waterfront development over a three year period. Indices derived from measures of issue diversity and prominence, and the variety and balance of viewpoints presented were used to assess the newspaper coverage. If journalistic norms exerted influence, it would be expected that alternative and mainstream papers would exhibit different content; if organizational norms controlled content, it would be expected that independent papers would exhibit different coverage than chain-owned papers; and if economic norms were a prevalent influence, it would be expected that community newspapers would differ from large metropolitan papers. Despite the appearance of diversity in the newspapers of Toronto, the reality is far different. The results indicate that the character of the newspapers exerted limited influence over story content.*

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### **Introduction**

The social responsibility model attributes a moral obligation to the press: providing the citizenry with the basis for making informed opinions (Siebert, Peterson & Scramm, 1956; Lemert, 1989; Ostini & Fung 2002). The press, then, has to be factually accurate, balanced and objective, and it has to provide a diversity of views, and promote open debate. The interests of all need be reflected in news coverage. Diversity is almost uniformly described as an essential character of the mass media in democratic societies.<sup>1</sup> A decline in the range of voices contributing to the “marketplace of ideas” is seen as problematic, as is a media presenting a “notional” balance of points of view (Hall, *et al.*, 1978, p. 121). Media messages that are heterogeneous are seen as providing access to a variety of viewpoints, thereby

allowing for a range of voices and viewpoints to be circulated, empowering and engaging the citizenry, and increasing the opportunity for dissemination of insurgent voices. When voices that challenge traditional perspectives infiltrate the media, the public has the basis to question not only the official perspective of a particular issue but also the validity of the dominant social paradigms.

Examining media messages and the perspectives they circulate to the citizenry becomes a study of complex influences. The content of an individual newspaper story is determined by a mix of journalistic, organizational, economic and ideological norms. The mix of norms affects the reliance on routine channels of information and ultimately the diversity of sources cited by an individual news organization. Any individual media organization exhibits

unique (and often dynamic) balancing of the various stories, which in turn affects how the reader understands any given issue.

Several studies ascribe a generally homogeneous news coverage afforded by papers to the prevalence of journalistic norms: if all journalists learn similar ways to construct news and are taught which sources should and should not be consulted, each journalist will produce a similar story (Kenix, 2005; McCombs, 1987; Entman, 1985). The standardization of news story production leads to recurring patterns of content, uniform story lines of similar perspectives, leads, quotes, styles and vocabularies, regardless of the organization reporting an event (Hackett & Uzelman, 2003; Wahl-Jorgensen & Galperin, 2000). Yet not all media adhere to the same journalistic norms: the alternative media defines itself as in opposition to mainstream media, not only in terms of the ideology supported in its stories but also in the standards applied to its reporting (Harcup, 2005); small community newspapers may not possess the same norms and resources as larger metropolitan papers; and independently-owned newspapers may differ in character from those in corporate chains.

## **Objectives**

Essentially, alternative newspapers exist to serve readers “alienated” by mainstream news coverage (Harcup, 2005). As a result of serving a unique readership, these papers often raise new issues and new points of view not found in mainstream stories (Mathes & Pfetsch, 1991). When reporters with work experience in both mainstream and alternative media in the UK were surveyed by Harcup (2005), two fundamental characteristics emerged as distinguishing the differing work environments: the sources consulted, and the events considered newsworthy. Journalists in alternative media were found to employ a different range of sources when

reporting on news events, especially rejecting the mainstream sourcing structure that favors and routinizes the use of elite sources (Harcup, 2005; Atton, 2002; Atton & Wickenden, 2005). Further, the news values used to determine what events are selected to become news are seen as different in alternative media. What “makes a good story” is thus evaluated differently in alternative media, and the construction of the story relies on different sources of information. This leads to what Harcup (2005, p. 363) terms insurgent or “counter-hegemonic” journalism. Articles in alternative newspapers are more likely to present viewpoints that run counter to the accepted dominant social paradigm (Atton & Wickenden, 2005).

Although issues and perspectives first raised in the alternative press may be adopted by the mainstream press (Mathes & Pfetsch, 1991), the alternative press is seen as generally providing different content, sourcing and story frames than the mainstream press. Thus, the first research question is:

**RQ1:** Does news coverage in alternative newspapers differ in content and framing from that in mainstream newspapers?

The most apparent differences between small and large newspapers are the financial resources available for hiring staff and covering stories. The economic norm of efficiency would be expected to constrain the range of events covered by small newspapers as well as limit the resources devoted to the events reported. Research findings, however, somewhat contradict this assumption. For example, Brown *et al.* (1987) examined front page news stories in two large (i.e., *New York Times* and *Washington Post*) and four small newspapers, and found small papers were less reliant on the most routine channels of information.



Beyond differences in financial resources, conventional wisdom posits that small communities have a lower degree of social pluralism and therefore are able to apply greater pressure on local media to limit the portrayal of conflict in their news coverage (Brown, *et al.*, 1987; Dunwoody, & Griffin, 1993; Schweitzer, & Smith, 1991; Griswold, & Swenson, 1993). Yet most research surrounding conflict representation within small newspapers has typically focused on newspapers outside large urban areas. In their survey of 141 *urban* community papers, Jeffres *et al.* (1999) found alerting residents of local problems and conflict – that is, acting as a watchdog – was ranked second among overall objectives of these newspapers. Small urban newspapers may exhibit different content behavior than their suburban counterparts—they may have a wider range of advertising and other options or may be less connected to the local community, allowing for a tendency to represent conflict that equals large papers.

Some argue that monopolies and large chains more readily adopt controversial stances given their greater resilience against threats of legal suits and protests from advertisers and readers. In contrast, smaller papers may shy away from presenting “objective” views of controversial issues as they are more vulnerable to the financial fallout of dissatisfied advertisers and legal action. The degree to which controversy is represented in small newspapers is also dependent on the source of that controversy and the personal response of journalists and editors to “threat” (Wakefield & Elliot, 2003; Nicodemus, 2004). This suggests reporters at small newspapers may be less adherent to the journalistic norm of impartiality, constructing stories differently from reporters at large papers who are not concerned with shielding themselves from the outfall of controversy. When staff members are also members of the community, a greater variety of sources are

used in reporting a given story (Nicodemus, 2004; Martin, 1988). However, an increased reliance on citizen sources does not necessarily correspond with greater diversity in viewpoints, as Schweitzer and Smith (1991) found larger papers were able to provide more balanced stories that covered a wider range of perspectives when compared to small papers.

Voakes *et al.* (1996) found the smallest papers displayed the greatest diversity in sources cited and ideas represented; however, the range of variation between the small, medium and large newspapers was relatively narrow, thus they concluded that the diversity among all papers was relatively comparable (i.e., size does not affect content diversity).

To address whether small urban papers have different levels of diversity than their large counterparts, the second research question is:

**RQ2:** Does news coverage in small community-oriented newspapers differ in content and framing from that in large metropolitan-oriented newspapers?

The owners of a newspaper organization can form the organizational norms under which that paper operates. The widespread belief is that the influence of ownership can filter down to the selection and presentation of news based on an altered set of values distilled not solely from journalistic norms but also from the owner’s primary objectives.<sup>2</sup> There is a substantial literature reporting that editorial policy and journalistic practice differ between chain-owned<sup>3</sup> and independent newspapers. Often, studies of the changes resulting from corporate chain ownership of newspapers have been critical of the impacts on news practice (Browning, *et al.*, 1984; Hackett & Uzelman, 2003; Coulson & Hansen, 1995; Howorun, 2005).<sup>4</sup>

Although the greater financial resources of newspaper chains might afford newspapers greater investigative reporting capabilities, in the interest of cost-containment and providing greater profit margins, chain-owned newspapers have been found to place a greater reliance on routine information sources such as news wire services (Fradgley & Niebauer, 1995; Romanow & Soderlund, 1978; Hackett, & Uzelman, 2003).<sup>5</sup> It is expected that a reliance on routine sources of information may decrease the diversity of content produced by chain-owned newspapers when compared to those that are independently owned.<sup>6</sup> It also appears chain-owned newspapers are more supportive of the status quo,<sup>7</sup> especially in aspects that allow for an opportunity to increase their own corporation's status, when compared to the behavior and content of independent newspapers.

Yet, a review of literature on the influence of the form of ownership on newspaper content is equivocal (see, for example: Wagenberg & Soderlund, 1975; Thrift, 1977; Meyer & Wearden, 1984; Romanow & Soderlund, 1988; Lacy & Fico, 1990; Demers, 1996; Compaigne, 2000; Howorun, 2005), likely as a result of confounding influences and conflicting pressures on owners. In fact, many studies have not found any relationship between the form of ownership and characteristics of news content. In Canada, the Kent Commission was unable to construct a conclusive case that chain ownership negatively affects the diversity of ideas (Ministry of Canadian Heritage, 2002). In assessing a variety of measures of newspaper quality in 31 independent and 49 chain-owned newspapers Lacy and Fico (1990) found no systematic differences in news quality. Compaigne (2000) concludes that there was little discernable difference between newspapers based on the form of their ownership. Similarly, Meyer and Wearden (1984) found no statistically significant differences between private and public

group newspapers (except that the private groups had more space devoted to local editorials).

To address the contradictory evidence that both supports and refutes the effect of ownership on media content, the third research question is:

**RQ3:** Does news coverage in independent newspapers differ in content and framing from that in chain-owned newspapers?

### **The Case of Toronto's Waterfront**

The Lake Ontario waterfront of Toronto (Ontario) has long been a site of contention. The most recent phase of planning interest for Toronto's waterfront was initiated in the late 1990s with the city's bid for the 2008 Summer Olympics. Leading up to the Olympic decision, federal, provincial and municipal leaders came together in November 1999 to announce the formation of the Toronto Waterfront Revitalization Task Force. This Task Force was formed to look at ways to "enhance the region's economic vitality, social development, transportation system, housing stock and environmental sustainability" (City of Toronto, 2006). In March 2000, the Task Force released its report that reviewed existing waterfront plans, prepared an inventory of waterfront assets held by the three levels of government, developed a marketing plan that provided open space, recreation, residential, commercial and entertainment spaces, and looked at infrastructure needed to develop the waterfront (City of Toronto, 2000). Despite the International Olympic Committee's decision to name Beijing as host to the 2008 Summer Olympics, a focus on waterfront development continued with the October 2001 release of the *Central Waterfront Part II Plan* (City of Toronto 2006), which incorporated the recommendations of the Task Force and also marked the formation of the Toronto Waterfront Revitalization Corporation

(TWRC)<sup>8</sup>, an agency enacted by provincial legislation to co-ordinate development of the waterfront among the three levels of government with jurisdiction over waterfront lands (City of Toronto, 2006).

Since then, Toronto waterfront planning has focused on not only building neighborhoods but also increasing tourism revenue through creating “signature” or flagship projects promoted as generators of a greater number of people visiting the waterfront. Many official and civic organizations have become involved, with the most vocal non-official voices evident in the context of specific controversial issues—generally linked to the broadly environmental aspects of the proposed development. It was issues related to the waterfront which made “ecosystem planning” a household word in urban discourse” (Kipfer & Keil, 2002, p. 240). Toronto’s waterfront development has provided a forum for innately diverse voices, perspectives and attributes concerning land development to be reproduced in local media, and is thus an ideal case study to determine the varying levels of heterogeneity or homogeneity in media coverage of a planning issue.

Toronto is served by a robust population of newspapers, from dailies to monthlies, tabloid to quality papers, distributed at the community to national level, available free-of-charge or by subscription. The city has largely resisted the trend evident elsewhere of a declining press (Rosse, 1980). There are two nationally-distributed dailies (*Globe and Mail* and *National Post*), two local dailies (*Toronto Star* and *Toronto Sun*), two commuter dailies (*Metro* and *24 Hours*), at least eight multicultural dailies (in Chinese, Korean, Italian and Spanish languages) and a number of weekly and monthly multicultural newspapers, about 20 community newspapers, and five regularly published alternative newspapers. Newspapers in a competitive environment

are generally seen as providing higher quality local coverage, greater diversity of news and greater diversity of editorial opinion than those operating in an environment without local competition (Coulson & Lacy 1996; Lacy, *et al.*, 1999; Lacy & Martin 2004). Toronto should be well served with its multitude of media voices.

## **Methodology**

As a representative sample, eight Toronto newspapers were selected for study. All serve a segment of waterfront residents in their readership, as well as each displaying various size, conventionality and ownership characteristics (Table 1).

*Beach/Riverdale Crier* (“*Crier*”) – An independently owned local paper, its coverage is narrowly confined to local issues. The *Crier* is mailed to residents in its distribution area free-of-charge, on a monthly basis. Overall, this paper is classified as an independent, mainstream, community newspaper.

*Beach/South Riverdale Mirror* (“*Mirror*”) – This community newspaper is affiliated with the Torstar Corporation through Metroland, a wholly-owned subsidiary of Torstar, and hence shares ownership with *Eye Weekly* and the *Toronto Star* (described below). The paper is delivered free-of-charge on a weekly basis. The *Mirror* is classified as a mainstream, group-owned community paper for the purposes of this study.

*The Bulletin* (“*Bulletin*”) – This community newspaper services the central waterfront area, and is mailed free-of-charge to waterfront residents on a monthly basis. The *Bulletin* is independently-owned, mainstream, community paper.

*Eye Weekly* (“*Eye*”) – This newspaper is also owned by the Torstar Corporation, through its subsidiary Metroland, and is the Torstar’s competitor in the “alternative news and entertainment” market. It is published weekly and distributed via free newspaper boxes around the city.

*Globe and Mail* (“*Globe*”) – A subscription-based daily, the *Globe* is one of the holdings of Bell Globemedia, and is thus a group-owned, mainstream, large newspaper.

*National Post* (“*Post*”) – Another large daily newspaper available by subscription, the *Post* is owned by CanWest Global Communications Corporation, a multi-media corporation formerly under the control of Conrad Black and now headed by the Asper Family.

*Now* – Like *Eye*, this newspaper identifies itself an “alternative” paper. *Now* is independently owned and published on a weekly basis, thus it is classed as an alternative, independent, community newspaper for this analysis.

*Toronto Star* (“*Star*”) – Published daily, the *Star* has the largest circulation of any Toronto daily. Distribution of the *Star* is based on subscriptions. This paper is owned by the Torstar Corporation, with ownership common among the *Star*, *Eye* and *Mirror*. This paper is thus a large, mainstream, group-owned newspaper.

Table 1: Newspaper Profiles.

|                          | <i>Bulletin</i> | <i>Crier</i> | <i>Eye</i>  |
|--------------------------|-----------------|--------------|-------------|
| Published                | Monthly         | Monthly      | Weekly      |
| Distribution             | Free            | Free         | Free        |
| Conventionality          | Mainstream      | Mainstream   | Alternative |
| Circulation <sup>1</sup> | 53              | 213,900      | 102,484     |
| Size Class               | Community       | Community    | Community   |
| Ownership                | Independent     | Independent  | Chain       |
| # of articles            | 22              | 11           | 11          |

|                          | <i>Globe</i>       | <i>Mirror</i> | <i>Now</i>  |
|--------------------------|--------------------|---------------|-------------|
| Published                | Daily              | Weekly        | Weekly      |
| Distribution             | Subscription       | Free          | Free        |
| Conventionality          | Mainstream         | Mainstream    | Alternative |
| Circulation <sup>1</sup> | 354,574<br>weekday | 21,850        | 106,103     |

|               |                     |           |             |
|---------------|---------------------|-----------|-------------|
|               | 416,457<br>Saturday |           |             |
| Size Class    | Metropolitan        | Community | Community   |
| Ownership     | Chain               | Chain     | Independent |
| # of articles | 95                  | 19        | 15          |

|                          | <i>Post</i>         | <i>Star</i>         |
|--------------------------|---------------------|---------------------|
| Published                | Daily               | Daily               |
| Distribution             | Subscription        | Subscription        |
| Conventionality          | Mainstream          | Mainstream          |
| Circulation <sup>1</sup> | 336,150<br>weekday  | 462,985<br>weekday  |
|                          | 399,032<br>Saturday | 673,633<br>Saturday |
|                          |                     | 430,089<br>Sunday   |
| Size Class               | Metropolitan        | Metropolitan        |
| Ownership                | Chain               | Chain               |
| # of articles            | 31                  | 135                 |

Articles dealing with waterfront development were identified from the eight newspapers for a three year time period, from May 2003 to April 2006. Proquest Newsstand was used to search for the adjacent terms “Toronto waterfront” in the keyword or subject area fields for the newspapers the *Globe*, *Post* and *Star*. As the smaller papers the *Bulletin*, *Crier*, *Eye*, *Now* and *Mirror* were not available through a periodical index, their individual website archives were searched using the less-sensitive terms “Toronto” and “waterfront”. Editorial and opinion-editorial pieces were included; letters to the editor were excluded from the analysis. All articles returned through the searches were read to ensure relevance. A total of 339 articles were identified.

The presence of specific issues and perspectives contained in the articles was recorded, and salience cues<sup>9</sup> related to the prominence of the issues and perspectives were also identified.

Issues represent the topics constructed as relevant to the overall waterfront development problem. Coding issues involved recording the following information:

- Presence: Each time a waterfront development topic appeared in article, it was coded as belonging to one of seven issue categories (i.e., business spaces, neighbourhoods, environment, energy, transport, amenities, public spaces).
- Prominence: The placement of a topic in a prominent position (i.e., within the opening paragraphs of an article) was also coded. The position of a topic is important in newspaper stories, as sub-issues placed at the top of an article are more salient than those buried at its end (van Dijk, 1988).
- Space: Space is another indicator of salience, for the greater space allocated to a topic, the more salient it is (van Dijk, 1988; Dunwoody & Griffin, 1993; Kioussis, 2004; Mathes & Pfetsch 1991). Using a standard font and spacing, the number of lines of text devoted to a particular topic was counted.

The second dimension of content, perspective, refers to the viewpoints presented as ways of understanding the waterfront development problem. Coding perspective relied on recognizing elements of Colby's (1991), five environmental management paradigms,<sup>10</sup> and collecting the following information:

- Presence: The presence of elements of the frontier economics, environmental protection, resource management, eco-development or

deep ecology paradigms was recorded.

- Balance: Since the boundaries of ideas and viewpoints are much more ambiguous than the boundaries of issues, the degree to which different perspectives were balanced within an article was coded rather than recording space. Each article containing only one paradigm was coded as "monopoly." For texts containing more than one paradigm, the article was coded as either "very unbalanced" (where one paradigm is much more pervasive than others), "unbalanced" (where one perspective is more pervasive than others) or "balanced" (where all perspectives are given roughly equal attention). Articles that did not contain any paradigms were coded as "absent". Where appropriate, the sole or most pervasive paradigm was coded as being "dominant."

If a news article presented at least two parties as in opposition to each other, it was coded as a "conflict" story (Berkowitz & Beach 1993).

The information channel was coded as routine if the story originated from a news release, public announcement, news conference or political meeting or campaign. The article was coded as originating from non-routine channel if it originated from a non-official source, such as a local group meeting, investigative reporting or background research.

The presence of the specific sources cited in the text was also coded. Each source was categorized into one of nine source types (i.e., advocacy group, alternative media, citizen, expert, government, mainstream media, document, private institution, or unnamed). Source diversity was recorded for each article.

All coding was performed initially by one author (LB). An intra-coder reliability test was undertaken by recoding 78 of the 339 articles at least one month after the initial coding. Simple agreement values exceeded 0.89 with the exception of “balance” (0.72).<sup>11</sup> In order to provide an inter-coder reliability test for the coding categories and interpretations, 15 percent of the sample were recoded by an independent coder.<sup>12</sup> Cohen’s kappa statistics (Brennan & Prediger, 1981; Viera & Garrett, 2005) were calculated with values for the categorical variables ranged from 0.80 to 1.0.

To combine the three measures of frequency, prominence and space allocation into a single measure of issue salience, and “salience index” was developed. Although Kiousis (2004) validated the role of frequency and placement (i.e., prominence) in constructing salience and several authors have relied on space allocation to gauge salience (c.f., Atton & Wickenden, 2005; Mathes & Pfetsch, 1991), the literature does not comment on the relative importance of these three characteristics in constructing salience. Frequency, space and prominence were assumed to be equally important in the construction of salience, and each was assigned an equal weight of 1. The “issue salience” index (S) is then calculated.<sup>13</sup> It provides a comparative measure of the importance of any one issue.

The second index value characterizes the relative dominance of a perspective. Paradigms appearing in “balanced” articles are assigned a weight of 1 ( $W_i = 1$ ), those in an article coded as “monopoly” are assigned a weight of 4 ( $W_i = 4$ ), the most pervasive paradigms in “unbalanced” articles are assigned a weight of 2 ( $W_i = 2$ ), and paradigms most pervasive in “very unbalanced” articles are assigned a weight of 3 ( $W_i = 3$ ). The “perspective balance” index (B) is then calculated.<sup>14</sup> This

index measures the pervasiveness of a perspective in news discourse.

Other indices were devised to amalgamate multiple variables into a single measure of diversity.<sup>15</sup> These diversity indices reflect the degree of heterogeneity in both the issues and perspectives presented in media stories. Diversity provides a measure of the degree to which all classes are mentioned within a population, and describes how evenly these mentions are distributed across all classes.

Lastly, each source cited within an article was categorized into one of nine source types (i.e., advocacy group, alternative media, citizen, expert, government, mainstream media, document, private institution, unnamed). This information was described using a source mix index, where the total number of source types cited amongst all articles was divided by the number of articles in which they were cited, which provided an average number of sources per article (or source mix).

To determine whether newspaper conventionality, size and ownership affect content, statistical randomization tests were executed for the various groupings of newspaper stories. Appropriate in cases with small population sizes, the use of this non-parametric test avoids the errors arising from assumptions of a normal distribution for a population size of eight (Gibbons, 1971; Siegel, 1956). Randomization tests calculate the possibility of a particular population grouping occurring due to chance.<sup>16</sup>

## **Findings**

The general results of the analysis are presented in Tables 2, 3 and 4.<sup>17</sup>

### **Research Question 1:**

Contrary to what might be anticipated, the alternative newspapers

(*Eye and Now*) do not exhibit the highest propensity to rely on the “alternative” eco-development and deep ecology perspectives. Rather, the papers generally reflect conventional environmental paradigms in both frequency and perspective balance. As a group they are indistinguishable statistically from the more mainstream newspapers.<sup>18</sup> Similarly, waterfront development stories in alternative papers do not differ significantly from stories in mainstream newspapers in terms of their issues addressed nor in any of the calculated diversity values (i.e.,  $D_a$ ,  $D_s$ ,  $D_p$  and  $D_b$ ).<sup>19</sup> These findings appear generally to support those of Kenix (2005) who found no difference in the way the issue of air pollution was constructed in mainstream, African-American and other alternative press and counter to others who have emphasized the differences in journalistic norms in the alternative press (Harcup, 2005; Atton, 2002; Atton & Wickenden, 2005).

Toronto’s self-proclaimed “alternative” press does not present an alternative discourse. Instead, the *Eye* and *Now* define “alternative” according to the age of their reader (e.g., catering to a specific young market), the proportion of political versus entertainment news offered in their stories (e.g., devoting more coverage to entertainment news), or the types of entertainment news coverage provided (e.g., focusing on “alternative” music and films as opposed to pop music and mainstream films). The similarity in content between alternative and mainstream waterfront development stories may also be due to the homogenizing effect of advertisers identified by Kenix (2005); that is, Toronto’s alternative media may orient their content to white, middle class reader to increase the attractiveness of their paper to advertisers, instead of shaping stories to serve the alienated counter-hegemonic reader. Those in Toronto seeking a dramatically different perspective on waterfront development will not find it in the self-styled alternative press.

#### Research Question 2:

The analysis also revealed minimal differences between the community and large metropolitan newspapers (i.e., *Globe and Mail*, *National Post* and *Toronto Star*). Stories in community papers do not differ statistically from the large papers in either overall diversity (i.e.,  $D_a$ ,  $D_s$ ,  $D_p$  and  $D_b$ ) or particular attribute frequency and salience. Only in their greater emphasis on the resource management paradigm (both frequency and bias differences), do the community newspapers differ statistically. In examining content, this results from their narrow emphasis on reporting on the mechanics of environmental assessment requirements of waterfront development proposals (where the consequences and details of local development is expected to be of primary importance to their readership). The large papers adopt resource management perspectives proportionately less frequently, but are more likely to contain a broader range of resource management elements in their story frames, such as the role of green industries in revitalizing the economy, issues surrounding flood protection, and the importance of soil remediation assessments.

The community newspapers do not consistently present less conflict, do not rely more heavily on non-routine channels of information, nor have a greater source mix than large newspapers. The similarities between waterfront development stories in community and large newspapers provide further evidence to support the assertions of Jeffres *et al.* (1999) and agree with others’ assessment that overall source mix and viewpoint diversity do not vary greatly among small and large papers (Voakes, *et al.*, 1996; Lasorsa & Wanta, 1990).

#### Research Question 3:

Finally, as a group, the independent newspapers (i.e., *The Bulletin*, *Beach/Riverdale Crier* and *Now*) do not

exhibit a greater proportion of conflict or non-routine stories when compared to chain-owned papers, and source mix values are not statistically distinguishable. Independent newspapers did report on public space issues less frequently;<sup>20</sup> otherwise the statistical analyses of the measures of diversity do not differentiate between the groups of newspapers.

## **Discussion and Conclusions**

Despite the appearance of diversity in the newspapers of Toronto, the reality is far different. If journalistic norms exerted influence, it would be expected that alternative and mainstream papers would exhibit different content; if organizational norms controlled content, it would be expected that independent papers would exhibit different coverage than chain-owned papers; and if economic norms were a prevalent influence, it would be expected that community newspapers would differ from large metropolitan papers. Although, as Hansen notes, “some issue-areas allow a much greater discursive diversity than others” (1993, p. xvi), little diversity was discernable among the newspapers in their coverage of what has been one of the central recent issues in the city’s planning. A singular perspective dominates among the newspapers: in the specific issues incorporated, in the perspectives adopted, in sources, and in the extent to which conflict is rendered.

Overtly, diversity is assumed when a requisite variety and number of newspapers is present in a given market; however, diversity in content (perspectives) and “voices” (sources) may not be there. This examination of variety in sources, issues and perspectives found that despite Toronto’s extensive mix of press, there is no true diversity in messaging. Contrary to conventional wisdom, there appears to be no more extensive coverage nor greater number of ways in which waterfront issues

are constructed in this highly competitive market.

Further, this study does emphasize that analyzing only one dimension of news diversity—source diversity alone—does not adequately reflect true diversity in messaging. By examining the diversity of perspectives, or the way an issue is constructed, a valuable dimension of diversity is revealed. It is the subtext, or these perspectives, that goes beyond a reader’s capability to recognize an issue into the realm of potentially informing *how* a reader understands an issue.

It is because of the ability of the press to influence the reader that the convergence of the media message and its lack of diversity have been identified as a problematic issue by many (Bagdikian, 2000; Danielian & Reese, 1989). As Hackett has suggested, “[T]he pluralist model of an open and diversified media does not correspond to the real world of power relations” (1991, p. 2)

Analyzing a deeper element of diversity—the diversity of alternate visions or perspectives—is a prerequisite before being able to gauge diversity in the press and the true impacts of media ownership, size and conventionality. There is a need to go beyond performing content analysis, probing deeper into the background messaging present in the media. Many studies have utilized an atomistic approach, systematically coding overt variables such as number of sources, but this alone is not enough to signify whether the citizenry are being informed of the issues. If we were to stop at merely these superficial studies, it would appear the press is meeting its moral obligation to provide for the citizenry to make informed decisions. However, there still can be a lack of diversity in the perspectives used to build an understanding of an issue.



Is the public being served by this lack of diversity? Is readership being fully informed? Can those with an alternate vision find confirmation or support in the media? A key issue is the extent to which the public “is permitted to choose between alternative visions of what the issue is” (Zaller, 1992, p. 8). From our findings, it cannot be concluded that many alternative visions are being circulated, and thus the reader must find alternate means to receive diverse messages. A competitive newspaper market does not always equate to a competitive marketplace of ideas. Further study is needed to find whether this holds true of a range of issues, and if so, how best to ensure alternative perspectives are fostered in a truly diverse press.

13

$$S = \frac{f_i}{\sum f} + \frac{s_i}{\sum s} + \frac{p_i}{\sum p} / 3$$

where:

$f_i$  – the number of times a particular issue class appeared within a population

$\sum f$  – the total number of issues (among all classes) within a population

$s_i$  – the number of lines devoted to a particular issue class within a population

$\sum s$  – the total number of lines devoted to all issues within a population

$p_i$  – the number of times an issue class appeared in a prominent position within a population

$\sum p$  – the total number of issues (among all classes) appearing in a prominent position within a population

The closer the salience value is to 1, the more salient the issue.

14

$$B = \left( W_i \left( \frac{M_i}{\sum M} \right) + W_i \left( \frac{B_i}{\sum B} \right) + W_i \left( \frac{U_i}{\sum U} \right) + W_i \left( \frac{V_i}{\sum V} \right) \right) / \sum W_i$$

where

$M_i$  – number of times one of five paradigm types appears in monopoly articles

$\sum M$  – total number of monopoly articles

$B_i$  – number of times one of five paradigm types appears in balanced articles

$\sum B$  – total number of paradigms in balanced articles

$U_i$  – number of times one of five paradigm types dominates in unbalanced articles

$\sum U$  – total number of unbalanced articles

$V_i$  – number of times one of five paradigm types dominates in very unbalanced articles

$\sum V$  – total number of very unbalanced articles

$\sum W_i$  – sum of weights

The closer the perspective balance index to 1, the more dominant the paradigm within the discourse.

<sup>15</sup> The following formula was used to calculate a number of “diversity” indices (D):

$$D = [1 - \sum x_i^2] * [n/(n-1)]$$

where  $x_i$  has a four connotations,

$D_a$  – a measure of issue diversity, where  $x_i$  is the percent frequency of a specific issue class

$D_s$  – a measure of salience diversity, where  $x_i$  is the salience index value for a specific issue class (the salience index is described in Formula 2, below)

$D_p$  – a measure of perspective diversity, where  $x_i$  is the percent frequency of a paradigm category

$D_b$  – a measure of perspective balance diversity, where  $x_i$  is the perspective balance index value for a specific paradigm category (the perspective balance index is described in Formula 3, below)

and where  $n$  is the number of classes (i.e., for issues,  $n=7$ ; for paradigms,  $n=5$ ).

The maximum diversity value of 1 denotes a perfectly even distribution of frequency across all classes.

<sup>16</sup> Siegel (1956) provides a full description of how this test is executed.

<sup>17</sup> Statistical analyses were conducted to reflect 95 percent confidence.

<sup>18</sup> Greater ideological consistency is shown by the neo-liberal *National Post* which has the highest proportion of the *laissez faire* frontier economics perspective.

<sup>19</sup> It is common in environmentally-related stories for more extreme views to be sought and reported selectively (Sandman, Sachsman, Greenberg & Gochfeld, 1987; Greenberg, 1985).

<sup>20</sup> As well, independent papers tended to focus on a limited scope of public space issues (mainly parks and beaches), whereas the chain-owned papers covered a wider range of elements such as winter gardens, public plazas, civic squares, and pedestrian and bike trails.

<sup>4</sup> However, Romanow and Soderlund (1988) found that few editorial changes accompanied the Thompson chain's takeover of the *Globe and Mail*—if anything the paper increased the number of local reporters.

<sup>5</sup> However, for small newspapers newswire use may reduce costs while permitting an expanded geographical coverage, albeit to the detriment of a focus on local content.

<sup>6</sup> However, Romanow and Soderlund (1988) found that few editorial changes accompanied the Thompson chain's takeover of the *Globe and Mail*—if anything the paper increased the number of local reporters.

<sup>7</sup> Fradgley and Niebauer's (1995) study of four UK papers found chain-owned newspapers to be less likely to report conflict in their stories than independent papers, maintaining an atmosphere of consensus.

<sup>8</sup> The Toronto Waterfront Revitalization Corporation changed its operating name to Waterfront Toronto as of May 15, 2007.

<sup>9</sup> Salience cues are the means by which the media make a "piece of information more noticeable, meaningful or memorable to its audience" (Entman, 2002, p. 293).

<sup>10</sup> According to Colby (1991), there are five classifications of environmental management. "Frontier Economics" defines progress as infinite economic growth, and does not account for natural factors that may limit growth. "Environmental Protection" views economic growth as being traded off for ecological health, and relies on environmental impact assessments and regulating pollution levels to redress the imbalance. "Resource Management" posits sustainable growth is achievable if humans manage ecosystems, monitoring both natural and social health when achieving economic growth. "Eco-Development" goes beyond managing resources, where humans and nature are viewed as co-developing, with integration of social, economic and ecological monitoring providing information to regulate development. "Deep Ecology" takes a biocentric view of planning, focusing on grassroots action that is anti-growth and a call for being in harmony with nature.

<sup>11</sup> In the case of "balance," on recoding additional paradigms tended to be recorded. When the articles were originally coded, a brief rationalization of the classification was prepared. After the intra-coder reliability test was undertaken, an examination of these descriptions validated the presence of the additional paradigms not captured in the recoded articles. With clear instructions to thoroughly identify all paradigms, this problem did not occur with the inter-coder reliability testing.

<sup>12</sup> Following the suggestions of anonymous reviewers.

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## Notes

<sup>1</sup> "Diversity" can be interpreted in several ways. For the purposes of this paper it refers to two main elements related to the framing of stories within a newspaper: content and sources. Content refers to the substance of the newspaper—the range of perspectives, opinions and information that helps a society achieve some level of self-understanding and the variety in the issues and ideas presented within a media text. Diversity of sources refers to the origins of the content—reporters' sources, newswires, news releases, and others—which initiate the content. There are an entirely different set of issues related to the diversity of the media more generally (Horowitz, 2005).

<sup>2</sup> For example, Demers and Wackman (1988) found that editors at independently-owned papers were more likely to mention community service as their organization's aim, whereas editors at chain-owned papers were more likely to emphasize profit as their paper's main objective.

<sup>3</sup> For the purposes of this study, "chain-owned" newspapers include all newspapers owned by a corporation with multiple holdings and does not differentiate between companies with diversified or wholly publication-type holdings.



Table 2: Individual Frequency and Salience Values for Issues Appearing in Each Newspaper

| Issue                                         | Frequency            |              |            |              |               |            |             |             |
|-----------------------------------------------|----------------------|--------------|------------|--------------|---------------|------------|-------------|-------------|
|                                               | <i>Bulletin</i>      | <i>Crier</i> | <i>Eye</i> | <i>Globe</i> | <i>Mirror</i> | <i>Now</i> | <i>Post</i> | <i>Star</i> |
| Amenities                                     | 16%                  | 7%           | 4%         | 13%          | 0%            | 9%         | 14%         | 14%         |
| Business                                      | 9%                   | 7%           | 8%         | 7%           | 9%            | 11%        | 9%          | 11%         |
| Energy                                        | 1%                   | 33%          | 8%         | 3%           | 21%           | 0%         | 0%          | 2%          |
| Environment                                   | 6%                   | 0%           | 0%         | 6%           | 6%            | 14%        | 9%          | 10%         |
| Neighborhood                                  | 18%                  | 7%           | 19%        | 22%          | 12%           | 17%        | 24%         | 16%         |
| Public Space                                  | 22%                  | 20%          | 27%        | 28%          | 36%           | 26%        | 26%         | 29%         |
| Transportation                                | 28%                  | 27%          | 35%        | 21%          | 15%           | 23%        | 18%         | 18%         |
| Overall Attribute Diversity (D <sub>a</sub> ) | 0.94                 | 0.89         | 0.88       | 0.93         | 0.90          | 0.95       | 0.94        | 0.95        |
| Issue                                         | Issue Salience Index |              |            |              |               |            |             |             |
|                                               | <i>Bulletin</i>      | <i>Crier</i> | <i>Eye</i> | <i>Globe</i> | <i>Mirror</i> | <i>Now</i> | <i>Post</i> | <i>Star</i> |
| Amenities                                     | 0.19                 | 0.02         | 0.01       | 0.12         | 0             | 0.19       | 0.12        | 0.13        |
| Business                                      | 0.09                 | 0.09         | 0.08       | 0.06         | 0.14          | 0.18       | 0.13        | 0.12        |
| Energy                                        | 0.04                 | 0.35         | 0.1        | 0.06         | 0.33          | 0          | 0           | 0.05        |
| Environment                                   | 0.03                 | 0            | 0          | 0.03         | 0.09          | 0.07       | 0.07        | 0.06        |
| Neighborhood                                  | 0.17                 | 0.02         | 0.21       | 0.21         | 0.05          | 0.11       | 0.34        | 0.15        |
| Public Space                                  | 0.16                 | 0.18         | 0.12       | 0.23         | 0.27          | 0.12       | 0.20        | 0.30        |
| Transportation                                | 0.32                 | 0.33         | 0.48       | 0.29         | 0.12          | 0.33       | 0.14        | 0.19        |
| Overall Salience Diversity (D <sub>s</sub> )  | 0.93                 | 0.85         | 0.81       | 0.93         | 0.90          | 0.92       | 0.92        | 0.95        |

Table.3: Individual Frequency and Perspective Balance Values for Paradigms Appearing in Each Newspaper

| Paradigm                 | Frequency       |              |            |              |               |            |             |             |
|--------------------------|-----------------|--------------|------------|--------------|---------------|------------|-------------|-------------|
|                          | <i>Bulletin</i> | <i>Crier</i> | <i>Eye</i> | <i>Globe</i> | <i>Mirror</i> | <i>Now</i> | <i>Post</i> | <i>Star</i> |
| Frontier Economics       | 18%             | 35%          | 22%        | 29%          | 28%           | 26%        | 47%         | 29%         |
| Environmental Protection | 25%             | 18%          | 28%        | 26%          | 34%           | 30%        | 20%         | 30%         |
| Resource Management      | 25%             | 35%          | 28%        | 16%          | 28%           | 26%        | 13%         | 19%         |

|                                         |                                  |              |            |              |               |            |             |             |
|-----------------------------------------|----------------------------------|--------------|------------|--------------|---------------|------------|-------------|-------------|
| Eco-development                         | 33%                              | 12%          | 17%        | 24%          | 7%            | 13%        | 13%         | 20%         |
| Deep Ecology                            | 0%                               | 0%           | 6%         | 5%           | 3%            | 4%         | 7%          | 2%          |
| Overall Perspective Diversity ( $D_p$ ) | 0.92                             | 0.88         | 0.96       | 0.96         | 0.90          | 0.94       | 0.88        | 0.94        |
| <b>Paradigm</b>                         | <b>Perspective Balance Index</b> |              |            |              |               |            |             |             |
|                                         | <i>Bulletin</i>                  | <i>Crier</i> | <i>Eye</i> | <i>Globe</i> | <i>Mirror</i> | <i>Now</i> | <i>Post</i> | <i>Star</i> |
| Frontier Economics                      | 0.15                             | 0.33         | 0.21       | 0.43         | 0.52          | 0.15       | 0.57        | 0.24        |
| Environmental Protection                | 0.36                             | 0.17         | 0.37       | 0.17         | 0.26          | 0.46       | 0.20        | 0.43        |
| Resource Management                     | 0.28                             | 0.51         | 0.22       | 0.12         | 0.19          | 0.22       | 0.06        | 0.09        |
| Eco-development                         | 0.22                             | 0            | 0.20       | 0.14         | 0.02          | 0.04       | 0.15        | 0.23        |
| Deep Ecology                            | 0                                | 0            | 0.02       | 0.15         | 0.01          | 0.14       | 0.02        | 0.02        |
| Overall Perspective Balance ( $D_b$ )   | 0.91                             | 0.76         | 0.92       | 0.91         | 0.79          | 0.88       | 0.76        | 0.88        |

Table 4: Conflict, Non-routine Source and Source Mix Characteristics of Newspapers

| <b>Paper</b>    | <b>Proportion of Conflict Stories</b> | <b>Proportion of Non-Routine Stories</b> | <b>Source Mix*</b> |
|-----------------|---------------------------------------|------------------------------------------|--------------------|
| <i>Bulletin</i> | 23%                                   | 59%                                      | 1.9                |
| <i>Crier</i>    | 27%                                   | 29%                                      | 2.1                |
| <i>Eye</i>      | 18%                                   | 36%                                      | 1.9                |
| <i>Globe</i>    | 22%                                   | 47%                                      | 1.7                |
| <i>Mirror</i>   | 37%                                   | 32%                                      | 2.0                |
| <i>Now</i>      | 40%                                   | 27%                                      | 1.8                |
| <i>Post</i>     | 34%                                   | 29%                                      | 2.0                |
| <i>Star</i>     | 36%                                   | 38%                                      | 1.6                |

\* Source mix excludes unnamed sources

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## **Contesting Property and Production: Dialectical Hegemony in the Case of the Earth Liberation Front**

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### **Abstract**

*The Earth Liberation Front (ELF), which gained attention for claiming responsibility for acts of targeted property destruction, belongs to a wave of new anti-globalization social movements whose dynamics emphasize calls to extend critical organizational scholarship to inter-organizational relationships and social movements as collective resistance. With prosecution of several members in summer 2007 constituting the largest prosecution of radical environmentalists, this case study provides a look into inter-organizational relationships of control and resistance.*

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The Earth Liberation Front (ELF), which gained attention for claiming responsibility for acts of targeted property destruction, belongs to a wave of new anti-globalization social movements whose dynamics emphasize calls to extend critical organizational scholarship to inter-organizational relationships and social movements as collective resistance. With prosecution of several members in summer 2007 constituting the largest prosecution of radical environmentalists, this case study provides a look into inter-organizational relationships of control and resistance.

This paper extends a critical approach, conceptualizing social movements in organizational terms. Authors (ex.: Ganesh, Cheney & Zoller, 2005; Cheney & Cloud, 2006; Cheney & Christensen 2001) call for examination of inter-organizational relationships and how control and resistance dynamics and progressive organizing methods and tactics, can formidably confront existing social formations of hegemony. The ELF's leaderless resistance structure enabled it to act more quickly and guard against infiltration (Leader & Probst, 2001) and cooptation (Ganesh et al, 2005), while the group's "direct action" assaults functioned outside conventional civil disobedience to attempt to stop environmental encroachment and harm profits of interests

involved in environmental destruction (Foreman, 1991).

This study focuses on organizational hegemony between the ELF and federal government, drawing on critical organizational communication literature on control and resistance with a dialectical approach to examine organizations as ideological practice. This approach is fitting, as the ELF's ideologically motivated acts strategically focused on what the group believed to be ecologically harmful activity, with the Department of Justice invoking the repressive state apparatus to classify ELF crimes as terrorism (Althusser, 1984; Department of Justice). This approach provides groundwork for viewing social movements in a global context (Ganesh et al, 2005) and analyzing surrounding and resulting structures in this conflict.

### *Ideology and Structures*

A view of organizations as fluid constructions comprising ideological language, discourse, and practices provides a model for examining contestations of ELF identity. Viewing organizations as discursively shaped relations (Fairhurst & Putnam, 2004) where interests compete to control knowledge (Habermas, 1970; Foucault, 1980) and meaning (Grossberg, 1982; Hall, 1985) to produce and reproduce domination (Deetz & Mumby, 1989), organizations' identities and forms

constantly shift to renegotiate configurations of power (Fairhurst & Putnam, 2004).

Critical organizational research extends to include organizations' interactions with outside forces, as internal processes are surrounded by social relations, similarly to the larger economy, with ideology driving consent (Buroway, 1979; Deetz & Mumby, 1989). This approach recognizes that how organizations are defined externally is not independent from its identity among insiders (Cheney & Christensen, 2001), how organizations often reference or attach themselves to more widely recognized images or positions to build their own identity (Gallager, 1990), and how organizational communication exists within larger social and cultural trends (Christensen, 1995).

#### *Dialectical Concordance Analysis*

A Marxist dialectical approach is used to look at contradictions to examine both conflict and transactional influence, where movement indicates ongoing struggles between multiple layers shaping organizational forms and contributing to positioning processes (Benson, 1977).

*Material-Symbolic Dialectics.* Symbolic arguments can attempt to negate the material, yet material elements' existence prevents them from being denied, with these tensions creating potential for change (Cheney & Cloud, 2006). Critical organizational communication research on control and resistance dialectics examines how control-fostering consent is created and continued (Buroway, 1979, Deetz & Mumby, 1989). Ideological influence and management of meaning-making is important in forging and maintaining power (Foucault, 1972; Hall, 1985), but material constraints and conditions also contribute (Cheney & Cloud, 2006).

These dialectics also exist *between* organizations because how an organization interacts with its environment affects its internal relations is also important in constituting an organization (Cheney & Christensen; 2001; Ganesh et al, 2005). As economic cycles expand to encompass a

worldwide economic system, organizations compete for control of resources, play off one another's images to ideologically create themselves, and use material events to shape self-representations (Galtung, 1988; Deetz, 1992; Gallager, 1990; DeLuca, 1999). Organizations are constituted by micro-level discourses and macro-level Discourses (Fairhurst & Putnam, 2004) and forms can exist as boundaries and voices in larger-scale conflicts.

*Collective Action as Hegemonic Struggle.* Such view of organizations encompasses social movements involved in public discourses and meaning formation. Social movements comprise social movement organizations; therefore, grassroots movements' micro-organizational practices provide a connection to larger organizational operations (Stewart, Smith & Denton, 2007; Cheney & Cloud, 2006). Social movement research contributes to critical organizational communication scholarship by attending to new forms of organizing and how they may lead to a social movement organizations becoming a larger transformational force (Ganesh et al, 2005).

Organizational discourses thus represent formations of hegemony influencing organizing processes. Processes of hegemony are aided by prevailing groups' ability to adjust, absorb and tame opposition (Gitlin, 1980), and emergent meanings and values present formidable resistance to alter existing hegemony (Williams, 1980). In a dialectical view, researchers can gain insight into transformational processes, as organized resistance represents counterbalances to power that move with and/or against structures (Ganesh et al, 2005).

Current fragmented conditions require acknowledgement of mass media's role in creating consent. Updated models of hegemony show aligned majority groups overpower a minority opposition, and the increasingly mass-mediated nature of political discourse represents various power structures at work (Condit, 1994). Social

movements often seek media attention to present their version of pertinent issues (Olien, Tichenor & Donohue, 1989; Ryan, 1991), while media organizations are gatekeepers (Olien et al, 1989; Lewin, 1947; White, 1950). Mass media owners' business interests, journalists' use of sources, and audience members' belief systems are also among interests interacting to sustain and shift hegemonies (Gitlin, 1980).

Mass media texts show interaction between different viewpoints to create a unified representation of social issues. In current conditions, hegemony is ideological conflict involving multiple groups contesting multiple issues, with change occurring slowly over time (Condit, 1994). These conflicts generate competition between differing realities, presented by news outlets where balanced reporting conventions contribute to mass media outlets contradictory function to serve elites and oppose established structures (Condit & Selzer, 1985; Gitlin, 1980). Under such discourse models, all contesting groups can articulate their interests, yet because not all groups' agendas are actualized, the researcher's role is to identify "accommodations made and missed toward the goal of facilitating the best possible concord" to highlight how hegemonies function and change (Condit, 1994, p. 210; Ganesh et al, 2005; Gitlin, 1980).

Considering the above theoretical framework, this study posits the following questions:

RQ3: How does the interplay of organizational interests in mass media reporting on ELF activism contribute to dominant and resistive meaning formation?

RQ4: How do these interactions and meanings contribute to hegemonic and resistant processes and formations?

#### *Methods*

This paper examines narrative aspects of inter-organizational hegemony in news stories through a "critique of concord," to examine how varying organizational sectors interact to accommodate or block

one another. Such analysis explores how representations collaborate to promote allied interests or oppose and discredit one another to articulate hegemony (Condit, 1994). Here, the critic looks for thematic interaction, social placement, and motivation of agents articulating perspectives to highlight points of contact between values, structures, and priorities by identifying interacting themes that constitute competing accord or lack thereof (Stone, 1992; Condit, 1994). Using a dialectical lens in this analysis provides insight into how organizations "engage with, resist, accommodate, reproduce, and transform the interpretive possibilities and meaning systems that constitute daily organizational life" (Mumby, 2005, p. 21). More extreme and mutually contradicting positions cancel each other out (Condit, 1994) and represent mutually constitutive actions. Identifying dialectics is useful in finding patterns in interaction and how competing power allows a group to impose its social reality over another (Benson, 1977).

Considering news texts as narratives representing and influence power relations, this study's data consists of 10 years of the most widely circulated print news coverage on this conflict authored and distributed by major news wires, ranging from 1997 when the ELF first became officially active in the United States to 2007 when many activists were convicted (Arisa Media Group). This data set included 166 stories that act as artifacts through which to understand social processes in relation to contextualizing social forces and shifting ideologies (Farrell & Goodnight, 1981; Wraga, 1945; McGee, 1982). Organizational narratives are important tools in creating social reality within an organization (Mumby, 1987), but news stories use of multiple, competing, or aligned sources appear to have much the same function in inter-organizational communication (Gitlin, 1980; Ryan, 1991). Like organizational narratives, news stories can be hegemonic agents (Gitlin, 1980; Mumby, 1987; Condit, 1994)

#### *Interpretation of Results*

Through extending notions of control and resistance as interrelated, this analysis contends these dialectical forces occur both symbolically, as organizations discursively construct themselves, and materially, as they use objects to refute or support symbolic definitions and alliances. Consistent with dialectical conceptions of hegemony, such interactions acted to change both ideological camps, allow for continuation of similar conflicts and highlight dialectical analyses' significance is in keeping symbolic and material dimensions in tension to explore dynamics at their nexus (Ball, 1979). This analysis suggests this case can be understood as (a) organizing and ideological manifestation, with inter-organizational contest involving (b) property and (c) production as sites of contestation, with a larger view of how these dynamics are mutually interdependent and implicating in an examination of (d) altered hegemony.

#### *Organizing as Ideological Manifestation and Change*

At the broadest level, this case study demonstrates the conflict between two long-opposed ideologies: capitalist expansion and deep ecology. Differing in interpretation of the type of value held in natural resources, these opposing viewpoints form the crux of disagreements over treatment of the environment. Capitalist expansion ideology favors using resources for human benefit, primarily economic, while deep ecology, or biocentrism, contends natural areas are valuable in and of themselves and should be maintained in their original form. Represented materially by organized bodies, these ideologies are practiced in continuously evolving discourses promoting causes related to each outlook (Fairhurst & Putnam, 2004; Rosteck, 1999).

How these opposing ideologies are likewise dialectical is the chief aim of this case study. Capitalist expansion is represented foremost by the federal government, and deep ecology represented primarily by the ELF. Capitalist expansion ideology maintains the accumulation of

wealth is the main societal goal and "nature exists to serve humans" (Foster, 2002, p. 9), manifesting symbolically in protection of existing power structures favoring expanding economic cycles to increase profits, and materially in production processes and other physical acts to promote these processes (Galtung, 1988; Pepper, 1996). Conversely, biocentric ideology posits untouched nature is valuable and seeks to protect it from human manipulation and authority, and is practiced symbolically in discourse confronting capitalism, and materially in sustainable, community-focused economic cycles and legal pursuits, as well as "direct action" protest (Pepper, 1991; Galtung, 1988; Foreman, 1991).

This conflict constitutes a control/resistance dialectic, with dialectical hegemony articulated in material/symbolic interaction. Featuring disputes of symbolic significance about material resources and processes occurring in alliances of organizational identities, this conflict also shows how material acts and procedures rebut and strengthen symbolic claims. As each discursive articulation representing an organization adapts and changes, shifting positions realign in larger process of hegemony to tip or reinforce power relationships, with symbolic interpretations and material practices guiding and following these symbolic assertions. As organizational collectives discursively create sites of conflict or points of opposition, the ELF conflict is defined through two sites of struggle including the symbolic conceptions and material practices of property and production.

#### *Property as Site of Contestation*

The socio-political construct of property is a primary site of conflict in this case. Specifically, ELF materially protests property as practiced in capitalist ideology through arson and vandalism, confronting ownership and commodification with symbolic claims promoting egalitarian utopia consistent with its biocentric vision. The government responds through symbolic

characterizations leading to material enforcement to successfully fold ELF's challenge into its hegemony.

*Protesting Property.* Biocentric ideology privileges a view of as nature intrinsically valuable, and thus resists dominant capitalist notions of ownership practiced in property rights and materially enforced through legal punishment. The ELF's egalitarian approaches to property justify property use for collective benefit and clash with these capitalist possessory approaches. ELF presented material protest to symbolic notions of property, which the federal government materially confronted with the repressive state apparatus to force symbolic realignment among ELF activists and supporters.

*Damaging property.* Through material destruction and disregard for property, and accompanying symbolic justifications in written communication, through graffiti, banners, and communiqués to media, ELF materially protests the symbolic conception of property. News descriptions of graffiti at the site of the 2001 University of Washington Center for Urban Horticulture fire show how, in descriptions of physical acts of arson and defacement accompanied by messages describing reasoning for them, the group mocked assumptions that ownership prevents meddling, expressing the concept with language to assert disapproval of intellectual ownership of naturally occurring biological processes ("Fire destroys buildings at tree nursery in Oregon, damage horticulture center in Seattle," 2001).

Similar dynamics are evident in ELF actions regarding housing developments, described in terms of destruction, defacement, and monetary damage. The group's purposeful disregard for property rights is echoed in descriptions of material destruction, mention of houses' value, and describing messages in activists' graffiti (Fowler, 2003). Through such acts and cooptation of property to carry its message, ELF reiterates its position regarding a

symbolic concept through means existing in the material.

*Targeting commodified resources.* The ELF's egalitarian approach to property also shows in actions protesting certain material objects becoming property to provide commodities to continue economic expansion under capitalist ideology. In a failed action at the Nestle bottled water plant, ELF protested privatization of a natural resource, drinking water, explaining its reasoning in a communiqué to media ("Incendiary devices placed at Nestle bottling plant," 2003). Using an egalitarian argument, ELF advocates access to drinking water for all, protesting it as property with exchange value.

*Objecting to ownership.* Also highlighting the violation of property rights inherent in ELF's materials means of protest are the news stories' consistent reference to ELF actions in relation to monetary damage and ownership. Describing the group, news frequently mentions financial totals for ELF destruction: "The FBI calls the Earth Liberation Front the most dangerous domestic terrorist group in America, one the agency claims is responsible for more than 600 attacks since 1996 and more than \$43 million in property damage" (Toner, 2002, ¶ 1). With specific attention to monetary property damage, descriptions are worded to remind readers of material targets' status as private or government property and further emphasizing ELF activities in relation to property and ownership.

Through material action against property, the ELF protested control practiced through property rights. Targeting ownership and commodification, the group directly confronted the conception of property inherent to capitalist expansionist ideology and leveraged material property destruction as a platform to promote symbolic messages about egalitarian approaches to property. Such material resistance was undeniable and consequently elicited a strong response to reinforce capitalist expansionist hegemony.

*Protecting Property.* In governmental reactions asserting control over ELF resistance, the progression of elements occurred in reverse, with symbolic notions used to enforce material concepts. With representations and references to ELF as criminal, detractors emphasized the symbolic importance of ownership and property rights prior to material enforcement of such notions. News coverage of activists' court proceedings features arguments where ELF detractors and federal prosecutors stress the symbolic conception of property rights as a means to justify material penalties for activists ("Radical environmentalist sentenced to prison in US for vandalism," 2004). Additionally, through mention of increased security and legal strategy to prevent future ELF actions, reactions to ELF protests against property feature material actions supporting and enforcing a symbolic concept.

*Imposing symbolic realignment.* This material domination creates a symbolic restructuring among the object of hegemony, seen in the government enforcement of property rights through legal penalties, intimidating ELF activists and organizations into abandon the movement. In coverage of ELF activists' arrests and trials, many realign with dominant capitalist expansionist ideology by pleading guilty, cooperating with authorities to name accomplices, and even denouncing the ELF. Several stories feature descriptions of multiple activists pleading guilty and being sentenced, showcasing the extent of such domination (ex.: Barnard, 2007). Descriptions of plea deals function similarly, with activists admitting fault and cooperating with opposition to consent to enforcement of capitalist expansionism's hegemony and its behavioral codes regarding property possession. Such consent is also evident in accounts of activists' apologies referencing their previous disregard for property rights:

'I was ignorance of history and economy and acted from a faulty and narrow vision as an ordinary bigot,' said

Meyerhoff, his voice breaking at times. 'a million times over I apologize ... to all of you hardworking business owners, employees, researchers, firemen, investigators, attorney and all citizens who se property was destroyed, whose holidays were ruined, whose welfare was thwarted, and whose sleep was troubled' (Barnard, 2007, ¶ 9; McCall, 2007a, ¶ 5).

As the repressive state apparatus imposed material ramifications for those resisting the capitalist hegemony, it also imposed symbolic realignment, allowing the hegemony to absorb resistors, which one story covered as "the end" of the radical environmental movement (McCall, 2007a, ¶ 6-7). With attention to this symbolic realignment inflicted materially, news emphasizes capitalist expansionist domination, but incorrectly claimed the hegemony sutured against further resistance.

*Defying symbolic realignment.* News coverage also highlights activists who refused to ideologically realign themselves, pushing back against symbolic claims and material force to maintain their symbolic integrity despite being disabled from further material action. From activists' refusal to appear in front of a grand jury to another's invocation of the Fifth Amendment in front of House Resources Subcommittee on Forests and Forests Health (Soto, 2005), resistance to the government's material enforcement of the symbolic notion of property rights is also highlighted in news media. News coverage of individuals not allowing themselves to be absorbed into the capitalist expansionist hegemony allows residual form of their ideology to symbolically continue and potentially be materially practiced again.

This symbolic resistance of material enforcement is most evident in reporting on charged individuals refusal cooperate in the

legal process. This includes coverage of activists rejecting plea deals (Thompson, 2006) and the prison suicide of an alleged ELF cell leader prior to legal proceedings (McCall, 2007). While these individuals were effectively stopped from further material action, their symbolic allegiance provides a fissure where their ideology lives on to be picked up by future activists, allowing the dialectical formation of hegemony to persist.

#### *Production as Contested Terrain*

Another major site of protest in this conflict is the economic production process at the heart of capitalist expansionist ideology. Reports of the ELF's repeated acts of economic sabotage and other organizations declaring various levels of support, combined to materially present an expanding resistance to contemporary economic means and lifestyles. In response, government officials symbolically characterized this threat as "terrorism," assisting material enforcement of legal penalties and forcing many ELF activists and associating groups to symbolically realign themselves to support capitalist expansionist hegemony.

*Protesting Production.* The ELF's biocentric ideology dictates an egalitarian approach to natural resources, resisting capitalist expansionist practices of using them for exchange value as consumable goods (Pepper, 1996). Materially destroying means of production and symbols of what it believed to be egregious consumption, the ELF's material protest drove its symbolic claims. Labeling the ELF with symbolically charged terms and consequently intimidating potential allies, the federal government's reaction used symbolic assertions to manifest material repression.

With news representations of ELF's accruing actions and alliances with similarly focused organizations, the group's ideological challenge becomes significant. The material element embodied in ELF's protest activity and organizational alliances to promote the group's symbolic claims

about biocentric protection of natural resources. Governmental reaction targeted these claims to characterize ELF's mounting economic threat as symbolically constituting "terrorism," and using material means to diffuse it.

*Accumulating material events.* News coverage of ELF allowed the group to make claims about the significance of its activities and consistently mentioned the group in the context of its previous actions' destruction value, acting to highlight the threat posed to production and present the ELF as formidable resistance. Through reprinting sections from ELF communiqués to media outlets and quoting spokespersons, news coverage provided the ELF an opportunity to describe its position (ex.: Bernton, 2001). In specific cases (ex.: "ATF: Vail fires arson," 1998), reprinted communiqué passages give rationale for actions, and ELF activists expresses disdain for capitalist ideology's prioritizing economic production above healthy native ecosystems.

*Articulating symbolic significance.* In such passages, the ELF is consistently linked to its ideology and given opportunity to describe its reasoning. News stories featured repetitious mentions of ELF acts against symbols of capitalist expansion ideology's ideals and values, consistently aligning the group's material acts with its symbolic claims. The ski resort action sent a message about affluent consumers' disregard for endangered habitat, while destruction of Bureau of Land Management horse corrals protested attempts to eradicate and tame wild animals, and multiple arsons of sports utility vehicles targeted excessive consumption and normalized pollution; these actions are consistently mentioned in news stories to introduce and position ELF, such as passages like the following, which appeared in various forms in numerous stories:

The FBI has said ELF and its companion the Animal Liberation Front, have caused \$43 million in



damage and more than 600 attacks, ranging from spray-painting building and breaking windows to firebombing fur farms and research centers. The most destructive was a \$12 million blaze that destroyed a Vail, Colo., ski resort in 1998” (McCall, 2002, ¶ 6).

These mentions provide a source of power for the ELF, as it cannot be ignored or argued away by proponents of capitalist expansion due to its undeniable material existence. News stories also consistently mention these acts in the context of their monetary damage, giving credence to ELF’s presence and enabling its transformative resistance by highlighting economic disruption of its acts, again contributing to the ELF’s ability to not be ignored or rationalized away.

*Strengthening through alliances.* ELF activities further presented a substantial resistance effort to production processes as media representations aligned other groups and individuals with ELF, allowing material organizing to support a symbolic concept. Through reaction to material events in ELF’s favor, aligning groups supported biocentric ideology, revealing substantial dissent to current modes of production.

The most prominent of these alliances was with the Animal Liberation Front (ALF), which jointly took credit on several actions and even shared a spokesman with the ELF. In the first few years of news data, many other allegiances developed, as mention of other groups, large and small and past and present, that had committed acts of sabotage to preserve environmental and animal rights interests, often on specific issues encompassed within those confronted by the ELF, appeared as background in ELF news stories. Among many others, groups like Earth First!, the Strawberry Liberation Front, the Evan Mecho Eco-Terrorism Conspiracy,

the Seeds of Resistance, Anarchists Golfing Association, and People for the Ethical Treatment of Animals were all named in conjunction with biocentric viewpoints or previous actions, functioning to present the ELF as not alone in its means and objectives.

Despite internal dissention among groups on finer points highlighted in later stories, inclusion of these numerous groups in news coverage presented a unified front of resistance; however, governmental response to ELF acts, through symbolic categorization and material enforcement, worked to disperse such concord and its threat.

*Protecting Production.* The control portion of the dialectic in production process discourses comes from capitalist expansion ideology’s defense of using resources for production. In contrast to ELF resistance, which used material to drive symbolic, governmental control used symbolic claims to manifest material consequences. Defining ELF’s threat to production as a larger threat to social norms and values embodied in capitalist expansion ideology, this camp used symbolic claims to define the ELF’s material acts and enforce material consequences for activists. To confront the ELF’s material threat to symbols of capitalism, the government invoked the symbolic, ideographic term “terrorism” and materially enforced it through the legal system, shown in coverage of activist convictions under terrorism laws. In representing the production process as individual business owners, characterizing groups threatening it as “terrorist,” and carrying through with material enforcement, the government forced symbolic realignment among many ELF activists and supporting groups to weaken ideological challenges from deep ecology camps and rearticulate capitalist expansionist hegemony.

*Personalizing the production process.* Consistent mention of monetary damage also reinforces a capitalist focus on the importance of profits by quantifying

property damage and suggesting potential revenue lost, underpinning the production process's importance to contemporary society. Showing ELF acts threatening individuals ability to maintain lifestyles provided by an expanding capitalist economy, news coverage presents ELF's confrontation of production as deeply threatening to the entire economic cycle.

Through associating ELF with lost income and economic stability on a personal, regional and even global level, coverage of this discourse also allowed for the federal government's symbolic claims about the significance of ELF's acts. Micro-level disruption is illustrated in news highlighting personal experiences of owners of property destroyed by ELF activists (ex.: Meyer, 2005) or representations of lifestyle sacrifices, as in this quote from a ski shop owner after the Vail mountain resort arson: "I invested a lot of money in gear for the World Championships and if no one shows up I guess I bought a loss leader. I may not be able to buy as many Christmas presents for my kids this year," said Steve Sheridan, owner of Performance Sports." (Weller, 1998a, ¶ 5; Weller, 1998b, ¶ 11). On a larger, macro-economic scale, news coverage also highlights this disruption with quotes from residents of towns where ELF actions occurred blaming protest activity for economic instability (Weller, 1998c), and reports that ELF's actions against genetic modification research institutions had made "[r]esearchers worry that crop sabotage and the growing international campaign against genetically modified organism could derail their experimentation, setting back world food production and increasing the cost of groceries" (Denson, 2000, ¶ 3).

*Labeling sabotage as terrorism.* By associating this economic threat from ELF as "terrorism," the federal government invoked a symbolical concept that drew support from other groups with similar ideologies, creating the representation of a majority opinion to constitute hegemony. Some authority figures link the ELF to other well-known terrorist groups to boost the

claim's credibility (ex.: Heilprin, 2005). Such an association makes the term more widely accessible to the general public, encouraging its use by other parties with capitalist expansionist interests. Use of this term allied authority figures, such as FBI agents and other law enforcement, as their jurisdictions crossed, given the designation (ex.: Dishneau, 2005). The term's accessibility allowed business owners and developers to join, creating an amalgam of organizations with an interest in maintaining a capitalist expansionist economy aligned against the ELF.

With this label, capitalist expansionist ideology presented a symbolic construction defining material acts to later manifest in material convictions, as more authority figures presented agreement on it. Such alignment of this construction was clenched in convictions of activists as terrorists and their recounting, such as in this quote where a judge addresses an activist during sentencing: "It was your intent to scare and frighten other people through a very dangerous and psychological act arson ... Your actions included elements of terrorism to achieve your goal" (Barnard, 2007, ¶ 5). Stories also presented such consensus among authorities and convictions of activists as curtailing action by the ELF and similar groups to further strengthen the potency of the designation (Denson, 2007).

*Restructuring symbolic alliances.* The force of such alignment is evident in restructuring among the alliance of groups representing biocentric ideologies coalesced around ELF, as they became altered by capitalist expansionist ideology's hegemony. The symbolic claims implied by use of this term are accompanied by material consequences, which exert force on ELF activists and supporters, and like the ELF's acts, cannot be symbolically argued away or redefined. News stories mention resignations of several ELF spokespersons, including one who specifically refers to the terrorist categorization as his reason (Cohen, 2003).

Similarly, individual activists also begin to drop support of ELF under pressure of this label its material consequences, as evidenced in quotes where activists recognize label is devastating to reputations in the current political context (ex.: McCall, 2007a).

Similarly, this categorization also intimidated other groups from furthering associations with ELF. Several stories chronicle People for the Ethical Treatment of Animals' (PETA) involvement with ELF, evidenced in tax records showing a donation to the group (Bridis, 2005), but later stories highlighted PETA's discontinued contributions to ELF (Gersema, 2003).

*Resisting the terrorism construction.* But, as in the previous discourse, resistance to this symbolic construction with material consequences leaves a place for radical biocentric activism to continue. Many news stories from 2001-2002 mention how September 11, 2001, created a social environment intolerant of terrorism. However, several news stories carried passages in which ELF activists and allies reaffirmed ideological commitments despite heightened adversarial opinions (Toner, 2002). Through such claims, activists resist the symbolic construction and material consequences posed by the government and continue material activism to promote a symbolic concept.

Also resistance to the federal government's symbolic-turned-material enforcement of capitalist expansion hegemony appears ELF activists' attorneys' success in arguing against terrorism convictions on certain charges. Stories describe an Oregon judge's decision that the Vail arson was not terrorism, setting a precedent that could allow for lesser sentences of similar crimes in the future (Barnard, 2007b). Reports of a larger ELF crime being determined to not fit the federal government's designation for it leaves a hole in the capitalist expansion hegemony, preventing completely suture against future resistance from deep ecology ideology

residual forms to further perpetuate a control/resistance dialectic between deep ecology and capitalist expansion ideologies.

### *Analysis of Dialectical Hegemony*

In dialectical conceptions of hegemony (Mumby, 2005), opposing forces depend on one another for existence and evolution; this theoretically enticing point calls scholars to complicate analyses of control and resistance forces. This dialectical view is insightful in this case because both organizations changed to accommodate opposition and strengthen themselves against it, acting to ease and continue the struggle, as evident in news media reporting of the conflict.

Overlapping discourses of property and production served as points where the ELF's emergent forms penetrated dominant capitalist expansionist ideology's hegemony. Through material disregard and destruction of property, and disrupting the production process, ELF activity called attention to biocentrism's disapproval of ownership, commodification, and prioritization of profits. However, these challenges allowed the hegemony to change itself to fend off the threat and incorporate it into capitalist practices.

In dispersing the ELF threat, the capitalist expansionist hegemony renewed and developed themes of nationalism and terrorism into discourses of property and production. Using ELF resistance as an opportunity to symbolically revamp and materially enforce capitalist protections of these ideological tenets and practices allowed the hegemony to strengthen itself by forcibly absorbing a segment of the emergent form posed by ELF. Associating property rights and economic stability with lifestyle and patriotism by labeling threats to them as terrorism proved effective in times of heightened awareness about global terrorism. Characterizations of ELF as "terrorist" imposed symbolic ideological realignment among many ELF activists and

groups supporting it, effectively incorporating them into the dominant form.

However, space for future resistance and continuation of the control/resistance dialectic in this conflict also shows pieces of resistance refusing to be incorporated into the dominant ideology. Representing a new form incorporating bits of a residual form at odds with capitalist ideologies for centuries, ELF resistance was not completely squelched by the government's arguments and practices. As activists refused to accept the "terrorist" designation, resisted legal cooperation, and the hegemony faltered to enforce in one case, the process of hegemony between these two ideological camps was allowed to continue.

*Altering hegemony.* Dialectical approaches to hegemony also highlight resistance efforts' transformative potential, as existing hegemonies must ideologically compromise to focus on threats from a specific resistance effort. As unincorporated residual forms evolve into new, emergent forms, they mix with the dominant form, requiring it to rearticulate itself (Williams, 1980). Through integrating aspects of deep ecology into the hegemony, ELF increased the social acceptance of other types of environmental activism. Diffusion of ELF changed the dominant form by creating opportunities through which other environmentalists became aligned with the capitalist hegemony, altering it to incorporate elements of biocentrism. As other environmental groups commented unfavorably on ELF actions and reports showed their differing tactics, other types of environmental activism became aligned with the dominant ideology. This broader concept is illustrated in stories discussing other groups sharing the ELF's stance on genetic engineering using tactics that don't threaten capitalism (Toner, 2002). A story about dismissed charges against activists using other means to protest the Vail resort expansion (Weller, 2000) illustrated how similarly aimed activity did not invoke the repressive state apparatus and showed

capitalist expansionist ideology's growing tolerance to non-violent protest.

#### *Discussion*

In this analysis, a material/symbolic dialectic functions to create a space where hegemony shifts to accommodate and continue dialectical relationships of control and resistance. Using an inter-organizational approach encompassing social movements and viewing them in a greater social totality (Ganesh et al, 2005; Cheney & Christensen, 2001), this study shows transformational emergent forms potential and dominant forms ability to diffuse and absorb them (Williams, 1980; Gitlin, 1980). With material resistance acting to symbolically contest widely accepted ideological perspectives and practices, the control portion was based in the symbolic and used material means to reinforce the social constructions to maintain its place. Such analysis demonstrates the material foundation of discourse (Norton, in press), and the value of investigating the dynamics of a dialectic through viewing symbolic and material elements in constant state of tension (Ball, 1979; Cheney & Cloud, 2006).

*RQ3: How does the interplay of organizational interests in mass media reporting on ELF activism contribute to dominant and resistive meaning formation?*

News stories consistently presented ELF in alignment with its own material actions and symbolically with other materially organized groups to build a resistive articulation. In this formation, material and symbolic elements worked together to advantage the ELF's defiant construction of reality in favor of deep ecology ideology.

The ELF's presented identity, as associated with material actions of economic sabotage, challenged dominant capitalist reality of property rights and of prioritization of production process. These protests against the socio-political concept of property and economic production confronted ownership and commodification, to challenge the taken-for-granted status of

these principles. This affiliation between the group and the actions for which it claimed responsibility acted to form resistive meanings in favor of biocentric perspectives.

Other groups' lending their names to ELF gives credibility to these resistant meanings, acting to support their biocentric viewpoints. Reports of the Animal Liberation Front's multiple claims of joint action with the ELF, mentions of other groups participating in similar material protests and providing other types of support to ELF in news coverage created the appearance of a unified movement, giving further credence to this interpretation of reality and its associated meanings. Such resistant meaning-making continued with reports of activists refusing to plead guilty or altogether evading the legal process.

The federal government's aligning with various entities within it and business owners to promote capitalist ideological meanings, characterized ELF's viewpoints as wrong, and supporting the dominant meaning formations linked to capitalist expansion ideology. This is most evident in these aligning groups' use of the term "terrorism," to describe ELF as a threat to property rights and contemporary modes of economic production. Furthermore, ELF activists conceding to law enforcement through plea deals and condemning their own actions partially realigned the group with the capitalist expansionist ideological camp to further contribute to capitalist definitions of ELF and its activity as unacceptable and unwarranted.

*RQ4: How do these interactions and meanings contribute to hegemonic and resistant processes and formations?*

This analysis shows a dialectical relationship of symbolic and material action in which material resistance efforts drive symbolic claims with hegemonic domination occurring first in the symbolic realm and extending to the material. ELF and its commitment to deep ecology functions materially because it does not have

authority to utilize the ideological power of the superstructure. Through material protest actions, the group positioned itself in a way that its ideological claims could not be denied; other similar deep ecology-aligned groups' partnerships, support, and loose associations with ELF further aided the group's resistance by providing material organizing in support of symbolic constructions regarding the role of capitalist tenets of property rights and economic production cycles. In response, the federal government used its influence over the symbolic realm before turning to material enforcement of its version of reality. With multiple federal entities and business owners aligning to denounce ELF as criminal and "terrorist," a symbolic domination preceded the material domination of the group through legal prosecution under terrorism laws.

The dialectical nature of hegemony in this conflict is also evident in gaps allowing for future resistance, which demonstrates the mutually constituted dynamics of the relationship between these two ideologies. Because of ELF's resistance to capitalist norms, the federal government strengthened itself against such challenges, rearticulating expansionist ideology to allow for its continued domination. This reinforcement of capitalist ideals occurred through emphasis on property rights and production processes, the "terrorism" label, convictions of ELF activists and what appears to be a greater tolerance for other means of environmental protest. However, this domination also created instances of greater resistance, with some activists refusing to consent to domination by the repressive state apparatus, leaving a thread of ELF intact to potentially be picked up by future activists. ELF activity in upscale Seattle housing developments occurring during the completion of this study illustrates this form's continued resistance (Gillespie, 2008), corroborating observations about gaps in the hegemony in this conflict.

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**Toward a more Complete Understanding of  
Sustainable Rural Community Development:  
Appreciating Systems and Interactional Theories**

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**Abstract**

*In this article, I present a holistic approach to conceptualizing sustainable rural community development. Sustainability is a value-laden concept often contested among existing political and social structures. These structures are associated with power dynamics and uneven access to resources. The ability of rural communities to achieve sustainability depends largely on their ability to solve local problems despite structural inequities. The community field, as conceptualized through the interactional approach to community, is a mechanism through which local problems are addressed. Conceptualizing the community field as a problem solving mechanism introduces questions concerning the efficiency of rural communities in solving problems and achieving sustainability. I introduce complexity theory to address this question and extend the current understanding of how social structure affects a community's capacity to act. Specifically, I contend the potential for rural communities to achieving sustainability is directly related to the complexity of their social structure. By weaving the interactional approach with complexity theory, a more complete body of knowledge regarding rural community sustainability can emerge.*

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**Introduction**

A large body of scientific evidence concerning the environmental impacts of economic growth and human resource consumption emerged at the latter half of the twentieth century (IPCC, 2007). Coupled with this growing body of evidence has been a trend in individuals' general perceptions toward the environment (Dunlap, 1991). Today, more than at anytime in history, individuals are aware of the repercussions of their personal patterns of behavior and consumption. This shift in general awareness is evident in current political agendas, mass-media campaigns, environmental activism movements, and efforts to build cities and communities that are ecologically oriented.

An increase in general levels of environmental awareness has spawned a more progressive and forward-thinking approach to many rural communities. Many planning strategies now focus not solely on maximizing capital gains and the tax base;

looking rather for ways to couple economic growth with ecological sustainability and social well-being (Flora, 1994; Kemmis, 1990; Rees & Roseland, 1991; Van der Ryn & Calthorpe, 1986; Wallner, Narodoslawsky, & Moser, 1986).

This shifting paradigm of community development is intended to have repercussions for rural social life, ecosystem processes, and local economies. The shifting paradigms of rural community development need updated theoretical foundations if the processes of rural social, economic, and ecological change are to be understood holistically. Given this, the purpose of this article is to make a theoretical contribution to understanding the social well-being, economic growth, and ecological health of rural communities. This contribution is made by first, introducing a value-centered definition of sustainability into the rural community literature; and secondly, by introducing complexity theory

into current approaches of understanding local problem solving.

Sustainability

#### *Operational Definitions*

As mentioned in the introduction, a relatively new body of scientific knowledge linking human actions to environmental consequences spurred national and local policy makers to focus on sustainability. More specifically, general concerns about sustainability are often traced to the publication of the Brundtland Report in 1987 (World Commission on Environment and Development, 1987). The Brundtland Report presented what has now become perhaps the most widely used definition of sustainability; it states “sustainable development is development that meets the needs of the present without compromising the ability of the future generations to meet their own needs” (1987, p. 43). This definition is vague, which has led to considerable debate as well as an obvious weakening of its rhetorical meaning (Korten, 1992; Lele, 1991; Pearce, Atkinson, & Dubourg, 1994). Contention has always surrounded the definition of sustainability, it has also surrounded the ways in which sustainable development projects are conceptualized and implemented.

Any attempt to understand how communities develop, and more importantly how they become sustainable, must acknowledge the operational definition of sustainability that is being employed. In this article, I acknowledge two pivotal components of sustainability. First, sustainability is not a universal state achieved by the symbiotic balance of human and ecological processes. Rather, sustainability is a socially defined construct and not a product of the biophysical world. We must accept that individuals, groups, and communities sustain what they value, which for most of these entities is an accustomed way of life, opportunities to improve their situation, or environmental conditions that match an idealized concept of nature (Tainter, 2003). In short, “ecosystems cannot care in which

configuration they exist, and for any ecosystem many configurations are sustainable” (Allen, Tainter, & Hoekstra, 2003, pp. 23, 322). What is sustained rather, are the ecological configurations that we value the most. The sustainability of rural communities therefore is defined by relative, variable, mutable, and transient values systems rather than ecological or economic determinants (Allen et al., 2003; Tainter, 2001). To engage rural community sustainability as a sociological endeavor, this realization is crucial.

The second pivotal component of sustainability stems from the first. Given sustainability is a socially defined construct, efforts to achieve it will affect different individuals in divergent ways. Efforts to achieve sustainability operate from existing political and social structures that are laden with power dynamics and the unequal distribution of resources. Sustainability efforts inevitably produce winners and losers, inviting conflict and continued debate (Tainter, 2003). Given the above properties of sustainability, it is defined here as “maintaining, or fostering the development of the systemic contexts that produce the goods, services, and amenities that people need or value, at an acceptable cost, for as long as they are needed or valued” (Allen et al., 2003, p. 26; Tainter, 2001, p. 352).

This definition is inherently useful to community scholars on two counts. First, by placing the focus on social values rather than biophysical outcomes it recognizes the group or community as the social unit that informs what is to be sustained. Second, it allows for social, economic, and political networks to be seen as operational mechanisms through which decisions are made. This approach runs counter to defining sustainability as an ecological and economic maxim. Under that framework, social, economic, and political forces are seen as independent variables that sway the balance of sustainability in one direction or the other. Through this definition, the social is realized as the author of sustainability – thus creating a more

accurate representation of the relationship between humans and their environments.

This values-oriented definition of sustainability highlights the concept's inherent contradiction. Efforts that are often seen as promoting sustainability because they aim to increase social, economic, and ecological well-being, inherently produce social conflict and debate because they put at odds conflicting individual, group, organizational, and state value systems (Tainter, 2003). I now turn from operational definitions of sustainability to the sustainability efforts at the local level.

#### *Sustainability and Community*

Efforts to achieve sustainability at the local level have paralleled the emergence of global sustainability efforts over the past three decades. Local efforts differ from global approaches on four counts. First, they can produce more immediate environmental and social changes. Second, they do not require multiple levels of abstraction to understand. Third, they are less reliant upon federal governments and international non-governmental organizations that may not be trusted. Finally, they are relatively more sensitive to local environmental problems, human and natural resource availability, differing levels of economic and social development and existing physical and climatic conditions (Bridger, 1994; Bridger & Luloff, 1999; Luloff & Swanson, 1995; Wilkinson, 1991). Given these differences, sustainable development at the local level may be the most effective means of demonstrating that sustainability can be achieved on a broader scale (Bridger & Luloff, 1999; Yanarella & Levine, 1992).

As sustainability is a value-laden concept, locality based efforts to achieve it have been fraught with conflict. Sustainability, as a concept, largely emerged at a global level of political discourse marked primarily by the aforementioned Brundtland Report, the subsequent Earth Summit in Rio de Janeiro, and programs initiated primarily for the purpose of enabling global sustainable

development. Programs under the "sustainable development" moniker were soon created within the World Bank, the United Nations Development Program, the US Agency for International Development, and the US President's Council on Sustainable Development.

The global level of political sustainability discourse however functions through existing power structures and political hierarchies. Much of the globalization literature has shown how this process undermines local autonomy to affect social or economic change at the community level (e.g., McCarthy, 2008; Yanarella & Levine, 1992). Global sustainability efforts therefore may actually marginalize rural communities in many cases. The community should have a fair amount of autonomy in determining social and economic change if the sustainability of rural communities is defined by the social values of these communities' residents. However, the process of globalization and the increasingly complex networks of production and consumption have increased local communities' reliance on extra-local institutions and sources of income and employment (Berry, 1993; Sachs, 1995; Warren, 1972). Globalization has also been criticized for decreasing the importance of the community as a social unit (Bridger & Luloff, 1999; Cuba & Hummon, 1993; Meyrowitz, 1986; Putnam, 2000; Reitzes & Reitzes, 1992; Stein, 1960).

Along with the external forces of globalization, the literature on community development and sustainability suggests attempts to achieve community sustainability are often affected by internal forces such as conflict, politics, and power dynamics. Previous studies have shown that leadership in community development efforts tends to be dominated by economic elites (Logan & Molotch, 1987; Molotch, 1976).

Given both external and internal issues, how is the sustainability to rural communities best understood? What theories can be employed to understand

disparate value-systems and the dynamic and interdependent nature of economic, ecological, and social systems? In the following section I introduce the interactional approach as a theoretically valid and empirically tested method for explaining rural community development. I then add to this body of literature by introducing complexity theory. The goal of interweaving these theories is to provide a more holistic approach to conceptualizing the social well-being, economic growth, and ecological health of rural communities and their territories.

#### **Theoretical Frameworks**

##### ***Interactional Approach***

Interactional theory, which is deeply rooted in rural sociology and community studies (Kaufman, 1959), views community as a natural and ubiquitous phenomenon among people who share a common territory and interact with one another on place-relevant matters (Wilkinson, 1991). The word natural implies social organization is grounded in “social relationships with others on a continuing basis” which allows individuals to form their social being and identity (Wilkinson, 1991, p. 16). This runs counter to many social or human ecological perspectives which view social organization and action as outcomes of larger structural or underlying biotic processes (e.g. Hawley, 1950). Community is also defined within interactional theory as ubiquitous in that “people engage in it almost all of the time, whether or not they recognize the fact” (Wilkinson, 1991, p. 16). In summation, community from the interactional perspective, is defined and measured by the extent of relationships and interactions among individuals within a common geographic space.

Interactional theories of community expounded on their philosophical groundings by introducing the concepts of social and community fields. Social fields are defined as emergent structures of social action (Wilkinson, 1991). Relatively distinct social fields are typically comprised of groups of actors that pursue similar place-

relevant interests. For example, most communities contain social fields comprised of actors engaged in distinct issues such as transportation, land use, or water quality (Figure 1). These interests serve as the nuclei around which social fields operate. Individuals within these social fields tend to develop similar perspectives and definitions of community development issues (Bridger & Luloff, 1999). Social fields tend to become entrenched in the particular interest around which they are focused, creating a barrier to interaction across social fields. Individual social fields therefore undermine the focus of sustainable development to be integrative of a diverse array of competing interests. Collective solutions to local problems and the search for sustainability require the particular positions of social fields to be transcended by mechanisms and individuals that operate across disparate interests.

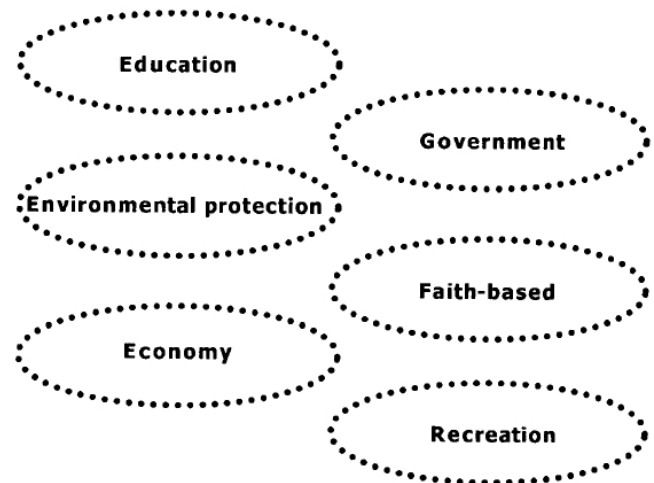


Figure 1. Common social fields within a community (Theodori, 2005).

The interactional theory of community proposes the “community field” as a mechanism that fulfills this need. The community field operates similar to social fields in that it is comprised of individuals and institutions surrounding a defined interest. Where the community field differs from social fields however is that the interest around which it is centered is not specialized or instrumental, but rather

general and intrinsic (Wilkinson, 1991). The community field cuts across disparate interests, “abstracting and combining the locally-relevant aspects of the special interest fields”, integrating them into a generalized whole (1991, p. 31) (Figure 2). The community field should not be seen as a panacea to local disputes; rather it focuses common interest in local life (Bridger & Luloff, 1999).

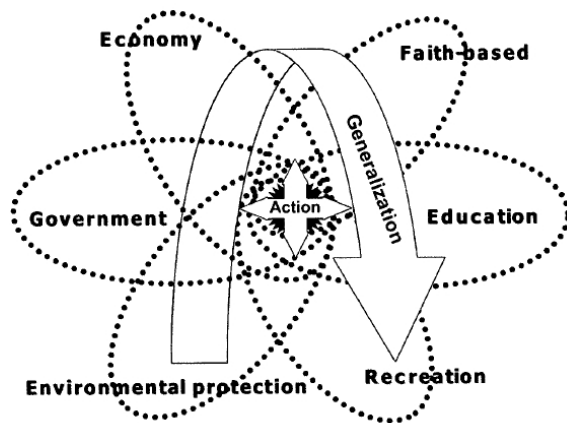


Figure 2. The community field (Theodori, 2005).

Action to build the community field can either be purposeful or defined by external events. Purposeful community field building actions may involve the conscious attempt to create linkages among actions and actors in different social fields (Bridger & Luloff, 1999). The linkages created among social fields are believed to create trust and mutual understanding, enabling future local actions to be less susceptible to conflict. The community field may also be built through reactions to sudden or external influences on a locale. Both of these approaches to building the community field have implications for sustainable community development.

Given interactional theory's historical roots in rural development efforts (Kaufman, 1959) and its contextual focus on community, it is not a difficult stretch to apply it to gaining insight into current efforts at achieving sustainable development. By distinguishing social fields according to the

interests they pursue attempting to understand the connections among these social fields, we gain two distinct insights for understanding sustainable rural community development efforts. First, the political contexts that define these social fields are better understood. An understanding of political context can provide insight into the processes and actions that define the current state of the community. An understanding of political context enables an understanding of the existing polity along which networks of interaction and the decision-making processes operate. Secondly, the existing values and perspectives of relatively distinct social fields are better understood. Understanding where social fields' values toward local development differ (possibly irreconcilably) and where they converge and overlap enables community development scholars to better understand the existing value structures present within localities. This enables a more comprehensive understanding of why, where, and how efforts to promote sustainable rural community development fail, stall, or succeed.

In sum, the basic theoretical argument being made through the interactional approach is that a community's social structure is related to the capacity for community action (Sharp, 2001). The community field can be seen as a problem solving mechanism that operates to serve not the specific interests of any one social field but rather more general interests across fields. The ability of communities to successfully address problems has become increasingly complex over the past several decades as discussed above. Rural communities now have more problems (ecological, economic, and social) than ever which must be addressed. An increase in the amount and diversity of problems as well as the general paradigm shift toward a concern for sustainability requires a theoretical approach that addresses the historical tendencies of how communities attempt to solve local problems. Complexity

theory aids in meeting this need. In the following section, complexity theory is applied to the interactional approach to produce a more integrated theoretical approach to understanding how and why some rural communities are able to achieve sustainability.

#### *Complexity Theory*

Complexity is referred to here as the process of increased differentiation and organization in social systems (Allen et al., 2003). It is not an inclusive theoretical model, but rather a loose collection of ideas surrounding the nature of systemic changes (Thrift, 1999; Walby, 2007). These ideas have been developed within both the natural and social sciences (e.g., Capra, 1997; Waldrop, 1992). Complexity theory within the social sciences posits social complexity is a basic human problem-solving tool (Allen et al., 2003). Simply put, if confronted with difficulty, individuals, groups, communities, and societies tend to respond by developing structural heterogeneity, increasing organization, or developing new elements of organization such as status or bureaucratic positions. Creating structural heterogeneity and increasing organization make our lives easier and more predictable. Most of the time complexity leads to increased efficiency.

This principle can be seen in the development of rural communities as they deal with shifting demographic, ecological, and economic situations. Governance by egalitarian organization, economic reciprocity, ad hoc leadership, and generalized social roles are reduced as specialized roles, economic inequality, and differentiated full-time leadership is increased. "This is the essence of social complexity" (Allen et al., 2003, p. 66).

Increases in social complexity do not always lead to more effective problem solving however. Increased complexity comes at a cost. "Every element of increasing complexity has an energy cost, which is the cost to create, maintain, and replace the parts of the social system, to support specialists, to regulate behavior,

and to produce and control information" (Allen et al., 2003, pp. 62-63). Increases in complexity come at a cost to rural communities, these costs are only beneficial to those communities in their efforts to solve problems and achieve sustainability if a significant return on those costs is achieved (Figure 3).

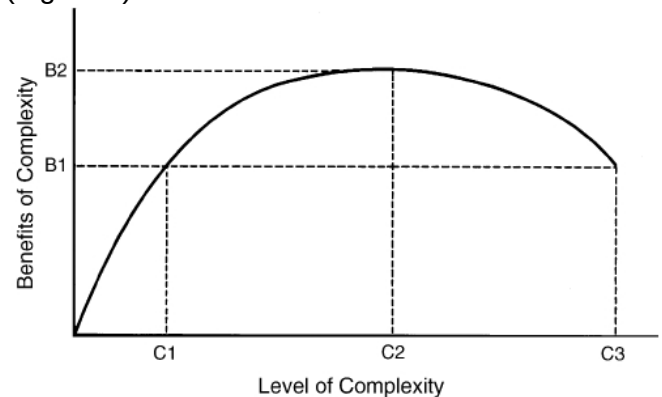


Figure 3. The marginal productivity of increased complexity. At a point such as B1, C3, the costs of complexity exceed the benefits, and complexity is a disadvantageous approach to problem solving (Tainter, 1988, 2006).

Rural communities' current level of development can be placed somewhere on the complexity cost-benefit curve depending upon the extent to which local social and economic infrastructure has progressed. Rural communities initially solve problems by increasing complexity, either by increasing the production of resources or information (see Allen et al., 2003; Tainter, 1988). Initially this is hugely beneficial as the benefit-cost ratio is high. Over time however, the least costly resources and organizational solutions are progressively exhausted, leading to future solutions that come at high costs and yield only minimal benefits. This proposition does not run counter to previous empirical research on relationship between community structure and the ability to solve problems; rather it adds to it a new dimension. For example, Turk found the inexistence of diverse regulating and coordinating organizations, consensual solidarity among organizations, and greater internal linkages within

organizations (all increases in complexity) improved communities' ability to access external resources and address local problems (1973, 1977). Complexity theory suggests the communities Turk studied are benefiting from low-cost increases in complexity.

To fully illustrate the concept of complexity and how it relates to sustainable rural community development, I present the case of several rural communities in southeast Alaska. This case shows how the complexity of social structures in rural communities leads to diminished problem solving capabilities and procedural gridlock. The Case of Subsistence Hunting and Fishing in Southeast Alaska

The Tlingit Indians are one of the larger indigenous Native groups in Alaska (Boyd, 1990; Driver, 1969). In 1990, the Tlingit population was estimated at 18,222 (Central Council of Tlingit and Haida Indian Tribes of Alaska, 1990). The social structure of the Tlingit is comprised of politically independent, matrilineal, avunculocal clans or clan segments called house groups who control access to fish, game, and other wild resources owned by the clan (Betts & Wolfe, 1992). Within the culture of Tlingit Indians, hunting, fishing, and gathering traditional foods are important practices for sustaining cultural identity. Surplus food is usually hunted and produced for reciprocal trade relations and ceremonial potlatch cycles (Oberg, 1973). Hunting, fishing, and gathering is also used to socialize children and for ceremonial purposes (Tainter, 1997).

The Sitka black-tailed deer is a primary game animal for the Tlingit communities; it has a significant amount of both economic and cultural value. These deer in Southeast Alaska forage and shelter in high-density, old-growth forests with are found at lower elevations. Unfortunately for the deer and the Tlingit Indians, the high-density, old-growth forests are the most economically viable for harvestable timber. The forest therefore has become a site of conflict between the Tlingit Indians, who

wish to preserve their cultural traditions, and the timber industry, which wishes to use the forest as viable revenue stream.

Confronted with this difficulty, local communities did what most rural communities tend to do; they attempted to solve the problem by increasing complexity. Increased levels of organization were created in attempts deal with the problem. Governance over the resource was shifted from a method of economic reciprocity between clans to one controlled by bureaucratic mechanisms. Specifically, generalized social roles between the Tlingit Indians and the government broke down as federal agencies responsible for managing the forest increased the amount of resources and personnel dedicated to resolving addressing the problem. Prior to the conflict, "a Tlingit wishing to hunt or fish could do so at will, or with the consent of the elders in another clan's territory" (Tainter, 2003, p. 219). However after the forest became contested terrain in 1996, six federal agencies had 74 specialists working with an annual budget of \$11 million dollars to deal with the problem. Ten Federal Regional Advisory Councils had been created which comprised of eighty-four members and five coordinators holding fifty to one-hundred public meetings per year and producing fifty evaluations and findings per year (Tainter, 2003).

Change produces the need for communities to adapt, and complexity often emerges as the mechanism for adaptation. Complexity for the Tlingit communities of southeast Alaska also occurred in response to the growing commercial fishing industry. In the communities of Angoon and Kake (1980 population of 630 and 634 respectively (Firman & Bosworth, 1990; George & Bosworth, 1988)), traditional practices of subsistence fishing have been transformed in response to the commercial fishing industry.

Commercial fishing was introduced to the area in 1878 and soon expanded quickly given the lack of regulation and oversight over fish stocks (Thorsteinson,

1950). The rural Tlingit communities quickly became a disenfranchised minority as they had no property system or mechanism for dealing with negative external pressures on the resources they rely upon. During the mid 20<sup>th</sup> century, there was no effective federal management system to control commercial fishing activities either. Lack of regulation soon led to over-harvesting of sockeye, pink, and chum stocks and the near collapse of the industry in the 1950s (Cooley, 1961).

The communities of Angoon and Kake (Figure 4) adapted to this negative external influence by differentiating their social structure, an investment in complexity to solve the problem. Families moved from the homes to the site of trolling camps and canneries during the long commercial fishing season to carry on subsistence fishing and processing while working on canneries or trolling (Betts & Wolfe, 1992). New elements of bureaucratic control were also created. A revolving loan program for five Native village councils was created in the 1940s to allow villages to purchase their own canneries, fish traps, and fishing vessels (Garza, 1983). Angoon and Kake also formed tribal councils under the Indian Reorganization Act (IRA) to administer loans (Betts & Wolfe, 1992). The Bureau of Indian Affairs also assisted in aiding each community in buying a cannery (LaVerdue, 1961). Finally, each of the communities attempted various local marketing and processing projects under the guidance of newly created political and economic organizations. These projects primarily took the form of village corporations formed through the Alaska Native Claims Settlement Act of 1971, and the aforementioned IRAs.

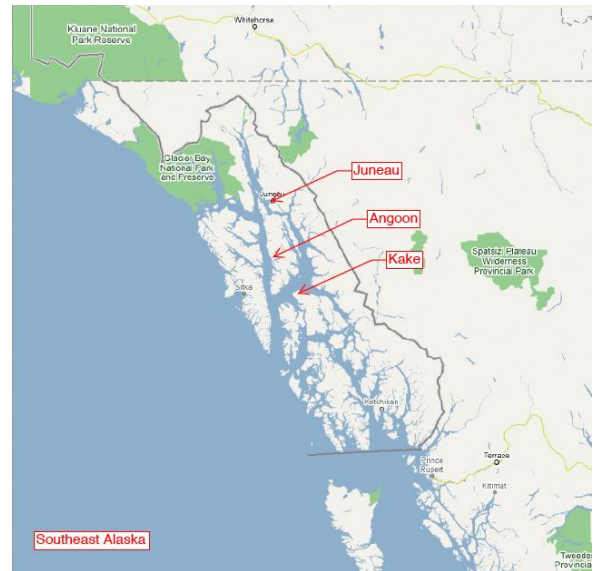


Figure 4. Map of Kake and Angoon in Southeast Alaska.

Complexity can hinder efforts to achieve sustainability. Subsistence fishing, in addition to being integral to the Tlingit's cultural heritage is also a main driver of the communities' "mixed subsistence market economy" (Betts & Wolfe, 1992; Wolfe, 1984; Wolfe & Walker, 1987). By the 1990s, the issue of subsistence versus commercial fishing rights had escalated to a federal legal case. By 1994, the federal government was assigned the responsibility to administer the rights, which according to their estimates required an additional 250 employees, and \$52 million per year to operate (Tainter, 2003). By 1994, the median economic value of and annual harvest was \$103 million (Tainter, 1997). This is a dramatic example of how frequent problem solving mechanism of increasing complexity results in increased costs. Costs to create, maintain, and replace the parts of the social system, to support specialists, to regulate behavior, and to produce and control information (Allen et al., 2003). In this example, as costs increase, the ability to achieve returns decreases. Complexity is not efficient when returns are marginalized against the costs of the solution. In the case of Tlingit subsistence fishing rights, the cost



of the solution reduced the benefit captured from the resource by roughly 50%.

Underlying the issues of subsistence hunting and fishing in southeast Alaska are divergent value systems. The Tlingit, with their strong cultural and symbolic connections to the place and the activities that have traditionally defined their way of life, harbor qualitatively different values for the region's resources than commercial fisheries. What is sustained in social, ecological, and economic systems is inherently grounded in these value systems. Individuals, groups, and communities desire to sustain what they value (Tainter, 2003). Understanding this, sustainability cannot emerge as a panacea for problems in rural communities. Any action to achieve sustainability will affect groups with divergent value systems differently. In southeast Alaska, the existing political and social structures inherent in natural resource management affected the Tlingit dramatically differently than other groups who value the resource differently.

#### Conclusion

A growing ecological consciousness over the past several decades led to concentrated efforts in achieving sustainability at both the global and local levels. Sustainability however, is an ambiguous and often misunderstood concept. Sustainability is introduced to the rural community development literature here as a product of individual and group value systems (Tainter, 2003), rather than a universal state achieved by the symbiotic balance between ecological and human processes.

Sustainability, as a value-laden concept, operates within existing political and social structures. These social structures are laden with power dynamics and the unequal distribution of resources; this in turn, creates conflict and debate. Given this, efforts to understand rural community sustainability must appreciate individual and group value systems. I propose the interactional approach can be utilized to distinguish social fields that are,

by definition, concerned with different aspects of community development and rooted in divergent value-systems. Political contexts and social structures of locales can also be defined through the interactional approach (e.g., Sharp, 2001). Understanding the structure, processes, and actions of a communities' decision-making process is integral to understanding the contested terrain of sustainability. Political context is fundamental to sustainability because "without some sort of workable social contract, the people in a system will not cooperate" (Allen et al., 2003).

I have also suggested that communities tend to address problems by increasing social complexity. Most of the time this is an efficient method to increase or maintain benefits while minimizing or marginalizing costs. However the complexity of social structure is not linearly related to communities' ability to solve problems and achieve sustainability. Rather, investments in complexity come at a cost; and the benefits received from those costs are minimized as investments in complexity increases.

The case of the Tlingit communities in southeast Alaska shows in stark relief how variable value systems embedded in divergent social fields and political contexts affect what and who is sustained. The case also shows how responses to local problems frequently come in the form of increased complexity. For the Tlingit communities, social complexity came through increased differentiation and organization. Complexity came with increased social and economic costs while simultaneously minimizing returns.

Scholarship on sustainable community development needs to focus on the disparate value systems embedded in social fields if the knowledge of how sustainable communities develop is to be increased. The political context through which these social fields operate is also critical for understanding the procedural mechanisms and varied consequences of

development. The tendency of communities' social structure to become more complex should also play a central in research that places sustainability within a historical context. In short, a more holistic approach to rural community sustainability can be achieved through the integration and

application of interactional and complexity theories.

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## **Collaboration avoided: the construction of an oil pipeline in Minnesota**

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### **Abstract**

*Pine Bend Refinery, located in Rosemount, Minnesota, is a subsidiary of Koch Industries Inc. and is the primary producer of motor oil, commercial lubricants, sealants, and coatings in the Midwest. A history of environmental and safety conflicts encouraged the organization of the Community Advisory Council in 1998, with the purpose of facilitating two-way communication between the community and refinery officials. However, the construction of a new pipeline in 2008 was able to bypass the community involvement and feedback the Community Advisory Council was established to uphold. This lack of discourse has left the community, namely organic farmers and landowners, angry and without voice. This study will (1) analyze the history of Pine Bend Refinery with the surrounding community, (2) evaluate the tactics used by Koch Industries Inc. during the assessment stage of the pipeline building process, (3) discuss similar conflicts and the effectiveness of the conflict management practices employed by stakeholders, and (4) suggest alternative methods that could have been enacted to prevent community distrust and discontent, as well as recommend current conflict management tactics.*

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### **Introduction**

In a world of increasing environmental consciousness, we are more than ever aware of our impact on the natural world. The European colonial notion of unlimited space and resources has been replaced with the push to recycle and preserve natural spaces. However, as our population grows, our demand for energy and resources grows as well. This demand often leads to conflict over the appropriate balance between preservation and environmental alterations. Additionally, ideas over resource extraction vary depending on the locality of the extraction in relation to those holding the opinion. This common idea is based on the “not in my backyard” attitude presented by Mowrey and Redmond (1993), whereby citizens agree that resources should, and need to be extracted from the natural environment, but prefer that extraction does not happen within their community.

However, the practicality of this belief is limiting to say the least. Eventually, a community will be affected whether by logging, mining, or in the case of this analysis, oil manufacturing. Conflicts are

escalated by unbalanced power relationships and a lack of voice and representation. In order to develop working relationships that allow environmental awareness and resource extraction, local communities and resource extracting companies need to participate in open communication. This article will explore the role of institutional power and the necessity for environmental communication through the analysis of an oil pipeline construction project that took place in Rosemount, Minnesota during 2006 – 2008. This study will (1) analyze the history of Pine Bend Refinery with the surrounding community, (2) evaluate the tactics used by Koch Industries Inc. during the assessment stage of the pipeline building process, (3) discuss similar conflicts and the effectiveness of the conflict management practices employed by stakeholders, and (4) suggest alternative methods that could have been enacted to prevent community distrust and discontent, as well as recommend current conflict management tactics.

### **Description of Conflict**

#### **History**

Koch Industries Inc. is a privately owned corporation based in Wichita, Kansas with subsidiaries specializing in diverse products including petroleum, chemicals, energy, fiber, intermediates and polymers, minerals, and fertilizers. While participating in several forms of industry, Koch Industries Inc. has the following moral philosophy:

At Koch Industries, we are firmly focused on long-term success. We believe in creating real value, rather than just the illusion of value. To do so, we strive to live by core values and guiding principles that include integrity, humility, respect and Principled Entrepreneurship™. (KII, 2008)

A major source of industry is derived from several oil refinery plants located throughout the United States as well as subsidiaries in over 60 countries (KII, 2008). Since Fred Koch founded the industry in 1940, Koch Industries Inc. has been convicted of over 315 acts of pollution, including over 97 accounts of evidence concealment involving a benzene spill in a refinery located in Corpus Christi, Texas (MPCA, 2008). Although many environmental disputes involve several oil refineries and production plants under Koch Industries Inc., this analysis will focus on the Pine Bend Refinery.

Pine Bend Refinery (PBR) is a subsidiary of Koch Industries Inc. located about 20 miles south of St. Paul in Rosemount, Minnesota. PBR is the primary producer of motor oil, commercial lubricants, and sealants and coatings in the Midwest (FHR, 2008). PBR has a history of environmental infractions including emission violations, chemical leakages, and numerous refinery explosions. After reports of increased asthma diagnoses in children living in neighborhoods surrounding the refinery, members of the community began to seek a means to discuss environmental

concerns and influence PBR pollution regulations (CAC, 2008; MPCA, 2008).

An oil spill in 1998 provided the final motivational thread to act. Several community members and local government officials approached PBR with the idea of forming a community advisory council (CAC). The council's purpose was to facilitate two-way communication between the community and PBR to discuss issues and make recommendations regarding the environment, safety, and other concerns relating to the actions of PBR (CAC, 2008). Representatives of PBR welcomed the council as a way to improve relations with the surrounding communities, as well as a means to receive feedback and suggestions on current policies. The current mission statement was developed: to promote open dialogue between the community and Pine Bend Refinery in order to enhance life in Dakota County (CAC, 2008). The current CAC consists of 20 community members, four employees of PBR, and one representative from the Minnesota Pollution Control Agency (CAC, 2008; FHR, 2008).

Collaboration between the CAC and PBR has led to several successful negotiations such as an agreement of water sources available to PBR during oil refinery and the establishment of air quality monitoring stations (A. Smith<sup>1</sup>, personal communication, October 15, 2008). However, Koch Industries Inc. bypassed the CAC when the addition of a pipeline running from Canada to Rosemount was proposed in 2006. The additional pipeline would allow PBR to increase daily oil production by 65,000 barrels, thereby alleviating some of the pressures of gasoline shortages in the Midwest (FHR, 2008). The proposed path of the pipeline would cut through private property in over 14 Minnesota counties. Under state law, energy companies are able to take private lands through eminent domain if the project is in the public interest, and land owners are compensated for their loss (Powell, 2008b).

### ***Lack of representation***

Although the CAC was established to facilitate communication and cooperation regarding such issues, representatives from Koch Industries Inc. claimed the CAC was an illegitimate player in this conflict (A. Smith, personal communication, October 15, 2008). Since the council was established to deal with issues regarding the property and actions of PBR alone and not the parent company, Koch Industries Inc. did not see any reason to include the CAC in decision making processes. The exclusion of the CAC from negotiations prevented access and standing from being actualized. Access is actualized when people within the community have the ability to become informed about issues and are allowed a venue in which their opinions and concerns may be heard (Senecah, 2004). Standing is actualized when community member opinions and concerns are valued and respected (Senecah, 2004). Access and standing are two of the Trinity of Voices described by Senecah (2004) which play important roles in evaluating participatory processes. Without a means to express opinions within a setting of legitimacy and respect, it is not surprising that the last voice, influence, was lacking from Rosemount landowners. Landowners had no means to affect the decision making process, even though they would be affected by the decisions the most. Many community members were outraged by Koch Industries Inc.'s lack of concern for public opinion and participation. Perhaps the most upset were individual landowners who felt they had no support system or power in the negotiation process once Koch Industries Inc. claimed their land for pipeline construction (CAC, 2008).

Environmental issues arose over the safety and proper compensation for taken land. Several organic farmers claimed their crops could no longer have organic growing conditions with the proximity of a pipeline (Lemagie, 2006; McKinney, 2006a; McKinney, 2006b; Lemagie, 2007). Other property owners claimed the compensation Koch Industries Inc. provided for their land

was at a reduced value, while other landowners claimed a price tag could never match the value of the pristine forests found on their property (Powell, 2008a). Anger escalated on several occasions in which Koch Industries Inc. began construction before a settlement was achieved with affected landowners (Melo, 2007; Powell, 2008a).

Efforts to rally for the support of local government officials proved unsuccessful. As put by Mark DeBettignies, Rosemount City Council Member "I get tired trying to answer all the questions...People just don't see the big picture..." (EDW, 2008). This statement sends a powerful double-edged message to private landowners that the local government is not concerned with ensuring their citizens understand eminent domain laws, but also that citizens are incapable of understanding such technical procedures anyway.

While Koch Industries Inc. could bypass the inclusion of the CAC based on technicalities, the community was left without a means to voice their concerns. The pipeline completed construction in the summer of 2008, but the conflict is far from over. Many landowners have filed lawsuits against Koch Industries Inc. claiming land acquisition was done illegally and with minimal compensation (Minnesota Courts, 2008). Hard feelings and distrust resonate in the community with regards to Koch Industries Inc. and threatens the probability of future cooperation (S. Watson, personal communication, 21 February 2009).

### **Comparative Dispute Management**

While the construction of the oil pipeline in Minnesota was rife with lack of communication, organization, and governmental support, not all pipeline construction projects are subject to the same outcome. San Juan Basin is located in northern New Mexico, and is considered an energy powerhouse for the local area, as well as the rest of the country, due to possessing some of the richest oil and gas reserves in North America (M. Kelly, personal communication, November 28,



2008). In order to manage resource extraction and maintain environmental health, the San Juan Citizens Alliance (SJCA) was formed. While focusing on numerous areas of environmental health including land development, oil extraction, and river protection, the SJCA's mission statement remains broad.

The San Juan Citizens Alliance is a grass roots organization dedicated to social, economic, and environmental justice in the San Juan Basin. We organize San Juan Basin residents to protect our water and air, our public lands, our rural character, and our unique quality of life while embracing the diversity of our region's people, economy, and ecology. (SJCA, 2008)

The SJCA has grown to its present day state of three regional offices, 9 full time staff members, and a working partnership with several organizations such as the Sierra Club and the New Mexico Oil and Gas Association. Additionally, the SJCA provides citizens the means to voice concerns and participate in actions that will affect their community and environment. Community awareness and participation are encouraged through several community outreach programs, an interactive website, and e-newsletters (SJCA, 2008).

This high level of organization and community involvement proved beneficial in the growing concern for landowner rights in relation to oil and gas drilling. As of 2006, landowners in New Mexico had no protection when companies wanted to conduct oil and gas operations on their property. Oil companies were not required to have a written agreement with the landowner before they began drilling, and no compensation was required for the use of surface land (SJCA, 2008). Additionally, the oil companies were able to decide when and where to drill on private property (SJCA, 2008). While some landowners were able to develop reasonable agreements with oil and gas companies,

they were typically landowners with large landholdings and the financial resources to hire good attorneys (M. Kelly, personal communication, November 28, 2008). This left smaller landowners with little power to compromise land use and compensation.

Since the SJCA had already been a well established source of community and environmental support, local landowners brought their concerns forward. The SJCA was able to mobilize landowners through mailings, community meetings, and community outreach programs. Since the SJCA was able to mobilize and organize landowner participation, the SJCA was also able to acquire government support, namely Governor Richardson. As a result the Surface Owners Protection Act (SOPA) was drafted, considered to be the nation's strongest legislation protecting landowners facing oil and gas development (SJCA, 2008).

In 2007, New Mexico's legislature passed SOPA with an overwhelming majority. SOPA now requires oil and gas companies to (1) notify landowners at least 30 days prior to beginning any oil and gas operations, (2) describe the proposed operation so the landowner can evaluate the effects of the operation on his/her property, and (3) propose a surface use and compensation agreement that addresses the timing, location and scope of the operation, and an offer of compensation. In addition, the landowner has the right to negotiate, or reject the offer. If an agreement cannot be made, the landowner has the right to file a lawsuit.

The actions of the SJCA allowed for community mobilization and governmental support which in turn allotted authority and negotiation space to citizens. The outcome was successful in increasing community power and control of actions taken upon private land. Additionally, this success gave the SJCA more clout in managing environmental conflicts, thereby increasing their legitimacy as a key player in environmental disputes.

### **Discussion of Management Tactics**

The course of events in the Rosemount, Minnesota, and the San Juan Basin, New Mexico, share a common source of conflict: the lack of landowner rights and power against oil companies. However, the management tactics in each conflict varied significantly. This section will analyze the benefits and hindrances of different management tactics employed by several stakeholders in each conflict.

#### **Koch Industries Inc.**

Koch Industries Inc.'s philosophy of environmental communication was minimalistic: the less work required towards engaging public opinion and participation the better. Koch Industries Inc. followed all legalities such as posting community meetings; however, little time and effort was put into advertizing and running meetings. As a result, little was gained. This tactic exhibits the Three-I Model identified by Daniels and Walker (2001) consisting of inform, invite, and ignore. Meetings were held in which representatives from Koch Industries Inc. presented their planned pipeline route and means of land acquisition. Through this process, public participation was downgraded into public relations (Martin, 2007). The public was invited, albeit with minimal advertisement, to provide their feedback and concerns, but ultimately public opinion was ignored. As Sharon Weston, a local landowner put it, "There was a public meeting and they allowed people to get up and ask questions and state their concerns, however, it was evident when no one was taking notes that it was just a formality....they had already gotten some sort of approval from the state" (personal communication, November 14, 2008). While the Three-I Method requires the least amount of work on the outset, the outcome of over 14 lawsuits (Minnesota courts, 2008) and many more landowners unwilling to cooperate potentially created more work for Koch Industries Inc. than initially involving landowner concerns in the decision making process.

The lack of public notification, which added to landowner frustration, could have

easily been avoided by posting meeting dates and project intensions in local newspapers. In a survey of 24 newspaper articles covering the pipeline construction (Table 1), only 2 articles contained information regarding pre-construction information. The majority of articles discussed the beginning of pipeline construction after plans were already approved by the state (n=12) or the effects the pipeline had on organic farms and forests once construction was underway (n=6). This low representation of public information further demonstrates the minimal effort put forth by Koch Industries Inc. to involve public comments and feedback.

Table 1: Distribution of pipeline construction topics found in local Minnesota newspapers (2006–2008)

|                                                |    |
|------------------------------------------------|----|
| Reports on construction                        | 12 |
| Organic/tree farms affected after construction | 6  |
| Gas leak/explosion during construction         | 3  |
| Pre-construction information                   | 2  |
| Attempts to stop pipeline construction         | 1  |
| Total                                          | 24 |

#### **Community Advisory Council**

The CAC perpetuated the conflict by allowing themselves to remain an illegitimate player. By hiding behind the wording of their mission statement to negotiate only with PBR, they removed themselves from the conflict. However, the mission statement has no legal binding, and could have been easily changed to incorporate any conflict involving oil in Dakota County. The absence of the CAC took away the landowners' system of representation and organization.

#### **Private landowners**

Lastly, the private landowners, while lacking the CAC for support, failed to organize. Instead of unifying to provide a

common front and panel for information sharing, they practiced self-confinement. This only perpetuated feelings of isolation and helplessness when facing a large organization such as Koch Industries Inc. Since the private landowners could not find support through the CAC and their local government, they could have sought support through other sympathetic organizations and the media. The local group, Eminent Domain Watch, specializes in voicing injustices in Rosemount due to eminent domain. However, this group focuses on the 10 year battle between downtown business owners and the city council for the most appropriate way to beautify downtown Rosemount. However, this group was little informed, if at all, of the eminent domain issues present outside city limits.

Private landowners also inhibited their chances of success by not advertizing their plight to the rest of the community. Since so little was covered by the media, letters to the editor, or paid advertisements in local newspapers would have greatly increased awareness to those in the community not directly affected by pipeline construction. Increased community support would have made the concerns of private landowners harder to ignore by the local government and Koch Industries Inc.

#### **San Juan Basin**

In contrast, the conflict in San Juan Basin, New Mexico, provides examples of successful management tactics. The most prevalent stakeholder present was the SJCA. The SJCA did not limit their actions in environmental conflict by restricting their mission statement to only certain companies and conflicts. This allowed the SJCA to clearly state their legitimacy in conflict management. Additionally, the SJCA allowed private landowners a means of organization and mobilization, an important component missing in Rosemount.

The SJCA has greater political standing and clout based on their longevity and participation in previous conflicts. The

CAC is relatively young and does not have the support of nationally recognized societies like the Sierra Club. The seniority held by the SJCA, as well as full time staff members, provided the conflict management experience lacking in Rosemount. The SJCA also has a system of revenue based on donations. Access to funding allowed the SJCA to quickly develop public outreach programs and hold public meetings. The result was an organized force that the government could not ignore. The resulting governmental support was the last step needed to increase the negotiation power of private landowners.

#### **Conflict Management Recommendations**

The following discussion will provide conflict management techniques for separate stakeholders from two temporal views: immediate action, as well as recommendations to increase communication pathways for future conflicts.

#### **Private landowners**

The biggest problem facing landowners in Rosemount, Minnesota, is their lack of power. Power can be gained in several ways ranging from those more extreme to more low key. One route chosen by several stakeholders in a position of low power is one of dramatics. For example, stakeholders against logging have been known to chain themselves to trees, participate in hunger strikes, or perform theatrical displays in public areas (Cox, 2006). While this method is effective in garnering media attention, the effects are often short-lived. Additionally, the public viewing such dramatic displays may perceive the act as a waste of time, overly emotional, and a way to compensate for being unfit to participate in mainstream jurisdictional processes (Cox, 2006). While private landowners in Rosemount would benefit from such increased media coverage, the negative backlashes that may stem from the public would be counterproductive.

On the opposite side of the spectrum, private landowners have the option of proceeding with the status quo – carrying out each lawsuit individually without unification. This method may be preferred to several landowners for it allows each individual to act in the manner they see will best benefit their situation. However, the amount of power each landowner possesses is greatly reduced from the power landowners would have as a collective group. Without unity, Koch Industries Inc. would be able to override landowner claims for injustice, sticking to their claims that they followed procedural law.

In order to effectively increase power, private landowners need to appeal to the media and other organizations that have the potential to be sympathetic supporters. This is more efficiently accomplished by forming a coalition, or other means of organization and unification. In order for unification to be successful, a handful of landowners will need to establish a structure of leadership. This can be done by distributing fliers to landowners affected by the pipeline, inviting them to attend neighborhood meetings. Motivation to attend a meeting, and to eventually participate in an organized group, would come from several sources. The first source is the sense of camaraderie and sympathy a landowner would gain once surrounded by people who feel a similar sense of victimization. After being ignored by the organizations established to provide assistance (the CAC and local government for example), landowners will feel the satisfaction of at least being heard by their neighbors. Secondly, motivation for participation would be derived from the opportunity to share knowledge regarding the actions of Koch Industries Inc. Knowledge sharing allows landowners to understand the broader scope of the conflict, as well as the opportunity to see more effective courses of action. For example, knowledge that Koch Industries Inc. had denied any attempts of one

landowner to call oil company officials to discuss displeasure with the level of compensation, will benefit another landowner to make sure they accurately document every contact attempt for use in court. Lastly, peer pressure would provide additional motivation to organize. After a few landowners experience the benefits of camaraderie and knowledge sharing, they are likely to seek out those not participating and urge them to join as well.

Once a unified group has been formed, landowners should then increase public awareness of the conflict. The first step could involve the utilization of the media. Landowners could begin to write letters to the editor describing their plight and ask those in the surrounding community for support. Additionally, reporters specializing in community happenings, procedural justice, and environmental health could be contacted and asked to cover a series of stories describing the different dilemmas faced by numerous landowners, ranging from crop safety to fair land compensation. Fliers could also be distributed and signs posted along the roadside on landowner property urging the community to speak-up and act on the rights for landowners.

The next step private landowners can take to increase their power is to appeal to sympathetic organizations, such as the local Eminent Domain Watch and the more distant SJCA. While Eminent Domain Watch focuses on the injustices committed by the Rosemount City Council against downtown business owners, private landowners involved in the pipeline conflict should appeal to the commonalities of their conflicts. Both groups have been largely ignored by local government and strong-armed into agreements that put property owners at a great disadvantage. A partnership of the two groups would increase the venues in which public awareness could take place, such as the Eminent Domain Watch website. Additionally, a partnership would further enhance knowledge sharing whereby

participants in Eminent Domain Watch could provide their 10 years of eminent domain procedural experience and the private landowners could provide more evidence for the injustices allowed by local governments.

Additionally, groups outside the Rosemount area could be contacted for support and advice. As we have already seen, the SJCA provides an excellent example of how organization can increase power in negotiation processes. Since the SJCA has several years of experience with landowner organization and the legal matters of landowner rights, they would be able to provide direction in dealing with mobilizing the public and gaining government support. Moreover, the open support of well-established, outside groups such as the SJCA increase the legitimacy of the unified landowners, and potentially bring the conflict to a national level.

The recommended tactics of private landowners discussed above will create a larger, more informed, organized group. Local governmental officials, media outlets, and Koch Industries Inc. will be less able to ignore such a group. The power generated in numbers and knowledge will provide private landowners with the negotiation leverage required to make their concerns heard, and not easily overlooked.

#### ***Koch Industries Inc.***

Koch Industries Inc. faced the negative backlash from a community in which it needs a continued working relationship. While power is not lacking, Koch Industries Inc. suffers from a negative image as seen by Rosemount rural landowners. However, Koch Industries Inc. does not necessarily need to act on their negative image. According to Minnesota law, Koch Industries Inc. followed the required procedures to install an oil pipeline. Letting this negative image fester in Rosemount will increase the amount of resistance encountered in future dealings. Since Koch Industries Inc. gains much of their revenue from PBR, it is to Koch's advantage to achieve a working relationship with the community of Rosemount if they

hope to run a business with less money spent on lawsuits and time spent on debunking negative portrayals.

At this point in time, Koch Industries Inc. cannot correct their mistakes made during pipeline construction. However, they have an opportunity to reach out to the community and set the stage for more positive interactions in the future. The first step regards the remaining lawsuits filed against Koch Industries Inc. Instead of belittling landowner concerns and compensation complaints, Koch Industries Inc. should allow room for negotiation space. Since the pipeline is already constructed, Koch has already achieved their goal and established a means of increased revenue. Allowing for negotiations and appealing to landowner demands will begin to lessen negative attitudes. Additionally, new faces in Koch's public relations office will provide a new start to negotiations. Private landowners have deeply imbedded, negative preconceived opinions of those currently in public relations. A change of personnel along with a transition in conflict management strategies will be considered more genuine than changes in management tactics with persons who have already proven them to be untrustworthy and unsympathetic.

Once conflicts with individual private landowners are resolved, Koch Industries Inc. should adequately demonstrate the benefits received by the community from the newly installed pipeline. This can be done through gas coupons to the Rosemount community, or by funding community events or scholarships for graduating high school students. Public relations personnel at PBR often employ this tactic and plan to build a sports complex in Rosemount to counteract the negative backlashes from the community after being associated with Koch Industries Inc. during the pipeline conflict (Duchschere, 2008). However, as will be discussed below, the benefits of the sports complex may not be compensating those

who lost the most during the pipeline construction.

For future conflicts, Koch Industries Inc. should follow through on public feedback received during meetings. This includes adequately advertizing meeting dates and times, encouraging positive and negative feedback on proposed plans, and, most importantly, addressing concerns before taking action. This simple, albeit time consuming, step establishes an environment in which landowners want to participate and negotiate reasonable settlements, instead of resisting and clinging to lawsuits as their only means of power. Putting in the time and effort before making a decision will save Koch Industries both time and money in the long run, and might help accumulate a positive working reputation including the alleged integrity, humility, and respect stated in their philosophy statement.

#### **Rosemount citizens**

Not every citizen in Rosemount had the same experience with the oil pipeline construction conflict. In fact, many citizens did not even know the conflict existed. Rosemount was once a unified rural and agricultural town; it is now a town divided. Within the past 20 years, the western half of Rosemount has undergone suburban development while the eastern half has remained agricultural and rural. Families moving into the new suburban development have called upon city officials to make Rosemount more accommodating to traditional suburban family lifestyles, including more shopping centers, family restaurants, and the afore mentioned sports complex. Citizens living in the more rural or agricultural areas of Rosemount, are not happy with the increased development, and wish for Rosemount to retain its small town atmosphere (S. Watson, personal communication, 21 February 2009). During the recent 2008 election, several city council campaigns were run with the promise of increasing business development, and most importantly, the construction of a sports complex (Anonymous, 2008). While PBR

provided the land and the funding to build the sports complex, this act does not benefit the Rosemount community as a whole. In fact, the complex benefits families living in suburban developments, not those directly affected by the pipeline construction.

Regardless of the level of personal impact or involvement with the pipeline construction, Rosemount citizens have a responsibility to make sure they are adequately and equally represented. Recognition of this responsibility was previously acknowledged and acted upon during the formation for the Community Advisory Council in 1998. Citizens saw the need for their concerns and ideas to be represented in issues regarding PBR. Citizens were able to unify, organize, and engage PBR into participating, forming a council, and collaborating to solve environmental issues and set-up environmental regulations. However, Rosemount citizens missed out on the opportunity to expand this representation to a broader scale, and as a result, lost a key player (the CAC) in public representation with Koch Industries Inc.

To ensure such representation is not lost in the future, the citizens of Rosemount should urge the CAC to alter their mission statement. This alteration does not need to be drastic, but should allow room for the CAC to act within any oil, or any environmental issue, that affects the communities within Dakota County. Since Rosemount is split between a rural and suburban communities, Rosemount citizens should take some guidance from the SJCA mission statement by “embracing the diversity” of their town, instead of fighting between the two extremes.

#### **Conclusion**

As our population continues to increase, so too will the number of environmental conflicts. The challenge facing us today is not whether to address environmental conflict, but how to manage them in a fashion that maximizes stakeholder satisfaction. Differences in what are considered the environment,

environmental justice, and rights of individuals' verses companies have the potential to collide when multiple stakeholders are engaged in a single conflict. Therefore, it is essential to open communication pathways to foster grounds for negotiation. This process is often overlooked when power imbalances and inadequate representation mark the situation, as seen in the Rosemount oil pipeline. However, those without power do not need to remain powerless, and those without representation do not need to remain unheard.

### **Notes**

- 1) Individual persons who have provided information and opinions via personal communication have had their names changed to protect identities.

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## **Pluralism, Collaborative Potential, and Regional Sediment Management: Assessing the Situation via Stakeholders' Views<sup>1</sup>**

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### **Abstract**

*This paper presents the results of two Regional Sediment Management Demonstration Initiative stakeholder activities that took place as part of a project in 2003 and 2004: conversations with stakeholders and Collaborative Learning training workshops for stakeholders. The essay includes the methods employed for gathering information about stakeholder views related to regional sediment management (RSM) and Mouth of the Columbia River (MCR) issues and policies. The paper features an analysis of RSM's collaborative potential, employing the Progress Triangle framework for interpreting comments of stakeholders. A number of key points have emerged from the conversations and training workshops, including: (1) People are uncertain about RSM, it should be defined and explained; (3) Goals, objectives, decision space need to be clear; (4) the Corps should demonstrate that this is not "business as usual;" (5) Agency personnel need to be involved; and (6) even though trust among parties could be better, stakeholders are optimistic that RSM can bring parties together. In light of these comments and analysis of related materials, the RSM project exhibited good collaborative potential. Many stakeholders were optimistic about a multi-stakeholder approach and hoped to work collaboratively.*

*1 Portions of this essay have been adapted from Walker and Daniels (2005) and Walker (2006).*

### **1. Introduction**

The U. S. Army Corps of Engineers (USACE) manages the waterways of the United States, including sediment or sand management. USACE has typically focused on managing sand at coastal projects on a project-by-project basis. This approach to sand management has not always adequately considered the cumulative impacts of individual projects on down drift projects. In response to this concern, the USACE initiated efforts to assess the benefits of managing sediment resources as a regional scale resource rather than a localized project resource. The concept of Regional Sediment Management (RSM) grew out of May 1998 meeting of the Coastal Engineering Research Board. As a management method, RSM includes the entire environment, from the watershed to the sea. RSM should account for the effect of human activities on sediment erosion as

well as its transport in streams, lakes, bays, and oceans.

In October 1999, the USACE began a Regional Sediment Management demonstration program for the Northern Gulf of Mexico, which is directed by the Mobile District. In November 2000, five additional demonstration sites were initiated, with four added in 2001-2002, for a total of ten. The ten project areas for RSM demonstration initiatives included sites in the Jacksonville, Mobile, Los Angeles, Detroit, Vicksburg, and Portland Districts. The Portland District site is the Mouth of the Columbia River (MCR).

The Columbia River drains a 259,000-square-mile basin that includes territory in seven states and one Canadian province. The river is one of the most significant environmental forces in the Pacific Northwest region of the United States. It flows for more than 1,200 miles, from the

base of the Canadian Rockies in southeastern British Columbia to the Pacific Ocean at Astoria, Oregon, and Ilwaco, Washington (Center for Columbia River History, 2006).

The Mouth of the Columbia River provides entrée into the Columbia River channel and its numerous ports. For more than a century the lower Columbia River has been maintained - through dredging - to provide safe passage of cargo ships making the 106-mile trip between Portland, Oregon and the Pacific Ocean. This important link for national and international commerce has contributed to the economic development of the region (USACE Portland District, 2006). At the Mouth of the Columbia River specifically the Corps typically removes between 4 million to 5 million cubic yards of sand and sediment from the 6-mile length of the project area each year.

A goal of the demonstration program is to change the paradigm of project specific management to focusing on a regional approach in which the USACE as well as state and local agencies stop managing projects and begin "managing the sand." Specific objectives of the demonstration program are:

1. Implement regional sediment management practices.
2. Improve efficiencies by linking projects.
3. Apply new technologies.
4. Identify and work through bureaucratic obstacles to RSM.
5. Manage in concert with the environment.
6. Incorporate a multi-stakeholder process for strategic planning and project coordination.

The USACE Portland and Seattle Districts added an additional objective for the RSM project at the Mouth of the Columbia: innovative and ongoing stakeholder engagement. Pacific Northwest USACE

leadership staff wanted to use RSM as an opportunity to build better relationships with stakeholders; to change their paradigm of public involvement. To address the sixth objective, "incorporate a multi-stakeholder process," the Portland District of the U.S. Army Corps of Engineers invited the author to apply a Collaborative Learning approach for pluralistic to stakeholder involvement.

## **2. Pluralistic Stakeholder Involvement**

Collaborative Learning a method or approach that for public participation in natural resource decision-making that embraces pluralism (Daniels & Walker, 1999). Pluralistic stakeholder involvement (or public participation) is civic engagement that embodies the principles of FAATH – fairness, access, accountability, inclusiveness, transparency, and honesty (adapted from Walker et al. 2005). Civic engagement is an important component of civil society. Civic engagement is not conventional public input, such as polling or taking comments. It "takes time, give-and-take among people, and willingness to insist that people consider different perspectives, choices, and trade-offs" (Harwood, 2004, p. 74-75). Civic engagement regards people as citizens and community members, rather than as consumers or customers. "Citizens certainly hold self-interest," Harwood (2004, p. 75) explains, "but they also have a responsibility to look beyond just themselves and take on the challenges of being part of a community." Pluralistic public participation seeks diversity through more than demographics (Harwood, 2004); it emphasizes a trinity of voice: access, standing, and influence (Senecah, 2004). Pluralistic stakeholder involvement values knowledge from many places and perspectives and strives for coordinated meaning and shared understanding, rather than simply providing information.

Pluralism recognizes “the inevitable existence of differing, often conflicting, positions on any question of substance, from politics to ecosystem management” (Anderson et al. 1998). In a pluralistic model groups that are autonomous and independent often interact as interdependent parties, with claims, goals, and interests on critical issues that are both legitimate and distinct. Differences based on separate values, perceptions, objectives and knowledge are respected. This view of pluralism highlights the dynamic interplay between different ideologies, interests, organizations, and actors (Anderson et al. 1998).

Pluralistic stakeholder involvement considers communication as social construction. “A social construction view regards communication as fundamentally a process of creating shared meanings,” Daniels and Walker (2001, p. 130) surmise. “We send messages as objectively measurable statements, but as recipients we generate the meanings those messages convey.” Communication is a multidimensional concept that ties meaning to message transmission, context or setting, and channels. “There is a wide range of communication functions that cross the development spectrum,” Ramirez and Quarry (2004, p. 13) point out, such as “information, public relations, social marketing, community voice and so on.” Regardless of the context, channel, or function, the core of communication activity consists of the meanings we create and co-create (Walker, 2007).

To foster meaningful communication and shared understanding, pluralistic public involvement “demands careful communication planning – for public meetings, consultations, and round tables for stakeholder engagement” (Ramirez & Quarry 2004, p. 13). To this list one can add the activities of a Collaborative Learning project, including assessment, training, and community

workshops. Collaborative Learning methodology exemplifies the attributes of pluralistic stakeholder involvement (Daniels & Walker, 1999; Walker et al., 2006a; 2006b; 2006c; Walker et al., 2008).

### **3. Pluralism and the Collaborative Process**

Collaborative work is inherently pluralistic. Various commentaries on community-based collaborations imply this claim (e.g., Wondelleck & Yaffee, 2000, Brick et al. 2000; Brunner et al. 2002; 2005; Weber, 2003; Koontz et al., 2004; Sabatier et al., 2005; O’Leary & Bingham, 2008) and present examples that illustrate varying degrees of success. As collaborative efforts, formats, and venues increase, a question emerges center stage, one that the cited case studies authors and other natural resources decision-making analyzed have not necessarily addressed. The question seems fundamental to conflict resolution and decision-making: *When should collaboration occur?* More specifically, when should a Collaborative Learning project be developed and applied? This general question encompasses a number of specific points.

1. Are there conflict/decision situations in which a collaborative effort seems particularly useful?
2. Are there situations where collaboration does not seem warranted?
3. What factors or criteria should be considered when determining the appropriateness and utility of a collaborative approach?
4. What groundwork could be laid to improve the prospects for a successful collaboration?

These questions imply the importance of assessing “collaborative potential.” In any complex and controversial multi-stakeholder conflict or decision situation, the potential for constructive outcomes may reflect the

extent to which the situation has “collaborative potential.”

### 3.1 Collaborative Potential

Any party, whether the decision authority, a key stakeholder, or a citizens’ group, that seeks to implement an innovative pluralistic public participation strategy will likely perceive some collaborative potential (CP). Collaborative potential can be defined as the opportunity for parties/stakeholders to work together assertively in order to make meaningful progress in the management of controversial, complex, and conflict-laden policy situation. This perception is based on three factors. First, the stakeholder determines that the nature of the situation exhibits a high or compelling need for collaboration. Second, the stakeholder believes that there is a possibility for civil interaction - meaningful, respectful communication between the various parties. Third, the stakeholder surmises that an interest-based mutual gain or integrative outcome is possible. As such, the fundamental structure of the conflict or decision situation offers the potential for both or all sides to achieve more of their objectives than would be likely in some other venue (Lewicki et al., 2003).

As we have noted elsewhere (e.g., Daniels & Walker, 2001), as a pluralistic public participation strategy, Collaborative Learning specifically differs considerably from the traditional model of open houses, public hearings, and comment periods. Some key aspects of collaboration that clarify these differences are: (1) It is less competitive, (2) it features mutual learning and fact-finding; (3) it allows underlying value differences to be explored, (4) it resembles principled negotiation, focusing on interests rather than positions, (5) it allocates the responsibility for implementation across many parties, (6) its conclusions are generated by participants through an interactive, iterative, and reflexive process, (7) it is often an ongoing

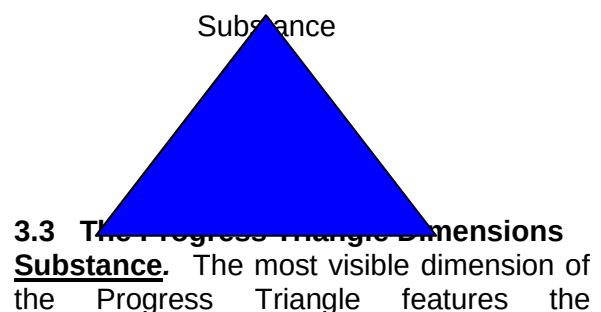
process, and (8) it has the potential to build individual and community capacity in such areas as conflict management, leadership, decision making, and communication (Daniels & Walker, 2001).

### 3.2 Assessing Collaborative Potential Using the Progress Triangle

The visual image of a triangle and the phrase “progress triangle” reflect the view of environmental and natural resource conflict situations as manageable (Walker & Daniels, 2005; Daniels & Walker, 2001). Managing policy conflicts and making good decisions require progress on the major dimensions of a given complex and controversial situation.

In a given conflict or decision situation, policy improvements (desirable and feasible changes) constitute progress. As part of improving the situation, progress can include such ideas as reaching consensus, developing mutual gains, learning together, resolving a specific dispute, achieving agreement, and laying a foundation for future negotiations. Progress is a way of thinking about a conflict or decision situations that recognizes: (1) that conflicts are inevitable and ongoing; and (2) that the competent management of those conflicts or decisions comes from continual improvements in areas of substance, procedure, and relationships. These dimensions form a “progress triangle,” as presented in Figure 1.

**Figure 1. The Progress Triangle**



substance of the conflict or decision situation. Substantive items are the “tangible” or concrete aspects of a conflict/decision situation, such as the issues about which the stakeholders deliberate and negotiate. They can be thought of as the agenda items of a decision process. Substance, though, also includes issues that parties may consider “symbolic,” such as “righting a past wrong” (Walker & Daniels, 2005; Daniels & Walker, 2001).

**Relationship.** While environmental and natural resource policy conflict and decision situations are overtly about substantive matters, progress on them often hinges on the quality of the relationships that exist among the stakeholders. Consequently, although assessment can begin at any one of the three triangle dimensions, in some cases examining relationship factors first may be productive. The relationship dimension includes the parties in the conflict and their history with one another. It also includes the “intangibles” of any conflict situation, such as trust, respect, power, legitimacy, identity, and face (Walker & Daniels, 2005; Daniels & Walker, 2001).

**Procedure.** The procedure dimension of the triangle includes those elements that pertain to the process or procedural aspects of how conflict situations are managed, disputes are negotiated, and decisions are made. It features important procedural and jurisdictional factors such as decision space and decision authority. This dimension addresses the rules, both regulative and generative, that stakeholders adhere to in working through the conflict/decision situation. Just as progress on substance relies in part on relationship factors, so, too, does it depend on the procedures the stakeholders regard as appropriate and fair (Walker & Daniels, 2005; Daniels & Walker, 2001).

#### **4. The RSM Project - The Stakeholder Conversations Method**

The first step in a Collaborative Learning project is situation assessment (Daniels & Walker, 2001). Consequently, the Collaborative Learning portion of the Regional Sediment Management (RSM) project featured stakeholder conversations. Through these conversations, the RSM situation could be appraised. To accomplish this task, a stakeholder involvement team (SIT) was created. The “Progress Triangle” was employed as a framework for organizing stakeholder ideas.

Author discussions with USACE staff members generated a number of stakeholder conversation objectives.

- # Discover what stakeholders (SH) know about RSM.
- # Identify RSM and Mouth of the Columbia (MCR) issues.
- # Learn about SH perceptions and expectations of the USACE.
- # Learn from SHs what they think is important in as RSM stakeholder involvement process.
- # Assess the collaborative potential of the RSM situation.

This last objective is particularly critical when considering a Collaborative Learning approach for pluralistic stakeholder involvement and RSM. For Collaborative Learning to be viable, stakeholders and the decision authority need to perceive that there is collaborative potential in the situation (Daniels & Walker, 2001). In the RSM project, the assessment of collaborative potential is two-fold. First, can RSM stakeholders interact with one another in a constructive and civil manner? Secondly, can RSM stakeholders participate in the development of decisions that will benefit the parties more than if a party chose to act alone? The assessment determines: (1) the current potential for collaboration, and (2) the extent to which certain aspects of the situation need to be changed in order to establish good potential for collaboration. There is no specific

“formula” to this assessment process. Rather, the analyst has to assess the situation as comprehensively as possible given available resources to do so, such as time, access to people for interviews or conversations, review of documents, and so on. In policy decision situations, though, the willingness of the stakeholders to try to work together and the degree of decision space the relevant decision makers are willing to share are key factors.

#### **4.1 Stakeholder Conversations – the Method/Procedure**

With the RSM stakeholder conversation objectives in mind, Walker developed a conversations protocol. The protocol included a conversation narrative and eleven questions. The narrative and the questions were reviewed and refined by USACE personnel. The eleven questions appear in Table 1.

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**Table 1. The Stakeholder Conversations: Questions/Discussion Points**

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1. What do you know about regional sediment management demonstration initiative at the mouth of the Columbia River? Are you familiar with this US Army Corps of Engineers’ effort?
  2. What issues are important to developing a regional sediment management strategy for the Lower Columbia?
  3. What are your concerns about these issues and about regional sediment management?
  4. What obstacles do might stand in the way of developing a regional sediment management strategy for the Lower Columbia and the mouth of the river?
  5. Do you see any connections between the development of a regional sediment management strategy and other Lower Columbia River issues?
  6. Who are the important stakeholders (organizations, businesses, agencies,

individuals) who should be involved in this regional sediment management demonstration project effort?

7. What relationship does the US Army Corps of Engineers have with major stakeholders?

8. Where Lower Columbia River issues are concerned, how is the US Army Corps of Engineers perceived?

9. As part of the RSM demonstration project, we are tentatively planning on holding five or six community workshops on regional sediment management issues. What advice or concerns do you have about the regional sediment management workshops that will take place in late fall and early winter?

10. What are things that you think we (the consultants) should know about the current situation as we begin to work with the US Army Corps of Engineers?

11. Are there any people, organizations, or groups that you recommend we talk with as part of this interview process?

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As the RSM-CL Stakeholder Involvement project director, the author recruited a team of seven current and former Oregon State University students. The author and senior facilitator colleague trained the SIT members to conduct the stakeholder conversations. The training included a review of the Regional Sediment Management Demonstration Initiative, background reading material on RSM, and an explanation of the stakeholder conversations procedure.

Team members discussed each of the conversation questions. The senior team members (the author and colleague) also guided the team members through the conversations narrative. SIT members were reminded that they were to conduct the stakeholder conversations as impartial individuals on RSM, MCR, and LCR issues.

In mid-September 2003 the Stakeholder Involvement Team received names of stakeholders and contact information from USACE personnel. Three members of the team attempted to contact stakeholders via phone and/or email. These three team members asked stakeholders if they would be willing to participate in a conversation and if so, when they would be available. SIT members' schedules were then coordinated with stakeholder availability.

#### **4.2 The Participants**

The team members who attempted the initial stakeholder contacted called and/or emailed 112 people from the list the USACE provided. Of these, only 59 could be reached. A minimum of three attempts were made to contact each party not reached. 8 people declined to participate in the conversations. Consequently, conversations took place with 51 people from the original list. In addition, SIT members contacted individuals recommended by stakeholders. As a result, conversations were held with ten individuals not on the USACE list. SIT members also talked with USACE personnel, either individuals or in groups. In sum, 71 people participated in conversations. The conversations ranged in length from 30 minutes to 2 and one-half hours. Their average length was about an hour. The conversations took place in September and October 2003.

### **5. Results from the Stakeholder Conversations**

The conversations with the 71 participants generated over 300 pages of notes. Three members of the team, including the author, read through the interview notes. The readers analyzed the conversation notes qualitatively, examining how stakeholders addressed the conversation questions and identifying themes, patterns, and unique ideas.

#### **5.1 The Stakeholder Conversation Questions**

This discussion of the conversation questions relies principally on the analysis of one of the student reviewers and the author but account for the second student's evaluation as well. The direct quotes have been compiled by the primary student reviewer.

**Question 1. *What do you know about regional sediment management demonstration initiative at the mouth of the Columbia River? Are you familiar with this USACE effort?***

##### **Q. 1 Summary Points**

- # Some SHs were not aware of RSM and wanted to know what it is.
- # While many SHs had heard about RSM, they did not know details.
- # Most SHs talked about MCR or LCR issues.
- # Some SHs wanted to know how RSM differed from other activities the Corps conducts.
- # Some SHs wondered how the RSM was defined geographically (e.g., why does it not extend further upriver).

##### **Q. 1 Comments**

Many of the stakeholders heard something about the RSM Demonstration Initiative, either from the introductory letters that we had sent them, or from mention at meetings they had attended. Very few expressed great familiarity with the effort, however.

Several of the SHs commented that they knew about RSM because of the USACE's involvement in the Benson Beach project. SHs most familiar with RSM were generally from government agencies. SHs least familiar with RSM were generally affiliated with local community groups and NGO's.

**Question 2. *Which issues are important to developing a regional sediment***

**management strategy for the Lower Columbia?**

**Q. 2 Summary Points**

Stakeholders devoted considerable time and comment to this question. While the list of issues may seem long, the issues correspond to one of three dimensions of the “Progress Triangle” that has been discussed earlier (Daniels & Walker, 2001): substance, procedure, and relationship. Some of the issues are presented here as questions because that is the way in which stakeholders presented them.

***Substantive Issues include:***

- # Channel improvement or deepening
- # Sediment disposal: Sand should be placed carefully so as to help halt erosion, but so as not to disturb habitat or cause dangerous wave amplification)
- # Sand management; sediment use: quantity, quality, moving it
- # Benson Beach
- # Crab fisheries, crab studies, habitat
- # Marine safety
- # Beach and jetty erosion
- # Protection of local economies
- # Shoreline protection
- # Salmon (including spawning habitat)
- # Tidal flats
- # Tern management
- # Tourism
- # Needs of the small ports
- # Restoration
- # Navigation
- # Geomorphology
- # Protection of the environment, including threatened and endangered species

***Procedural Issues include:***

- # Agencies send different messages
- # Corps’ program authority is not clear
- # Some agencies are easier to work with than others

- # The least-cost alternative method should account for long-term, cumulative effects
- # Need to address scientific knowledge holes
- # Need to examine the connections between issues
- # Are Tribes/Indian Nations involved? They should be on a government-to-government basis.
- # How does RSM to the work of other government organizations (e.g., CREST)?
- # How does RSM relate to other MCR and LCR initiatives (e.g., Lower Columbia Solutions Group)?
- # What will RSM do? Is this another Corps activity so that it can do what it wants?
- # What is the decision space? What decisions come out of RSM?
- # Partnership opportunities need to be pursued.
- # Time: How long will RSM take?
- # What will RSM produce?
- # What will RSM efforts cost and who pays?
- # RSM needs to incorporate a long term vision of sustainability

***Relationship Issues include:***

- # Trust is important, and lacking
- # Corps favors the big ports
- # Agencies contradict each other
- # Congressional delegation needs to be involved
- # Coastal communities’ needs ignored
- # Benson Beach: Locals worked together but the goal was not achieved
- # Corps needs to be a partner rather than the central authority or leader

**Q. 2 Comments**

This question seemed to elicit the same or similar responses to those of questions three and five, all of which encouraged respondents to focus on specific issues surrounding sediment management.



Respondents who differentiated between questions two and three tended to list all of the general concerns surrounding RSM they could think of for the second question and then narrowed their scope to give specific details about their own concerns for question three. Many respondents did not give separate answers for these two questions, however.

Several people mentioned the decision-making process as an important RSM issue, expressing concern about possible conflict due to personalities, positions, history, and limited trust. Respondents with commercial interests were concerned about erosion, sediment disposal sites, and the crabbing industry. Some respondents mentioned the need for erosion and habitat studies, and for dissemination of information resulting from those studies.

Government agency respondents voiced strong concerns about the beneficial placement of dredge materials, halting beach erosion, maritime safety and navigation, maintaining open shipping channels in the Columbia River, long-range planning, and meeting environmental standards. Some also mentioned the fishing and crabbing industries, as well as project sustainability and environmental protection.

Respondents associated with local community groups and NGO's emphasized the protection of natural resources and minimizing environmental impacts. Many also mentioned the need for maritime safety and navigation, as well as supporting local economies. Some talked about erosion, beneficial sediment disposal, crab and salmon habitat, and the fact that MCR estuaries are filling up.

**Question 3. *What are your concerns about these issues and about regional sediment management?***

### **Q. 3 Summary Points**

- # RSM needs to be clearly defined and distinguished from other initiatives
- # Role of the Corps needs to be clear
- # Some people will always oppose channel deepening
- # Agencies sometimes send contradictory messages
- # Why should SHs get involved? What's in it for them?
- # Corps needs to work better with coastal communities. Will RSM promote that?
- # Ecological impacts of RSM
- # Need better communication
- # What are other RSMs doing?

### **Q. 3. Comments**

Responses to question three were very similar to question two, or were sometimes absent entirely. In addition to the summary points noted above, some respondents expressed concerns about proper beach nourishment, the sustainability of local communities and their economies, the need for a long-term view, and cost issues.

**Question 4. *What obstacles might stand in the way of developing a regional sediment management strategy for the Lower Columbia and the mouth of the river?***

### **Q. 4. Summary Points**

- # Unclear purpose
- # Unclear decision space
- # Agency rigidity
- # Lack of trust
- # Funding
- # Skepticism, cynicism
- # History
- # Insufficient data and knowledge

### **Q. 4 Comments**

Funding and cost issues came up as the most frequent response among all groups to this question. Many respondents cited stakeholder polarization as a major obstacle to developing a collaborative RSM strategy for the MCR. Some respondents thought

that a lack of scientific studies and/or knowledge would limit progress. Many respondents commented on agency talked about agency rigidity (particularly the USACE), often voicing a perception about the Corps' traditionally non-inclusive decision-making processes.

Some respondents, particularly from agencies, felt that stakeholder perceptions of agencies and stakeholder resistance to agency projects could become an obstacle to RSM. Some noted that conflicts within groups and communities could be a detriment. A few noted differences in goals and views of the big and small ports. Some respondents thought that the USACE was too driven by projects with commercial benefits. Other respondents expressed concern about where the money would come from for this project. Some referred to the rigidity of the USACE, industry, and other stakeholders. Some respondents were frustrated that a few stakeholders make assumptions about sediment without consulting scientific studies.

Some consultants cited USACE's least-cost rather than long-term approach to problems as an obstacle, and like other groups, felt that funding, lack of knowledge about the subject, and the rigid polarization of some stakeholders could impede the process. One consultant said that the fact that there is less sand in the river than previously could also prove problematic.

Both government agencies and government representatives overwhelmingly responded that cost would be this project's greatest obstacle. Government agency respondents also highly ranked USACE limitations and lack of studies and general knowledge about key RSM issues (such as sediment movement's effects on crab and salmon habitat).

While the NGO group had the most negative comments about the USACE's sincerity and commitment, their largest response to this question was stakeholder

polarization. Many people felt that too many conflicting views would impede this process. They also talked about the difficulty of deciding where sediment placement would be the most beneficial, funding, and scientific disagreements. One respondent said that the EPA's ability to override USACE decisions would make it difficult to reach an executable decision. The tribal respondent talked about knowledge gaps in response to this question.

**Question 5. *Do you see any connections between the development of a regional sediment management strategy and other Lower Columbia River issues?***

**Q 5. Summary Points**

- # Many people could not answer this question because they did not know enough about RSM.
- # Some SHs turned this question back on the questioner. They asked:
  - How will RSM connect or relate?
  - Will RSM be more comprehensive?
  - Will RSM be consistent?

**Q. 5 Comments**

Many respondents did not discuss this question independently; they either had no response, or felt that they had already covered it in questions two or three. One concern often expressed dealt with the interconnectedness of the entire watershed, up-river actions and concerns, and the potential loss of small ports.

Other connections that a few respondents (not necessarily the same few) noted were the crabbing industry impacts and other RSM/MCR issues. Some people connected protecting small ports, fisheries, and coordinating sand control and erosion control efforts. Others associated all Columbia River interests with water flow and water quality issues. Some respondents focused on up-river concerns including dams, sediment flow, and endangered species protection (both land

and water species affected by the river). In contrast, other participants talked about the connection between RSM and economic development and navigation, including barges.

**Question 6. *Who are the important stakeholders (organizations, businesses, agencies, individuals) who should be involved in this regional sediment management demonstration project effort?***

#### **Q. 6 Summary Points**

A long list...frequently mentioned were:

- # The urban Ports
- # The small Ports
- # CREST
- # Working groups, advisory groups (e.g., parties in the Lower Columbia Solutions Group)
- # Federal agencies
- # State agencies
- # Fishing interests (e.g., crabbers)
- # Elected officials
- # Commercial interests
- # Advocacy groups

#### **Q 6. Comments**

Some people identified general groups in response to question six (e.g., crab fishers, county officials, port authorities, local business groups, etc.). Some referred to CREST as good bridge builders out on the coast. Many respondents answered question six in the same way they responded to question eleven: with names of specific parties.

**Question 7. *What relationship does the USACE have with major stakeholders?***

#### **Q. 7 Summary Points**

- # The USACE needs to build trust
- # The Corps needs to communicate well with stakeholders and communities
- # Corps works well with the large ports

- # Corps has a good relationship with other agencies, both federal and state
- # Corps relationship with some small ports and coastal communities could be a lot better
- # Sometimes legal action is needed to get the Corps' attention
- # Corps has some really good people...relationships are more with Corps people than with the Corps
- # Commander mobility/rotation thwarts good relationships.

#### **Q. 7 Comments**

A lot of respondents commented on the matter of trust with the USACE. Though many respondents noted that they had a good relationship with the Corps (most often defined as a relationship with specific Corps personnel), they said that the USACE would have to work on building both trust and communication with communities involved in RSM for this project to have success. Respondents from all groups also urged the USACE to improve communication between the Seattle and Portland districts, and with other government agencies (such as the EPA). Stakeholders who stated that they have had poor relations with the USACE also observed that the relationship was improving, and they hoped the RSM project would demonstrate the USACE's sincerity to be more collaborative and work with stakeholders. However, others had very bad experiences with the USACE, or with USACE individuals, and doubted its ability to change.

Some stakeholders commented that the USACE has very good relations with the ports. Several respondents said that the USACE has very poor relations with other government agencies. They reported a history of distrust. A small number of respondents said that the USACE is perceived as both authoritarian and as having suspicious motives.

Government agency personnel voiced mixed feelings about the USACE. Many government agency respondents said that they had a good working relationship with USACE staff on a personal level, but others said that USACE has its own agenda, doesn't listen, is tough to deal with, and is not receptive to research. Respondents reported both the USACE's bureaucratic and its militaristic orientation as impediments to establishing good relationships with stakeholders.

Non-government respondents reported the most dissatisfaction and frustration with the USACE. Not surprisingly, they claimed that stakeholders don't trust the USACE. While some respondents in this group said they had very good relations with the USACE, others asserted that the USACE is heavy-handed, above the law, slow, unresponsive, uncommunicative, uncooperative, and traditionally shows no commitment to the environment. Many people from this group remarked that the USACE presents projects to stakeholders with its mind already made up about its course of action, and does not listen to their suggestions.

**Question 8. *Where Lower Columbia River Issues are concerned, how is the USACE perceived?***

#### **Q. 8 Summary Points**

- # Corps doesn't care about the coastal communities
- # Corps does not care about non-technical issues, or issues beyond its program authority (e.g., community economic viability, tourism)
- # Corps responds most to the needs of the big ports
- # Corps cares about commercial/industrial river activity
- # Corps wants to deepen the channel above all else
- # Corps has good personnel...good technical expertise

#### **Q. 8 Comments**

Many people answered this question in the same way they answered question seven, or they condensed the two questions. Quite a few respondents said that the USACE is seen as untrustworthy, uncommunicative, and uncooperative concerning Lower River Columbia issues. Even some who stated that they have a good working relationship with the Corps observed that the USACE is often perceived as inflexible, authoritarian, unfriendly, and suspiciously motivated. They said that the USACE is seen as a proponent of deepening, and favors urban areas. Although some respondents asserted that stakeholders resist USACE projects because the agency is harsh, rigid, and doesn't listen to feedback, a few were optimistic that the Corps' relationship with stakeholders is improving based on better communication.

**Question 9. *As part of the RSM demonstration project, we are tentatively planning on holding five or six community workshops on regional sediment management issues. What advice or concerns do you have about the regional sediment management workshops that will take place in late fall and early winter?***

#### **Q. 9 Summary Points**

- # The reason for meetings should be clear
- # What will these meetings produce?
- # What's in it for SHs?
- # Involve many and diverse SHs
- # Meet on the coast
- # Not just weekday meetings in Portland
- # Get Corps people to participate and not stand at the back of the room
- # Communicate effectively; listen
- # Need impartial facilitation
- # Include public hearings (some people like them)

#### **Q. 9 Comments**

This question generated a lot of comments. Almost every respondent seemed eager to offer suggestions about how the RSM initiative could succeed (even though many did not fully understand RSM and were skeptical). Comments generally emphasized involving as many stakeholders as possible, communicating openly with stakeholders about the RSM purpose and agenda, and about USACE limitations or constraints. Respondents hope that Corps personnel will really listen to what people had to say and will incorporate their suggestions into the planning process and products. Several respondents advocated addressing local needs, utilizing local knowledge, as well as informing stakeholders of scientific studies and information.

Many respondents strongly recommended having meetings at convenient times in neutral places, though no consensus emerged on when that should be (whether afternoon or evening, weekend or weekday). Some wanted short, interesting meetings, using local resources, and addressing USACE limitations. Several respondents stated that information and issues should be personalized, and that locals should be able to receive training on technical issues. Others recommended creating coastal community partnerships, and instituting small projects that everyone can get behind. Many people were concerned that the purpose of the meetings specifically and RSM generally be clear and communicated well. A lot of respondents across groups recommended the use of facilitators. Respondents from non-government groups overwhelmingly suggested building trust (in part by starting with small projects that involve local people), communicating all relevant information to stakeholders, setting clear goals, and getting locals involved.

**Question 10. *What are things that you think we (the consultants) should know about the current situation as we begin to work with the USACE?***

#### **Q.10 Summary Points**

- # Been through this before
- # Too many meetings, too much talking, nothing gets done, or the decision has already been made
- # Trust is a big issue
- # Maintain independence to gain credibility
- # Continue the conversations
- # The Corps should not drag RSM out
- # How will the results of these conversations be reported?

#### **Q. 10 Comments**

In response to this question, many respondents cautioned bureaucratic and regimented nature of the USACE, stating that it would take a long time to get anything done. Some people said that the key is talking to the right people within the USACE, and understanding that it is very compartmentalized organization. Some respondents observed that the RSM effort has to overcome the USACE's poor reputation among stakeholders and the USACE bureaucracy.

Many agency respondents stated that the USACE is under-funded. They suggested talking to upper-management, being open-minded, and being wary of the USACE's political motivations. They also warned that legal battles may slow down the RSM process. The consultants were encouraged to talk to people with the authority to make decisions. Some agency respondents remarked that the USACE is very knowledgeable, and focuses well on the issue at hand.

Non-government respondents were generally less optimistic about working with the USACE. They suggested talking to the right people, including those not motivated by politics, and warned that commander mobility and compartmentalization may make it difficult to implement plans.

**Question 11. Are there any people, organizations, or groups that you recommend we talk with as part of this interview process?**

**Q. 11 Summary Points**

- # A long list; many names of organizations and people
- # Conversations should continue
- # Listen to more than just the Corps

**5.2. General Observations; Central Themes**

A number of themes emerged from reading the conversations notes. These themes are summarized below. Some of the narrative repeats points made during the discussion of specific questions. One of the student reviewer's analysis is featured here, integrated with the author's assessment.

**Concerns about RSM.** Many of the respondents either had not heard of the RSM demonstration project, or had limited knowledge of it. Much confusion was evident concerning the issue of dredging and how RSM was larger than this issue. A number of stakeholders wondered if this was *just another Corps project* and an attempt to utilize a new process as a *justification for dredging*. Related to that theme was the fear that many people were *already burned out* and the stakeholder involvement process and structure of the process therefore needed to stand out from attempts that mottled a suspect history. On top of this history of past project difficulties many respondents projected a fundamental concern that the geographical scope of the project conflicted with any effort to take a holistic ecosystem management approach because many influences existed much further upstream than Mile Post 7.

**Opportunities for RSM.** Aside from the concern over geographic boundary limitations, many participants did embrace the idea that the RSM could be a successful attempt for the USACE to develop a new

management approach that was more holistic and not just focused on dredging. Some respondents stressed the fact that past conflicts had moved all players into a box or defensive position and a different management approach and stakeholder involvement approach could allow participants to *move out of their box*. This movement could *improve relationships* between many players, could *reduce bureaucratic inefficiencies* that would funnel more project and mitigation dollars to the ground, and allow for the mutual discovery and implementation of many solutions. This holism could also allow the Corps to move beyond a least cost pricing scenario to costing that included more factors.

**Call for Action.** Many respondents referred to a long history of major impacts on the landscape and the concern that these consequences are soon coming due. A few SHs specifically referenced the problems in the Chesapeake Bay and mused that the RSM could serve not only as a *vehicle for continuing and implementing scientific research* (i.e. testing theories on a larger spatial scale), but could also serve as *proactive action to avoid ecosystem failure* and the enormous price tag that comes with massive restoration attempts at that time.

**Trust.** Trust was an issue for many. Common themes of polarized participants, strained relationships, burnout, and people working from their worst-case scenarios often boil down to the issue of trust. Many respondents were concerned that little trust existed between many parties, but the idea of the RSM as a new project did have the potential to build trust.

**Improve Likelihood of Success through Management Projects, Clear Decision Space, and Transparent Procedure.** One of the ways the RSM could build trust and become successful was to start small and build momentum through a series of accomplishments. Even if those accomplishments were considered small,

the positive effect could be large. At the same time there is an *inherent tension* in the RSM to not only build success through small projects but to simultaneously build a large scale holistic approach. Different respondents identified a variety of variables that together could build a successful RSM project that incorporates this tension:

- # Think through what a successful RSM looks like
- # Come to meetings prepared to articulate this vision in a way that seems inclusive and provides participants a way to envision their participation (i.e. be structured but not too rigid and heavy handed)
- # Determine what the objective is
- # Determine what agency is responsible for what action or resource
- # Determine under what legislative authority the project is operating
- # Determine who has decision making authority
- # Clarify the decision space
- # Communicate clearly to SHs where their ideas and actions matter
- # The Corps needs to articulate what they want out of the process to alleviate concerns

### 5.3. Some Sample Statements from the Conversations

As part of the analysis of the conversations, one of the student reviewers compiled a set of representative statements:

- # *"'Regional' is larger than government project boundaries. We need to have a regional approach broader than one project by looking at the thing with a holistic approach."* [conversation #57].
- # *"[I am] intrigued to see how two groups, black vs. white, can make improvement that's not just grey."* [conversation #32]

- # *"If this [process] is perceived as a facade, people won't participate."* [conversation #59]
- # *"Sometimes public testimony scares away people."* [conversations #63 - 64]
- # *"Good faith efforts like these [RSM activities] show credibility."* [conversations #56]
- # *"When it comes to doing things, the Army Corps tend to develop something and then present it to stakeholders saying, 'here's what we're going to do.'" [conversation #19]*
- # *"USACE has expert knowledge."* [conversation #67 - 68]

### 6. The Stakeholder Training Workshops: Ideas about RSM Stakeholder Involvement

In addition to stakeholder conversations, the RSM-CL Stakeholder Involvement effort included Collaborative Learning training. As part of the training component, citizens/stakeholders were invited to participate in a one-day Collaborative Learning training workshop. Two identical workshops were held, on inland and one on the Southwest Washington coast. About 35 people participated in one of the training days.

As part of the CL training, participants were asked to voice concerns and/or improvements regarding the RSM stakeholder involvement process. Via a worksheet, training workshop participants were asked "what are your concerns about the RSM stakeholder involvement process?", and "how can the RSM stakeholder process be improved?" Key responses are presented below. Some of these have been reported in Walker, Senecah, and Daniels (2006).

### **Concerns**

- # Honesty is essential
- # All parties must commit to the process
- # Need to include the political actors, e.g., legislators
- # What is the product? A process is no good without a product
- # Be clear about the ultimate goal
- # Encourage innovation but balance with realism
- # Safeguard against a stakeholder who comes in at the last minute and disrupts the process
- # USACE staff need to participate rather than stand at the back of the room
- # What/who is a stakeholder? This needs to be defined
- # Business and industry need to be valued
- # What are the boundaries of the process?
- # What are the criteria for success?
- # People need to see direct results of their time and efforts
- # Be inclusive
- # Foster and maintain good communication

### **Improvements**

- # Issues should be clearly framed
- # Use the best science
- # Sessions should be recorded
- # Decision must be defined early and clearly
- # Establish issues; set a substantive agenda
- # Provide necessary technical information
- # Include a broad and diverse set of stakeholders
- # Include the Tribes
- # Develop a framework for stakeholder interaction and get them all together
- # Organize a technical committee
- # Create a glossary
- # Publish a newsletter and develop a website

- # Present early and clear any “givens” or “sideboards”
- # Include upriver stakeholders
- # Build trust
- # Bring in partners
- # Develop a shared problem statement
- # Develop clear objectives and principles
- # Follow the training sessions and community workshops with a formal “agreement to collaborate.”
- # Get media coverage
- # Increase the RSM geographic area

As these ideas indicated, citizens wanted RSM clearly defined, both in substance and in procedure. Of all these points, the need for clear decision space was voiced most often. Citizens indicated that, while they saw potential in the RSM effort, they wanted to know where their ideas may matter and what decisions will emerge. As one training workshop participant and prominent stakeholder wrote:

Overall, I believe that the [RSM-CL] process has great potential of breaking through the lack of trust barrier—if the key parties commit to the process . . . [It] will help break the logjam and provide solutions not previously understood or addressed. [It must be] a very inclusive process that is facilitated.

## **7. Analyzing Collaborative Potential**

In light of the conversations and the stakeholder CL training workshops, the RSM-CL project included assessment of collaborative potential. This assessment included an evaluation of the appropriateness of a pluralistic, multi-stakeholder participation strategy.

**Collaboration and Substance Elements.**  
RSM stakeholders asked a lot of questions



about the purpose of the RSM effort. They wanted to know what the purpose and objectives of the RSM effort and what it could produce. They urged the USACE to be clear about the ultimate goal of RSM. They voiced concerns about the boundaries of the RSM effort and the criteria for measuring success (also a procedural element).

The RSM stakeholders generated a comprehensive list of issues, most important of which involved dredging. Some stakeholders revisited the controversy over sand management and Benson Beach.

**Collaboration and Relationship Factors.** Stakeholders consistently raised issues of trust, particularly trust in the U.S. Army Corps of Engineers. There were also tensions expressed between the small parts and the large ports, the crab fishers and the USACE, and environmental organizations and the large ports. Some stakeholders expressed skepticism about the process, believing that TSM was one more example of the USACE working with the large ports at the expense of the aquatic ecosystem. Stakeholders urged that USACE personnel be actively involved in the RSM effort as participants at the table rather than “back of the room” observers.

**Collaboration and Procedural Variables.** Stakeholders recommended that the nature of the RSM task and the RSM decision factors be determined and clarified early. They emphasized that the decision space needed to be clear and substantial. A number of stakeholders recalled their history with the U.S. Army Corps of Engineers and urged that the USACE demonstrate that the RSM project would not be “business as usual.”

Furthermore, stakeholders wanted jurisdictional clarity. They voiced frustration that federal and state agencies’ Columbia River efforts were not coordinated.

Consequently, stakeholders wanted assurance that the relevant government agencies would work together and communicate coherent policies to stakeholders.

## **8. Conclusion - Meaningful Collaborative Potential?**

Within the lead agency, although a number of USACE personnel were excited about working collaboratively with stakeholders to develop a regional sediment management strategy, some Corps staff members were not. Similarly, while many stakeholders welcomed the opportunity to collaborate with the Corps on RSM issues and activities, skepticism endured. A two-day Collaborative Learning training for Corps staff and one-day training workshops for stakeholders were not by themselves sufficient to overcome structural constraints, procedural history, and trained incapacities. Stakeholders stated that the various parties would have to consistently demonstrate their commitment to a pluralistic and collaborative effort.

Stakeholders recognized the complexity of the RSM situation. They acknowledged the diverse array of stakeholders who cared about Columbia River issues. Although they articulated concerns about the U.S. Army Corps of Engineers’ commitment to collaboration, many stakeholders were willing to give the RSM project (and process) the opportunity to succeed as a pluralistic, inclusive, and transparent, and productive endeavor. Stakeholders emphasized that communication about clear and substantial decision space was essential; this should not be a dictated, top-down process (Walker, 2004).

The author and the key members of the Stakeholder Involvement Team (the senior colleague and two student reviewers) concluded individually and collectively that the situation had substantial potential for productive collaboration among

stakeholders. In light of the long list of substantive issues and the range of interested and involved parties, many stakeholders saw the RSM project as an innovative opportunity for managing the Mouth of the Columbia in a systemic and sustainable manner. When presented with their comments within the framework of the “progress triangle,” stakeholders, both within the USACE and the RSM community at large, stated that progress on relationship and procedure dimensions was essential. In building constructive stakeholder relationships and clarifying procedural boundaries and opportunities, a strong foundation could be constructed for building a sound RSM policy.

## **9. A Postscript**

In 2009 the regional sediment management work at the mouth of the Columbia River continues. The RSM effort is led by the Lower Columbia Solutions Group (LCSG), a multi-stakeholder coalition initiated in 2002 by the Governors of Oregon and Washington. As its website reports:

The Lower Columbia Solutions Group is a bi-state partnership convened in 2002 by the governors of Oregon and Washington as a forum for nearly 30 local, state and federal stakeholders to raise issues, collaborate on policy, and develop solutions for sediment management in the lower Columbia River. The LCSG includes representatives from local, state and federal government, crabbing and fishing interests, coastal communities and conservation groups, and serves as the key bi-state clearinghouse to coordinate policy, projects and research related to dredge material disposal and sediment management on the lower

Columbia River. The LCSG's work integrates economic, social and environmental objectives. (Lower Columbia Solutions Group, 2009)

LCSG members were participants in 2003 Collaborative Learning training events for stakeholders. The stakeholder conversations list included LCSG members. Additionally, some LCSG members participated in a 2004 RSM workshop which the author designed and directed. According to the LCSG website:

In January 2008, the LCSG signed a Declaration of Cooperation to initiate work on a Regional Sediment Management Plan (RSMP) for the lower Columbia River to maximize regional benefits (economic, social and environmental) and reduce regional costs associated with dredging activities...The goal of regional sediment management is to make sure that project decisions are made within the context of a regional plan that maximizes regional benefits (economic, social and environmental) and reduces regional cost. (Lower Columbia Solutions Group, 2009)

The regional sediment management effort in its current form emphasizes collaborative interaction among Mouth of the Columbia River stakeholders. In doing so, it focuses on substantive progress developed through clear, well-supported procedures. Through substantive progress and procedural clarity, perhaps relationship factors such as trust have improved.

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## **The Role of Environmental Communication in Shaping Remedy at America's Largest Superfund Site**

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### **Introduction**

Grassroots environmental activism is crucial in shaping remedy (i.e. cleanup) at U.S. Environmental Protection Agency (EPA) Superfund sites. This study examines the role of grassroots groups at an Operable Unit (i.e. individual site) within a large megasite and focuses on two questions: (1) How effective has EPA policy been in promoting meaningful citizen participation; and (2) What communication strategies used by grassroots citizens groups are most effective?

The Upper Clark Fork River Basin in western Montana is America's largest Superfund Megasite. Mining and smelting over the past century contaminated residential areas and natural resources with arsenic and heavy metals. Currently, the price tag for cleanup – including the cost of remedies currently being implemented – will exceed \$1 billion by a wide margin. Since 1983, when Superfund sites were first listed, the area has become a laboratory for applied environmental communication.

The map in Figure 1 shows the geographic extent of this complex of Superfund sites (i.e. megasite) in the Upper Clark Fork River Basin. Three major contiguous Superfund sites, each with several Operable Units, extend from the headwaters of the river near the Continental Divide in Butte and Anaconda 150 miles downstream to Milltown Dam just upstream of Missoula.

With its inception in 1980, Superfund was envisioned as a linear technocratic policy that would quickly and efficiently clean up

hazardous sites. This soon changed, and the EPA's ability to black box a solution and impose it as *fait accompli* largely ended in the 1980s (Jasanoff, 1992). Citizens affected by Superfund actions wanted to be informed about risk and play a role in shaping remedy. Toward this end, the EPA implemented several strategies: the agency hosted local public meetings to present information and encourage comment; it funded citizen groups that contract their own technical experts, communicate with the broader public, and develop positions on various options; and it accepted invitations from local governments and grassroots organizations to participate in public forums.

Agency emphasis on "promoting meaningful citizen participation in the decisions affecting [Superfund] sites" began in 1986 when the Superfund Amendments and Reauthorization Acts required the agency to "seek increased public information, comment, and participation in decisions at these sites." This movement began with the creation of Technical Assistance Grants to provide citizen's groups with technical consultants and to fund public education/outreach. It culminated in the 1998 publication of a handbook designed to guide Superfund Regional Site Teams through this process (SFAA, 2005; U.S. EPA, 2002; Teske, 2000).

Despite the agency's official encouragement of public input in the Superfund process, the process has not always achieved transparency and allegations of bias are frequent (Bryant and Mohai, 1992; Camacho, 1998). In the project area some

of these allegations involve issues of undue corporate influence, as when a less protective remedy is chosen over alternative remedies. Typically, a more protective remedy requires a more thorough level of clean-up, and is thus more costly. For example, the EPA initially agreed with the responsible party's proposed alternative remedy for the Silver Bow Creek stream side tailings Operable Unit—a remedy costing tens of millions of dollars less than the \$80 million remedy eventually selected by the EPA. The major difference in cost stemmed from the responsible party's proposal to treat mine tailings in place rather than to remove them from the creek's flood plain. In this case, the power of several grassroots groups allied with state government resulted in a network that helped move the federal agency well beyond its initial \$24 to \$46 million "preferred remedy" (U.S. EPA 1996; U.S. EPA 2002).

### **Historical Overview**

Over the past century, mining and smelting operations of the Anaconda Copper Mining Corporation polluted the Clark Fork River watershed at the headwaters of the Columbia River. This area takes in the cities of Butte, Anaconda, and Missoula. Between the upstream city of Butte and the downstream city of Missoula lies the rural and agricultural Deer Lodge Valley. By the 1970s, local citizens and agency personnel were increasingly concerned over the toxic effects of arsenic and heavy metals on environment and human health. Most of the waste was created by the Anaconda Copper Mining Corporation (ACM), which merged with the Atlantic Richfield Corporation (Arco; now Arco-BP) in 1977. Shortly thereafter, in 1983, Arco ceased mining and smelting operations in the Butte-Anaconda area.

For more than a century, the Anaconda Copper Mining company mined ore from Butte and smelted it in nearby Anaconda. During this time, the Anaconda smelter released up to 40 tons per day of arsenic,

1,700 tons per day of sulfur, and great quantities of lead and other heavy metals into the air (MacMillan, 2000). In Butte, mine tailings were dumped directly into Silver Bow Creek, creating a 150-mile plume of pollution extending down the valley to Milltown Dam on the Clark Fork River just upstream of Missoula. Air and water borne pollution poisoned livestock and agricultural soils throughout the Deer Lodge Valley. Though the farmers sought damages in a series of lawsuits between 1905 and 1924, the company prevailed in every case, arguing, "We have a perfect right to carry on legitimate business, and if incidentally we should pollute the atmosphere nobody has the right to complain..." (MacMillan, p. 106).

Following expensive hazardous waste site clean-ups such as Love Canal in the 1970s, Americans formulated and instituted a "polluter pays" principle for environmental pollution. This movement culminated in passage of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (i.e. Superfund). Soon thereafter the EPA began keeping a National Priorities List of sites. The Superfund process came to the Upper Clark Fork River Basin in 1983 with listings for three sites: Anaconda Smelter-Community Soils (300 square miles); Stream Side Tailings (26-mile long Silver Bow Creek near Butte); and Milltown Reservoir (2.6 million cubic yards of contaminated sediments). Many more sites were added after 1983.

The geographical extent and complexity of the Upper Clark Fork River Basin complex of Superfund sites make it an ideal case study in applied environmental communication. The three major cities of Butte, Anaconda, and Missoula have very different cultures although they share similar environmental problems. The cultural differences have led to distinct grassroots groups employing varying communication strategies.

After more than a decade and about \$700 million spent on data collection, remedial investigations, and emergency actions, the Superfund process is now drawing to a close. Closure (i.e. a Record Of Decision, or ROD) has been achieved for all 6 sites that are central to this study. The EPA finalized its RODs for the Berkeley Pit and Anaconda in 1984, Silver Bow Creek in 1995, Milltown Dam and the Clark Fork River in 2004, and Butte in 2007. With a ROD the process of social negotiation and public participation largely ends, and the agency institutes a remedy (i.e. cleanup).

Along with increasing scientific complexity and uncertainty in the Superfund remedy process, there has also been an increasing demand for public participation. This demand stemmed both from social movements that began with the environmentalism of the 1970s (Ashford and Rest, 1999; Brulle, 1996; Dunlap and Mertig, 1991; Gibbs, 1998) and from academics promoting public participation through risk communication (Cranor, 1993; Hiskes, 1998; Krinsky and Plough, 1988; Mayo and Hollander, 1991). When the public engages in the social construction of a remedy, it increases the difficulties faced by site managers and the agency in designing remedy. Despite the increased complexity, however, there are indications that public involvement produces remedies that are “better” in both a technical and political sense (Cole, 1992; Laurian, 2004; Novotny, 2000).

### **Previous Studies**

There have been few studies of citizen participation and environmental communication in the Superfund process. One such study compared groups funded by Technical Assistance Grants at two sites. At a small site in Florida citizens felt marginalized by the process, their concerns were largely ignored, and their efforts had little effect on the remedy. On the other hand, at a large site in Washington citizens felt empowered, their concerns were taken

up by the agency, and their efforts played a major role in shaping the final remedy. The study concluded that EPA site managers have great flexibility in integrating citizens’ concerns and “the final, cold, statutory reality [is] that the EPA at any given Superfund site can make decisions more or less unilaterally.” That said, the author also cautioned that the two communities differed greatly, the larger site mobilized far more citizens, and we should not hastily accept overly simple conclusions (Teske, 2000). Clearly, more such studies are needed—and we especially need studies that view the public as active agent (and not as passive object) in negotiating and socially constructing remedy. In this sense, democratic participation is more than people expressing their opinions; it is citizens and groups advocating for remedies grounded in the semiotics of technoscience.

The federal government funded a study of a Superfund megasite in the Coeur D’alene River Basin. Like the Upper Clark Fork River Basin complex of sites, the Coeur D’alene site was created by a long history of mining. Though this 382-page study admirably addressed the challenges to Superfund policy and agency planning in cleaning up a large and complex site, it is a rather narrow technocratic study. That is, it focused on remedy as determined by the agency and technical experts. It did not address the role of citizens, grassroots organizations, or local culture in shaping remedies through environmental communication (National Research Council, 2005). Clearly, Superfund is in serious need of studies from the perspective of environmental communication.

### **Methods & Procedures**

This study draws on Actor Network Theory (Latour, 1987, 2005; Callon, 1986; Castree and MacMillan, 2001) as a tool for explaining the relative effectiveness of communication strategies used by grassroots groups in shaping Superfund decisions. Particular grassroots groups



emerged as major actors because of their ability to control discourse and gain power by linking with one another and amplifying each other's message. The development of this network transformed environmental communication and greatly augmented these groups' ability to shape Superfund remedy in the Upper Clark Fork River Basin. As the region moves from postindustrial Superfund remedy to what is being called "the restoration economy," these groups are proving to have a durable and adaptable influence on the region's culture.

The chief artifact to be explained is the Record of Decision (ROD), which is a point of closure in the social construction of a technoscientific Superfund remedy. In Actor Network Theory, this point of closure functions as an Obligatory Passage Point. The process of developing a remedy involves a wide range of stakeholders including agency scientists, the affected public, and the legally liable corporation. The ROD is *the* major opportunity for citizen participation.

Drawing on public comment data, the Actor-Network Analysis consists of a 4-step translation analysis. In Step 1, shared problems emerge, actors recruit delegates, and obligatory passage points (such as public meetings and letters of comment) are defined. In Step 2, grass roots organizations and other actors stake out particular issues and build constituencies. In Step 3, actors enroll other actors (including entities such as vegetation test plots and stream channels) that accept or conform to their roles in varying degrees. In Step 4, actors mobilize their support and achieve power by shaping the process in significant ways (Callon, 1986).

This Superfund case study lends itself well to a test and refinement of the ANT technique of translation for understanding environmental communication. Early on in the ROD process for each site, a group of actors will agree on a common definition of

a solution for the problem. It is then a matter for the lead actor to co-opt others in order to gain broader support for achieving the solution—i.e., for convincing the EPA to incorporate the solution in the agency ROD.

A key issue to be explained is the quality of citizen participation in the Superfund process. At times, public participation has been largely a *pro forma* cog in the procedural machinery of a regulatory bureaucracy. At other times, it has been a process of civic engagement in which shared local values helped shape the common good. In this "highly complex machinery of checks and balances" (Kemmis, 1990), underrepresented groups were sometimes held up like a sort of hand puppet, with various groups (corporations, agencies, and environmental organizations) attempting to speak for these underrepresented populations. This process of objectifying others is what Donna Haraway calls a "political semiotics of representation" (Haraway, 1992), with various groups/actors acting as a ventriloquist and speaking on others' behalf. Actors in the Clark Fork Superfund network were not always easily co-opted in this way. For example, the responsible party took out newspaper ads and created a website claiming that on the Clark Fork River "the EPA preferred alternative conflicts with landowner interests" (Arco). In comment at public meetings hosted by the TAG group, however, landowners disagreed with the way Arco had translated their interests. In situations such as this, ANT can help clarify the process by which grassroots public advocacy and other semiotic processes shaped environmental communication and Superfund outcomes.

### **Cleaning it Up: The Role of Culture, Community, and Values in Effective Environmental Communication**

Superfund remedy and restoration on the Silver Bow Creek Superfund site near Butte, an area the Environmental Protection Agency referred to as the Stream Side

Tailings Operable Unit, has been a tremendous success (NAEP, 2005). For a century the creek had been used as a free garbage dump for mining and smelting waste. When this pollution ceased in the 1970s, the creek had been classified as an industrial sewer and its floodplain was a toxic wasteland. The huge amounts of arsenic and heavy metals laden sediments that had been deposited meant that natural recovery could take thousands of years (see Figures 2 and 3).

Cleanup began in 1999, following the EPA Record of Decision in 1995, a revised ROD in 1998, and the state of Montana's settlement with Arco for natural resource damages in 1999. A total of 80 million dollars was allocated to cleanup approximately 26 miles of stream. Less than 10 years after cleanup began, native fish were recolonizing Silver Bow Creek and the riparian zone was lush with vegetation (see Figure 4).

The cost of remedy was based on the need to:

- Remove approximately 3 million cubic yards of toxic material from the most highly contaminated 1,300 acres along the 26-mile stream corridor that ran through the 85 square mile site;
- Haul waste to the Opportunity Repository approximately 20 miles downstream of Butte; and
- Reconstruct the stream channel and plant vegetation so that it functions naturally—a goal that is called “authentic restoration.”

This was a huge engineering undertaking, and the largest stream restoration project to date in the U.S. (see Figures 5 and 6; Clewell, 2000; Higgs, 2003; CDM, 2005).

When the EPA completed the Remedial Investigation and Feasibility Study in 1994, grassroots citizens groups were concerned that the agency would choose a remedy

that was insufficiently protective of human and environmental health. In fact, when the agency proposed a number of alternatives in the process leading up to its Record of Decision in 1995, it was clearly leaning toward alternatives that were tens of millions of dollars cheaper than what was ultimately chosen. In the ROD, the agency chose a modified version of Alternative 5, a remedy with an estimated cost ranging from about 32 to 54 million dollars. Yet by the time Montana settled its lawsuit against Arco for natural damages in 1999, the preferred remedy was more protective than anything the EPA had proposed and had an estimated cost of 80 million dollars (see Figure 7; U.S. EPA, 1996; Montana NRDP, 2009)

How can the dramatic change in this selection of remedy be explained? In investigating this process, it was found that the environmental communication strategies of grassroots organizations were a key factor in explaining the ultimate choice of remedy.

The Superfund remedy selection process for a large, complicated site such as Silver Bow Creek is a painfully slow process. From 1982, when Silver Bow Creek was first listed as a Superfund site, to 1999, when remedy began, the process of public participation went through two major phases.

The first phase extended from 1982 to 1990. Environmental communication largely occurred through a simple sort of sender-receiver model, with the local newspaper – *The Montana Standard* – playing the traditional role of the fourth estate. Local reporters such as Rick Foote and Gerry O'Brien – both of whom later became editors of the paper – took an interest in local Superfund issues and ran frequent articles about it. The frequency of articles about Silver Bow Creek and the other local Superfund sites steadily increased from 60 to 100 in the early 1980s

to well over 200 per year by 1990 (Montana Standard, 1982-1990).

Much of this coverage was about the efforts of politicians to force the EPA to develop plans for cleaning up Silver Bow Creek and other sites. This was a difficult task during the Reagan era, when the agency was riddled by scandals such as the Anne Gorsuch (EPA Director) debacle, chronic underfunding, and Reagan's patently anti-environment/pro-industry stance (Short, 1989; Dunlap, 1992; Griscom, 2004; Lash et al, 1984; Landy et al, 1994).

Montana's U.S. Representative Pat Williams was especially active in pursuing EPA action on Silver Bow Creek. He harshly criticized the agency's initial budget of \$596,000 for fiscal year 1983 as "insufficient" and "unacceptable," and refused to accept the EPA's explanation that "there simply isn't enough money to go around." The state had requested more than \$1 million, but the EPA wanted to spend less by deferring studies of the creek's hydrogeology and impact on downstream fisheries. Williams wanted the full amount and feared that a temporary deferral would turn into permanent inaction. He emphasized the urgency and importance of the problem, "The [Silver Bow Creek] site poses problems to groundwater tables in Butte and downstream fisheries in the Clark Fork. Some scientists believe the contaminated water supply in Milltown may be a direct result of problems at silver Bow Creek 80 miles upstream" (Montana Standard, 1989). The Senate agreed with Williams' argument, and unanimously approved an amendment to release the full amount (Montana Standard, 1983b). Williams worked with U.S. Senator John Melcher, who was seeking emergency unemployment benefits for Butte and Anaconda as well as trying to get EPA to release the cleanup money. In a letter to EPA Director Ruckelshaus, Melcher wrote, "[I am] impatient with EPA foot dragging on its commitment to do cooperative remedial

investigations at the Silver Bow Creek Superfund site..." (Montana Standard, 1983c)

While this press coverage and political representation helped keep the public informed and resulted in the agency expenditures necessary to study the problem, these efforts did little to involve the public. It was what scholars such as Frances Moore Lappé (Lappé, 2005) call "thin democracy" or what Daniel Kemmis described as "a highly complex procedural machinery of checks and balances" designed to "keep citizens apart" and relatively disengaged from political decisions (Kemmis, 1990: pp. 12-13). The agency itself did little to communicate issue to the broader public, typically inviting only Arco, local government, and state representatives to its meetings (EPA 85, 1990). Typically, to find out about these meetings, legal wrangling between the agency and Arco, and other important processes, reporters for the local newspaper resorted to Freedom of Information Act requests (EPA 89, 1987).

The second phase of environmental communication began after 1989, when the EPA awarded a Technical Assistance Grant (TAG) to a group of citizen activists based in Butte, Montana, the city at the headwaters of Silver Bow Creek. TAGs were part of the 1986 reform of CERCLA, and were designed to strengthen the role of community members at Superfund sites and "ensure that people whose lives were affected by abandoned hazardous wastes would have a say in actions to clean them up." A TAG could be awarded to one group in each Superfund site, no matter how large the site or how many operable units there might be within it (U.S. EPA, u.d.). Butte-Silver Bow County government also tried to obtain the TAG, but as a government entity it was not eligible (EPA 81, 1987; EPA 83, 1988).

The Butte TAG called itself Citizens Technical Environmental Committee (CTEC) and was founded by Bill Macgregor, a professor of technical communication with a small, local engineering college. It took CTEC a few years to get on its feet. The group's members initially consisted primarily of engineering faculty, engineering consultants, and other technical experts (EPA 02, 1990). Meeting minutes and correspondence with the agency show that the group had excellent and perceptive technical discussions about issues such as the need for long term institutional controls to protect remedy, and it raised interesting questions and engaged in lengthy discussions with the agency about issues such as the need to take public comments seriously when developing remedies (EPA 16, 1992; EPA 19, 1992). The group was not, however, particularly effective in motivating the general public to take an interest in the issues or in changing the agency's decisions. This lack of effective public outreach found no help from the agency, which did not use the media to communicate ongoing plans and decisions with the public (EPA 35, 1994).

Beginning in late 1993, a more activist (some would say "radical") group of environmentalists began participating in CTEC (EPA 25, 1993). The group became much more hard-edged in its dealings with the agency and began making direct rhetorical attacks on Arco as the responsible party, and many of the original members resigned (EPA 36, 1994). In part, this change stemmed from CTEC members drawing on their affiliation with other, more activist, grassroots organizations such as the Clark Fork Coalition. For example, after CTEC board member Mary Kay Craig "strenuously objected to Arco presenting 'their propaganda' to CTEC and the general public without a 'counter-balancing presentation by the Coalition'" at the same meeting, CTEC President Tom Malloy

resigned (EPA 38, 1994) and Craig became acting president (EPA 42, 1995).

After initially providing Arco and remediation specialists Bill Schafer and Frank Munshower a public forum to promote an *in situ* treatment technology called Streambank Tailings and Revegetation Studies (EPA 40 and 41, 1994), CTEC became increasingly critical of leaving waste in place in lieu of removing it (EPA 43, 1995).

The situation was complicated by an Arco-funded initiative channeled through a local pro-development group, Montana Energy Resources and Development Institute (MERDI), for an alternative remedy known as the Greenway. This plan called for *in situ* treatment of waste along Silver Bow Creek using STARS and development of the creek corridor for beneficial use in the form of a public trail. Arco planned to fund the Greenway (at an estimated cost of 5 million dollars) as a community amenity so long as remedy costs were kept low by leaving waste in place. CTEC ran an article in its newsletter titled, "Is the Greenway Plan Pitting Permanence vs. Prettiness?," stating "Ultimately, there is a perception that MERDI is being used by Arco to co-opt the community to ask the State to trade a better clean-up for a beneficial community use." CTEC also publishes its resolutions on the issue, including (capitalization in original):

- "1. The Greenway proposal CANNOT BECOME A SUBSTITUTE FOR A REAL CLEAN-UP EFFORT as Superfund law defines clean-up, i.e., to make the site free of contamination.
2. The Greenway proposal CANNOT BE USED AS A POLITICAL PLOY TO PRECLUDE SERIOUS CONSIDERATION OF REAL CLEAN-UP OPTIONS for the Streamside Tailings Operable Unit." (EPA 43, 1995).

By late 1995, Craig was joined by another prominent local environmental activist, John Ray, who became CTEC's vice-president. Ray was a political science professor at the small, local engineering college, and he helped Craig and CTEC plan and implement an all-out public campaign for a thorough removal of contaminants from the Stream Side Tailings Operable Unit. Furthermore, Ray and Craig helped CTEC network with other interests. These included other grassroots environmental groups such as Trout Unlimited, Citizens for Labor and Environmental Justice, Milltown Technical Advisory Committee (the TAG group for the Milltown Reservoir site near Missoula) and the Montana Environmental Information Center; government entities such as Missoula's County Health Department, Council of Commissioners, and Water District; and individual activists such as George Ochenski and University of Montana environmental studies professor Vicki Watson. CTEC had enough credibility that its officers could meet with Montana's Governor Racicot, Department of Environmental Quality Director Mark Simonich, and Attorney General Joseph Mazurek. During the meeting, CTEC made its position clear, stating: "STARS treatment is inappropriate where tailings are either proximal to shallow groundwater or in areas where stream meander and high-flow erosion may allow reentrainment..." and "Removal is the way to go...and nature knows how to build greenways for free" (EPA 46, 1995). CTEC's campaign inscribed the Greenway and STARS in ways that would protect the group's interest in a protective remedy.

CTEC's activism created some tension with the community and with its relationship to the agency. The group had used space on the campus of Montana Tech (a small, local engineering college) since its inception, but in early 1996 Chancellor Lindsay Norman told the group space was no longer

available and the group could no longer hire students through the college's co-operative education program (EPA 48, 1996). The Butte-Silver Bow government also tried to usurp CTEC's role in "educating the public on issues surrounding the remediation of the Streamside Tailings Operable Unit" and "act as the community representative" (EPA 52, 1996). The EPA seemed to reinforce this decision by removing CTEC from its mailing list, though when CTEC complained about this agency personnel responded with an apology and a promise to "keep CTEC fully involved and informed" (EPA 57, 1996).

In the Actor Network of the Silver Bow Creek Superfund site, the obligatory passage point came in the form of the EPA's Record of Decision. CTEC became a focal actor that helped coordinate many other grassroots groups and other entities in order to obtain its goals. The agency received 321 comments regarding its seven alternative remedies. The positions were, for most participants, clearly staked out. Don Peoples, MERDI's president and a former Butte-Silver Bow Chief Executive, summarized the view of the business community and local government:

"...[the proposed Alternative 5] seem unreasonable and dangerous...[It] eliminates the likelihood that Arco will participate in the building of a greenway" (EPA, 1996: D-1f, 74-75).

George Waring, wrote on behalf of the Citizens for Labor and Environmental Justice group in Butte. The Montana Tech history professor explained why the Merdi/Arco greenway plan should be rejected:

"...the Merdi "Greenway" proposal has introduced an element of major confusion.... Local governments appeared to be basing their non-acceptance of the State's proposed cleanup mainly on the political

activity and all-out public relations campaign undertaken by Merdi and Arco” (EPA, 1996: D-1f 34-35).

CTEC prevailed. Of those who commented explicitly on STARS, 36 were for it and 144 against it. A majority of comments, 174 of 321, supported Alternative 6 or 7, the most protective remedies. CTEC was extremely effective in aligning other groups. Thirty-one organizations commented, including: 7 corporate or business entities; 3 federal government agencies; 14 grassroots environmental groups; 3 local government entities; 3 state government entities; and 1 Indian tribe. The 7 corporate or business entities all weighed in for the cheaper remedy – i.e. Greenway – promoted by Arco/Merdi, as did Butte-Silver Bow and Anaconda-Deer Lodge local governments. The 24 other organizations supported Alternative 6 or 7 (EPA, 1996: D).

The Actor Network of groups can be mapped using individual alliances (see Figure 8). For example, CTEC president Mary Kay Craig was also active with the Clark Fork-Pend Oreille Coalition, which shared key members with Montana Trout Unlimited, which shared key members with the local Westslope Chapter of Trout Unlimited and the Montana Wildlife Federation. CTEC vice-president John Ray was also active with the Montana Environmental Information Center.

The letters of comment from these groups share much of the same language and make a unified argument for more removal and less *in situ* treatment. CTEC used its paid consultants and professional staff to produce sound technical arguments to support this position, and this position was bolstered by consultants, staff, and volunteer experts with many of the other groups. CTEC guided discourse in the Actor Network and brought pressure for a highly protective cleanup. As the EPA and Montana moved beyond the ROD, Montana took the lead on remedy and further

modified the ROD. The revised ROD and remedial design that was implemented eliminated any use of STARS, minimized the use of local repositories in favor of a central repository, and integrated restoration with remedy. This latter element was made possible by the separate natural resource damage lawsuit that Montana brought against Arco and accepted a partial settlement in 1999. Much to the surprise of those who had supported a greenway as a trade-off for a low budget remedy, Montana’s Natural Resource Damage Program guaranteed a greenway that was far better funded and more elaborate than what Arco had promised (CTEC 2009; Montana NRDP, 2009).

### **Conclusion**

For more than a decade, the American nation has been engaged in a major debate regarding the merits of and the need for Superfund (Probst, 2002; Church & Nakamura, 2003). This study is a central contribution in that debate, for rather than arguing over abstract political principles it focuses on the pragmatic results of public participation in a particular, geographically extensive, and very costly Superfund megasite. The political debate over Superfund can benefit greatly from the pragmatic nature of case studies of environmental communication grounded in methods such as social history and ANT. While the official role of the EPA, the oppositional role of the responsible party, and the political role of state and local governments have been instrumental in shaping remedies in the Upper Clark Fork River Basin, the role of citizens and grassroots organizations were crucial in determining final remedies. Oftentimes grassroots organizations hired environmental scientists who brought expertise and perspectives to the table that were helpful to the agency’s deliberations. Without grassroots organizations as actors in the Superfund process, the network and the resulting artifacts (i.e. RODs) would look very different.

The range of technically feasible remedies for a particular Superfund site leads to an underdetermined solution. In other words, technical information alone is insufficient to determine a unique solution. Though technical feasibility, economic cost, and legal considerations all play a role in framing potential remedies, even together these factors lead to a set of underdetermined solutions as shown with the Greenway/STARS vs. selected remedy for Silver Bow Creek.

Cultural context – especially in the local geographic sense known as “sense of place” – is a strong determinant in the EPA choice of a particular remedy. This sense of place and the values it embodies play out through local politics and communication strategies as citizens and grassroots organizations engage as actors in the Superfund network. Though over the years the agency has paid lip service to the need for community involvement, in reality this goal is seldom realized. Perhaps other areas have not followed the citizen activist model prevalent in Montana culture. The large number and broad diversity of activist groups in the Upper Clark Fork River Basin made it difficult for the agency to ignore social influences on the technoscience of environmental remediation. This strong influence demonstrates the limits of actors in the social shaping of Superfund remedy, and is an instructional case study for other areas to use as a model.

Several times in the Upper Clark Fork River Basin, surprising remedies emerged in the final Record of Decision process. These remedies were surprising because they were not anticipated in the cleanup alternatives preferred by the agency or the responsible party throughout the Remedial Investigation/Feasibility Study stages. Grassroots organizations – and sometimes informal coalitions of citizens – played a major role in advancing these surprising remedies. The technical experts hired by

these organizations were especially pivotal in developing novel remedies, since these experts typically play a dual role by both (1) assessing and explaining the agency’s proposed remedy/remedies to the organization; and (2) listening to criticism from the organization and trying to frame remedies that incorporate grassroots

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Figure 1

Map of the Upper Clark Fork River Basin (outline map of Connecticut shown for comparison)  
<http://www.epa.gov/region8/superfund/sites/mt/milltowncfbasinmap.jpg>



Figure 3: Silver Bow Creek floodplain,





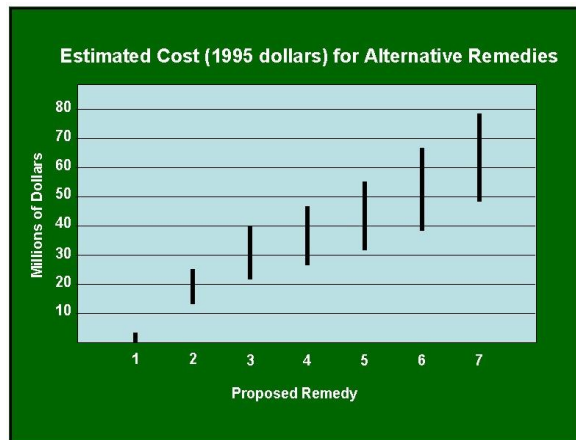


Figure 7: Cost of EPA alternative remedies for Silver Bow Creek (SSTOU), from EPA, 1996

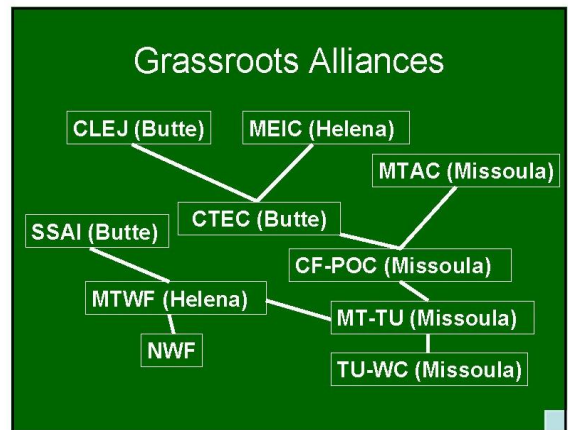


Figure 8: Actor Network mapped relationships among environmental groups for SSTOU ROD



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## **Rhetoric's Relation to the Alternative Agriculture Movement Industry**

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### Origin and Development of "Sustainable" and "Organic" Agriculture

#### *History*

Growing food has preoccupied human symbolizing for thousands of years. The literary and political manifestations of this truism—most germane to the issues examined here—appear in folklore, philosophical tracts, and political movements throughout the centuries. Evidence of this longstanding relationship between agriculture and human thought, word, and deed can be found in such Western civilization exemplars such as Cato the Censor, Virgil, Pliny the elder, Cicero, Thomas Jefferson, the Populist party, and the organic agriculture movement. In fact, agriculture arguably revolutionized humankind (Quinn, 1992).

In a strictly literal sense the origin of sustainable agriculture can be dated to thousands of years ago, circa 8000 BC when human concerns over and ingenuity with stable food sources spawned the Neolithic Revolution (Raman, 2006). However, for all practical purposes, the rhetoric of "sustainability" in agriculture did not gain widespread public legitimacy and use as rhetorical currency until the 1980s.

Considered from the broadest possible vantage point, there are two streams of discourse that can be traced with regard to the origin, development, and legitimation of sustainability rhetoric. First, from an official perspective, most sources comfortably attribute the World Commission on Environment and Development meeting in Norway in 1987 as the birthplace of sustainability rhetoric. The Brundtland Commission issued a report, called *Our Common Future*, from this meeting and sustainability discourse subsequently moved to center stage in the international arena at the Rio de Janeiro *Earth Summit* in

1992 and the *World Summit for Sustainable Development* in Johannesburg in 2002 (Meister and Japp, 1998; Osborn, 2005). Long before the 1992 *Earth Summit* in Rio de Janeiro where perhaps the sustainability frame reached its pinnacle as dominant (effective) discourse and was controversially codified<sup>ix</sup> (Meister & Japp, 1998), individual states such as California, Minnesota, and Iowa had begun funding research on sustainable agriculture practices (Rawson, 1995). This took place throughout the 1970s and 1980s. Already in 1972, for instance, the sustainable agricultural practice of integrated pest management (IPM) had endorsement and funding at the federal level (Branaman, 2000). Also, in 1977 as an amendment to the Clean Water Act, "best management practices" (BPMs) began to improve soil and water quality (Branaman, 2000). The Farm Bill in 1985—The Food Security Act—included federal support for education and research on sustainable agriculture. The Alternative Farming Systems Information Center (AFSIC) in Beltsville, Maryland—part of the National Agriculture Library of the USDA—was founded in 1985 with resources from the USDA's Low-input Sustainable Agriculture (LISA) Program. The status of these international commissions and summits resulted in official US governmental adoption. In the US, also in the late 1980s, the LISA program became the SARE (Sustainable Agriculture Research and Education) program because debates over "low-input" rhetoric that was built into the LISA framing of an alternative agriculture resulted in a name change.

Second, the other dominant perspective grew from the grassroots (including the sustainable agriculture social movement and some fringe researchers and practitioners) which advocated for a three-

pronged approach in order for agriculture to be sustainable. These three prongs consist of ecological soundness, social justice, and economic viability (Butler & Flora, 2006; Hassanein, 1999). There is a complex cultural history trailing this approach to sustainable agriculture that includes some overlap between the conservation, environmental, and organic social movements (Esbjornson, 1992), explaining in part, the multiple foci (social, ecological, and economic) of this approach. Different frames, movements, and initiatives have usually either focused or privileged one prong at the expense of the others (Raynolds, Murray, & Heller, 2007).

#### *Definitions*

Whether agricultural processes and products are deemed “sustainable”, “organic”, or something else has both practical and symbolic import. However, any philosophical/practical approach to agriculture that deviates from mainstream, conventional agriculture industry and practices can be considered *alternative*. There has been much thrashing of the pen in recent decades as scholars, practitioners, and advocates have tried to make sense of the various rhetorics, frames, and definitions that comprise alternative agriculture. Alternative agriculture can be considered the umbrella term for all of the diverse food movements and initiatives that have crossed cultural and political fronts in the past several decades. There are both bold and subtle differences between and within various approaches that can create a bewildering range of choices for growers, legislators, and consumers. For example, in the last several decades a myriad of agricultural rhetoric has spiraled into public consciousness including organic, sustainable, low-input, alternative, permacultural, regenerative, biodynamic, ecoagriculture and biointensive, to name a few. And within one of these rhetorical approaches—sustainable—for instance, over 57 definitions have been in place since the late 1970s (Murcott, 1997).

Both streams of discourse identified above (official and grassroots or top-down and bottom-up) have distinct approaches to sustainable agriculture. However, both streams of sustainability discourse have as an implicit assumption a central value which sometimes is and sometimes is not attributed to the Brundtland Commission report. The value is the same as the Iroquois principle of the seventh generation: “We say that the faces of coming generations are looking up from the earth. So when you put your feet down, you put them down very carefully—because there are generations coming one after the other. If you think in these terms, then you’ll walk a lot more carefully, be more respectful of this earth” (Lyons, 1995). In other words, live so that the ability of the seventh generation from now to live at the same quality of experience is not constrained. In fact, there is even a successful “environmentally friendly” company named after this principle: The Seventh Generation. In the Brundtland Commission’s language, sustainable economic development and/or agriculture will “meet the needs of the present without compromising the ability of future generations to meet their own needs” (World Commission on Environment and Development, 1987).

This is the rhetorical bedrock under both streams of sustainability discourse. Yet, if each stream of discourse about sustainability can be seen as a paradigm, within each paradigm, there is a tendency to focus on certain aspects of sustainability so that definitional orientations arise. These definitional orientations are significant in that widely divergent policies and practices grow out of them. As Raynolds, Murray, and Heller (2007) have argued regarding sustainability-grounded private-sector certification initiatives in particular, “key variations in the ideas and practices employed in these efforts influence their positive potential” (p. 148). Within the official, governmental paradigm, a focus on *resources* leads to definitions of sustainable agriculture that highlight different types of

resources. A diversification of defining resource(s) and their instrumental utility and proper management is typically included in these definitions of sustainability. Economic rhetoric is still central in this type of discourse. Pretty (2005), for instance, explains that “systems high in sustainability are making the best use of nature’s goods and services whilst not damaging these assets” (p. 2). Another example is an Economic Research Service report for the USDA published in 1999 highlights a definition of sustainable that focuses on the responsible management of social, human, and natural capital (See Paul Hawkins many works for more on “natural capital” and a unique approach to integrating ecological and economic principles). These types of definitions are usually more utilitarian and employ traditional cost-benefit logic to appraise the multi-faceted nature of sustainable agriculture. They are also very conservation-oriented in terms of programmatic proposals. What is novel in these approaches, however, is a recent recognition that historically, natural capital (e.g., soil, water, air) has been considered *gratis* from nature and therefore not necessarily included in quantitative formulations of “input-output” ratios. This also meant that prior to sustainability rhetoric, environmental degradation as a result of agricultural practices, policies, and processes (e.g., soil erosion, surface water availability, ground water contamination, etc.) was considered an externality and not included on the “cost” side of the ledger.

The social movement paradigm for sustainability, as previously mentioned, grew out of the confluence of several different movements. As a result, the discourse is more literary, is richer, and may resonate higher with the public because of the cultural identification. This tradition has a range of influences including the ideas and writing of folks like Wendell Berry, Aldo Leopold, John Muir, Wes Jackson, Rachael Carson, J. I. Rodale, Louis Bromfield, Paul Sears, and Edward Faulkner. This paradigm, too, is multi-faceted, but instead

of orienting and reducing definitions of sustainability to resources, it has a broader lens and includes the three prongs discussed earlier. Many community-level and regional organizational developments have emerged out of these movements’ paradigmatic discourse. The Sierra Club, the Land Institute, and the Leopold Center for Sustainable Agriculture are a few examples of these new institutional models. Of course, very successful business models such as the Body Shop, Ben & Jerry’s, and well recognized organic-brand growers have emerged from this approach also.

However, as any social movement has an ideological underpinning and truly sustainable agriculture does not necessarily need to be attached to any specific ideology in terms of practice (Pretty, 2005), this stream of discourse may be more *culturally*, less *politically*, influential. Moreover, as any social movement must make difficult choices about which ideological aspects to spin into reality and through which strategies, the broad, three-pronged paradigm of sustainable agriculture functions more like a rhetorical vision than a reality.

As the broad, cultural, three-pronged approach to sustainable agriculture developed from numerous and somewhat overlapping social movements, ideological, strategic, and organizational differences resulted in a splintering effect so that a multitude of preferences and priorities manifested itself in leaders, organizations, definitions, political affiliations, and antagonisms. In the social movement literature, this pattern is tenuously empirically predictable and is called the “professionalization” or “bureaucratization” of a social movement over time. Within the alternative agriculture movement industry, both “sustainable” and “organic” agriculture emerged as dominant discourse. However, even if these agricultural frames shared common ancestors and influences, they cannot be conflated. As Shreck, Getz, and Feenstra (2006) pointed out, “using organic and sustainable as interchangeable is

problematic at best” (p. 440). Next, the paper provides an up close explanation of how these two dominant discourses—“organic” and “sustainable”—can be seen as competing frames within the alternative agriculture movement industry today and how proponents of the “organic” frame maneuvered in the last two decades in an effort to become the preeminent alternative agriculture frame.

#### Competing Frames within the Alternative Agriculture Movement Industry

The framing of agriculture as “organic” or “sustainable” is a clear example of how the subtle relationships between framing and ideology (Oliver & Johnston, 2000; Valocchi, 1996; Westby, 2002) can create competition within a movement industry (McCarthy & Zald, 1977; Zald & McCarthy, 1980). Alternative agriculture may be seen as a social movement industry with organic and sustainable movements and organizations within the industry. The differences in framing between advocates and organizations who privilege organic over sustainable, or sustainable over organic, leads to different visions for agriculture and development policies, resource usage, lifestyle choices, and values. These differences in ideology create competition between movements or movement organizations within the same industry.

For decades, U.S. political discourse and support tacked back and forth between the two dominant alternative agriculture frames of sustainable and organic agriculture. Prior to the first decade of the twenty-first century, the U.S. government exhibited a longer track record of supporting sustainability frames rather than organic ones.<sup>x</sup> Rawson (1995) claimed that until organics came on the sociopolitical scene in early 1990s, the sustainable frame had been dominant in U.S. planning and policy debates regarding alternatives to conventional agriculture.

In the years following the back-to-the-land movement,<sup>xi</sup> organic agriculture, already achieved cultural legitimacy, but

also had a chance to gain legitimacy within the U.S. political system because Rodale’s Congressional testimony decades earlier may have symbolized official acceptance and recognition of a social movement organization or discourse (Gamson, 1975). Even though Rodale’s testimony decried the use of chemicals in food production and advocated the organic alternative, the government’s response in terms of seriously considering allocating research funds for organics was slow. Three decades after Rodale’s congressional testimony in 1950 the USDA published a *Report and Recommendations on Organic Farming* which included the establishment of an office to coordinate organic resources, but the Reagan Administration eclipsed the government’s role in helping to develop organics in 1981 when it abolished the position (Rawson, 1998). It was not until 1990 that the organic frame would begin its official ascendancy as the dominant alternative agriculture frame in the U.S. which continues to this day in some parts of the world. Prior to this, the sustainable frame met with more success.

The movement’s primary followers, organic consumers, had helped to build increasing demand for organic production. Due to this trend, the organic movement wanted to protect its segment of the market because increasing competition was inevitable. But, although the movement had become financially successful, it was more than merely an alternative set of produced goods available for consumers to choose from in the marketplace. It was an entire way of life with its own unique ideology. Thus, the movement wanted the goods in the marketplace to reflect the high standard of integrity which was based more on a process than a product (Howard, 1940). Early consumers of organic agriculture products (pre-OFPA) resonated with the diagnostic and prognostic framing of organic because of the organic frame’s empirical credibility (Benford & Snow, 2000). That is, the organic frame was beginning to show signs of correspondence with real world



issues. Early consumers were concerned with problems that plagued conventional agriculture such pesticide use, farm worker safety, and environmental protection (i.e., soil and water quality). Organic agriculture seemed like the best alternative because it addressed these problems and had had better taste and appearance (Branaman, 2000).

In keeping with the generally accepted idea within the movement's framing that organic agriculture should be farming on a small-scale that used local resources and contributed to local food security and rural vitality, private individuals and states had been developing and practicing their own organic labeling certification standards for decades. The state of Oregon had developed state regulations for the label "Oregon Tilth Certified Organic" (OTCO) label in 1974 and the state of California had developed the "California Certified Organic Farmers" label in 1973 (Allen & Kovach, 1999) which became state law in 1980 (Lipson, 1998). However, the increasing demand led industry analysts to anticipate undersupply and increasing competition from large agribusiness corporations. Since the agribusiness industry was one of the original organic movement's opponents, key stakeholders from within the organic movement endeavored to preserve the integrity of the entire frame of organics (including specific beliefs and practices) against outside forces (i.e., agribusiness and federal government) that could compromise the organic frame (Branaman, 2000; J. Moyer, personal communication, October 26, 2006). In a relatively short amount of time (i.e., two decades), there was a groundswell of support for organic products from consumers so that the small, organic agriculture movement on the cultural fringe in the 1960s and 1970s was not able to meet the volume of demand, especially without government support.

The organic movement recognized the advantage of government advocacy during this time of market popularity. As

Crable and Vibbert (1985) argue: "issue management is a fundamental way of influencing policies before they become policies" (p. 7). By influencing a policy before it became a policy, the U.S. organic agriculture industry also positioned itself to influence the policy after it became a policy. The organic community in the U.S. engaged in issue management by pursuing federal regulation of their products (Branaman, 2000; J. Moyer, personal communication, October 26, 2006; Rawson, 1998). This nonpartisan advocacy of organics by the organic community resulted in the first Organic Food Production Act (OFPA) of 1990. The OFPA authorized the creation of a National Organic Program<sup>xii</sup> (NOP). Yet, the NOP would not provide federally protected market labels for organic growers for another twelve years. This delay between the enactment of the OFPA and the NOP's certification infrastructure is largely a result of framing disputes between the USDA and US organic agriculture movement organizations.

In the early 1990s, organic agriculture demand skyrocketed (Rawson, 1998). An annual increase of 20% in consumer demand for several years, beginning in 1989, indicated that organics was more than a fad (Greene, 2001). The industry's advocacy efforts were realized in the passing of the Organic Food Production Act of 1990. The legislation was sponsored by Patrick Leahy of Vermont and was written by Organic Trade Association President and to-be Agricultural Marketing Service (AMS) head, Kathleen DiMatteo (J. Slama, personal communication, January 17, 2007). Included as provisions of the 1990 OFPA was the development of a National Organic Program (NOP) and the creation of a National Organic Standards Board (NOSB) to help steer the NOP (Branaman, 2000; GAO, 2001). Although the movement could claim some success in being a catalyst to the first federal legislation concerning organics, the NOP did not become a reality until 2002 when the

USDA's final rule went into effect (Ingram & Ingram, 2005).

Actual levels of governmental financial support for practitioners of organic are miniscule compared to the subsidies for conventionally produced commodity crops. What funding is available in the federal budget for organic agriculture has primarily been funneled into certification agencies and marketing efforts. This leaves the individual small-scale grower or farmer at a loss in the process of converting to organic production and management. Since the official federal governmental support for organic standards in the U.S. emerged in the 1990s, individual states such as California, Oregon, Minnesota, Iowa, and Wisconsin have gone beyond the federal government's involvement. Reasons for this are cited as individual U.S. states trying to capture the environmental benefits of organic agriculture (DeWitt, 1999; Greene, 2001; Greene & Kremen, 2003; Plank, 1999) and gain support for rural economies (Rawson, 1995, 1998). Thus, certain states have decided that the nature and level of their support must go beyond market facilitation in terms of certifying and marketing. Compared to states in the European Union (EU), government financial and educational support in the U.S. to accelerate conversion to organic has been slow. Since the 1980s, the EU has provided direct financial support to organic producers (Green & Kremen, 2003) and many EU countries have targeted 10-20% of all agricultural land areas to convert to organics by 2010 (Lampkin, 2002).

Individual states that have surpassed federal advocacy for organics in the U.S. include California, Oregon, Minnesota, and Iowa. Minnesota and Iowa have begun subsidizing farmers that convert from conventional agriculture production to organic production. Another progressive approach that individual states in the U.S. such as Minnesota and Oregon have embraced is green planning and taxation. Green taxes, for example, substitute for income tax and penalize environmentally

destructive business practices such as polluting the environment or relying on old technology that is not clean. A green plan would create a regulatory context in which businesses must operate without exceeding nature's limits of growth and balance and overly diminishing the natural capital base of soil, minerals, water, trees, and air. Green plans create new win-win collaborative relationships between businesses and governments so that the private and public sectors are working together to solve environmental problems that impact society (Lerner, 1997). Research on the use of organic farming as a method of carbon sequestration could fit into this comprehensive planning process (J. Moyer, personal communication, October 26, 2006). Organic agricultural management practices can capture atmospheric carbon dioxide and sequester it in soil and plant biomass. The carbon removed from the atmosphere sequestered in plants and the soil reduces global warming while increasing soil fertility.

In spite of the comparatively small percentage of federal dollars and haphazard adoption of comprehensive planning measures, the organic sector continues to show signs of impressive growth. Land use and revenue figures from the 1990s-to the early years of the 21<sup>st</sup> century trace a sharp curve of growth. From the enactment of the Organic Food Production Act in 1990 to the present, land use and revenue statistics for the organic sector continued to climb. In 1990, organic food retail sales totaled \$1 billion dollars. In 1996, sales had climbed to \$3.5 billion dollars (Rawson, 1998). By 1999, organic sales had reached \$ 4 billion dollars (Branaman, 2000). In 1997, one and one third million acres of cropland and pasture were certified organic by USDA standards (Greene, 2001). This figure indicates 100% growth over the course of five years between 1992 and 1997. By 2002, when the USDA implemented the standards for organic production, another 1 million acres of certified organic land had

been added to the 1997 figure (Greene & Kremen, 2003).

Last, the paper names and delineates some of the unfinished rhetorical business of alternative agriculture. Specific rhetorical vectors may be considered *topoi* for agricultural production and consumption. My contention is that the following rhetorical vectors are perceptually salient for consumer's food deliberations and choices. It is a corollary then, that alternative agriculture marketers can and do manipulate the meaning of these vectors to position their ideologically branded goods. Perceptually Salient Rhetorical Vectors in Consumers<sup>xiii</sup> Food Attitudes

#### *Process*

The contemporary organic agriculture movement has helped shape consumer attitudes toward a **process-focus**. The conventional food system, following the industrial model, became unappealing because of the artificial disconnect between process and product. These consumers want food that has been grown/processed in accordance with nature's *modus operandi*.

#### *Place*

**Place** in the food production system becomes rhetorically significant to consumers in a variety of ways. This type of consumer is aware of the environmental consequences of distant food sources shipped in a carbon-based economy and transportation system. These consumers also want a sense of connectedness with the earth and so knowing where their food comes from becomes a rhetorical vector in their brand attitudes, ethical discussions, and purchasing behavior.

#### *Standards*

The issue of **standard-setting** became very politicized in the USDAs efforts to legislate Organic Food Production Act final rule. The National Organic Program was not implemented until 12 years after the original OFPA due to social movement frame disputes. The rhetoric of transcendence was employed to set the bar higher than the USDA initially planned.

#### *Materials*

How food is produced involves what goes into the soil, water, plant, air as part of growing/production techniques. The organic movement and consumers built their petition campaign in 1997-1998 around "The Big Three" or "The Dirty Three" of sewage sludge, biotechnology, and irradiation. There were other **materials** and processes that were contested, but these stood out in many consumers' minds and thus petitions. This type of consumer is not only concerned with how their food is produced but what goes into it.

#### *Integrity*

This category of aware, educated, and concerned consumer is confused because they are faced with a variety of life-style, political, and market-based paradoxes. Even though compromise, discipline, negotiation, and sacrifice are becoming mainstays of the contemporary environmental, social justice, and alternative agriculture movements, in their market role as consumers, they want to have trust and confidence in the environmental and social claims of food growers/producers. Consumers want growers, marketers, policymakers to get involved for the right reasons. Historically, organic farmers began farming organically because of an entirely different philosophy of farming. In recent years, large agribusiness corporations and even retail firms like Target and Wal-Mart have gotten into organics because of the financial opportunity. Concern over "greenwashing" has led to higher expectations, consistency between marketing, values, and behavior, and counter-PR and smear campaigns. Consumers want some balance between economic incentive for conversion to alternative agriculture and belief in and adherence to the spirit of the ideology.

#### *Human-nature relationship*

Consumers are also concerned with resource/animal treatment and how the manipulations in different agricultural philosophies/practices leads to different

degrees of **human-nature** cooperation and interrelationship. Agricultural philosophies and practices that revere, praise, and mimic natural processes, structures, and relationships are more resonant with this consumer. The “culture” part of an agricultural enterprise/operation is expected to mesh with consumer perceptions of utopian human-nature environments that are dynamically embedded in a farm design.

#### *Diversity*

**Diversity** is another loaded vector for this consumer group. A long history of industrial monoculture farming has turned off this consumer group because of the focus on profit and efficiency. There is a deep assumption in consumers who support alternative agriculture that efficiency and profit cannot be the sole focus of a farm. The belief is that growing food in accordance with nature requires a different set of priorities. Biodiversity in natural ecosystems suggests an analog to farm design that is a veritable patchwork quilt of integrated flora, fauna, species, and varieties. The diversity vector also comes to play in consumers’ vision of a Jeffersonian-style agrarian democracy with a diverse number of small to mid-sized farms decentralized around the country.

#### *Price*

**Pricing** of food is a paradox for this segment of consumers. Many consumers in this psychographic and demographic segment have a favorable attitude toward price premiums in order to support the social and environmental causes underlying organic or other alternative agriculture frames (i.e., providing a livelihood to a small family farm or paying more for production processes that do not degrade the earth/natural resource base). However, this consumer group also has an expectation of reasonableness in pricing, although this is fairly subjective. They often make random decisions about purchasing based on the price-tag in relation to overall usefulness (nutrition, satisfaction) and appeal of the product.

#### *Community*

Based on ecological principles, this consumer group usually appreciates a dense, rich, network of interrelated parts. This translates into an expectation for a higher degree of **community** rather than segmentation/compartmentalization in their shopping, eating, and growing behavior. This explains the support of food-coops, community-supported-agriculture (CSA), pick your own, farm tours, etc.

#### *Closing Remarks*

This paper has situated the two dominant alternative agriculture movements—sustainable and organic—within the same movement industry. By doing so, it allows a rhetorical compare and contrast of these movement’s histories, ideologies, discourses, frames, and positioning efforts. Even though “organic” has superseded “sustainable”, had its meaning legislated, and has even become a master frame in its transnational movements and ability to be used in conjunction with farming, food, clothing, cosmetics, wine, medicine, and more, its meaning is not fixed and will continue to be molded, manipulated, and managed by interested stakeholders. It will be interesting to observe organic’s and sustainability’s continuing rhetorical meanderings, evaluate the advantages and disadvantages of these shifts, who profits, and whose meanings and material reality become marginalized as a result.

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### **Notes**

<sup>ix</sup> There are important cultural and economic reasons that the sustainability frame has met some resistance. According to Meister and Japp (1998), the ascendancy of the sustainability frame met its pinnacle at Rio de Janeiro. The reason this was its pinnacle was because the language used in the United Nations documents defining and prescribing sustainable agriculture and sustainable development undercut the potential of sustainability to do true good in developing nations around the world that exhibited practices harmful to the environment and endemic poverty and hunger (see also Sen, 1999). For structural (IMF, World Bank, 5 year adjustment programs) and sociopolitical (neoliberal economic globalization, local vs. global resistances and tensions) reasons, in the international arena, a sustainable development frame would

include a sustainable agriculture frame, which includes privileging biotechnological methods of food production. The organic frame of agriculture opposes agricultural biotechnology. In some international contexts and markets, there are cultural and economic tensions that are barriers to biotechnology adoption.

<sup>x</sup> According to Jean Rawson (1995), a specialist in agriculture policy for the U.S. federal government, the primary difference between the two frames is a matter of degree. While sustainable agriculture aims to reduce farmers' use of chemicals, organic agriculture prescribes against chemical use. Rawson relies on the legal discourse in the Organic Food Production Act of 1990 to make this distinction. Interestingly, the semantic debate predates the OFPA of 1990. J. I. Rodale allegedly harangued some of his contemporaries who were early organic movement leaders in the 1940s for their moderate position on chemical use (See Conford, 2001).

<sup>xi</sup> The back-to-the-land movement was not an off-shot of the counter-culture movement although there was some overlap between these movement's followers. Back-to-the-landers flocked to rural areas around the country to set up communes and alternative communities where they believed they would be freer to practice their lifestyle choices of being closer to nature and exercising dignified physical labor to become self-sufficient.

<sup>xii</sup> The National Organic Program refers to the USDA's national oversight of organic products produced in the U.S. according to the federal standards set in the Organic Food Production Act. The program is managed by the USDA's Agricultural Marketing Service (AMS) and consists of regulating the certification standards established by the OFPA's final rule.

<sup>xiii</sup> Consumer referred to in this table is the market segment identified in proprietary market research: "Demographically speaking, the consumer is age 28-55 (purchasing produce for their families), well educated, and has an annual income over \$50,000. They are aware, concerned, and somewhat confused about these environmental and social issues; they embrace the attributes and characteristics of organic produce—they do not necessarily purchase organic.

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## **Animal, Vegetable, Mineral: Viewing Food Production Through a TV Screen**

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In 1844, Marx argued that “the depreciation of the human world progresses in direct proportion to the increase in value to the world of things” (86). Whether those “things” consist of designer shoes and handbags, sleek electronics, hybrid cars, or upscale chocolates, their value depends to a great extent on their mystique. The less we know about the origins or manufacture of commodity goods, the more we rely on a price tag and advertising copy to assess their worth and status. Our ignorance permits the fetishising of commodities and a concomitant belief in their ability to transform us and the quality of our lives.

Capitalism, as a system of organizing commodity production, relies upon two fundamental sleights of hand to mask the origin of goods. The first is the capacity to alienate a worker from the products of his or her own labor through a highly organized social and technical division of labor. Assembly lines convert artisanal skills into a series of repetitive rote tasks performed by laborers compensated by hourly wages. “Though by no means unique to capitalism,” writes David Harvey (1989), this strategy “is one of the founding principles of capitalist modernism” (103). The second tactic is the separation of sites of production from sites of consumption, thus hiding both the raw resources as well as the labor required to make the commodities that litter our lives. As the material origins of goods become more and more invisible and inscrutable (shielding us from sweatshops and factories), consumption can become a more pleasurable activity. As Harvey notes, “We can take our daily breakfast without a thought for the myriad people who engaged in its production. All traces of exploitation are obliterated in the object (there are no finger marks of exploitation in the daily

bread). We cannot tell from contemplation of any object in the supermarket what conditions of labour lay behind its production” (101).

Yet in the past few years, the proliferation of reality television programming seems initially to work at odds with these principles. Programs such as *How It's Made* (Science Channel) and *Dirty Jobs with Mike Rowe* (Discovery Channel) promise to offer viewers access to otherwise hidden processes of production, revealing the conditions of labor and delivering that information directly into our living rooms.<sup>xiv</sup> Such televisual spectacles—paired with commentary from either an on-air or off-camera host—presumably encourage viewers to give a thought to myriad others and to discover the finger prints that are in fact to be found on our daily bread.

In an attempt to test whether (or to what extent) such programming does begin to undo these capitalist strategies, this essay explores program episodes related specifically to food production—both on the farm and in the factory. These include episodes about the production of agricultural commodities (cattle, coffee, cranberries, hatchery chicks, milk, pigs, pineapples, and taro) and the manufacturing of processed foods (cheese, bacon, hot dogs, ketchup, potato chips, soy sauce, sushi, wine, cookies, sweets, cheesecake, and chocolates). In examining these representations of food production and processing, my intent is to explore the visual and narrative techniques employed that may both disrupt and reinforce, reveal and conceal capitalist strategies of alienation. Additionally, viewer feedback on these episodes (available through on-line fan sites) is integral to this study as it provides



some evidence of the ways in which readers interpret these texts, acknowledge the conditions of labor within a capitalist system, and begin to reflect on their own food consumption practices.

### Modernism in a Post-Modernist World

Since World War II, the labor involved in food production has shifted increasingly out of home kitchens and into factories, where raw ingredients are transformed into packaged goods: frozen, canned, boxed, bagged, or vacuum-packed. Although their ranks are fast declining within the largely post-industrial United States of the 21<sup>st</sup> century, 12.9 million Americans (about 4% of the US population) continue to hold jobs in the manufacturing sector. Food processing, organized around industrialized production lines, remains the 3<sup>rd</sup> largest sector of US manufacturing overall (behind transportation equipment and fabricated metal products) and the largest sector among non-durable goods. Marx's 1844 observation that "the worker becomes poorer the richer . . . his production" (86) seems to hold especially true within the food industry. Though the production and processing of food in the United States generates billions of dollars in sales annually (for example, \$23 billion in the snack food industry alone in 2008<sup>xv</sup>) and earns hefty double-digit profits, its workers earn lower-than-average wages. According to the Department of Labor, "production workers in food manufacturing averaged \$13.13 an hour, compared with \$16.76 per hour for all workers in private industry in 2006"

(<http://www.bls.gov/oco/cg/cgs011.htm>).

With an annual income of just over \$34,000 in 2006, the 1.5 million workers in food manufacturing rank among the lowest paid factory workers in the United States (with textile mill and apparel workers below them).

It might also be argued that the more Americans become concerned with the nutrition and health claims of their food, the

more ill become those workers responsible for food production. On its website, the U.S. Department of Labor acknowledges that Many production jobs in food manufacturing involve repetitive, physically demanding work. Food manufacturing workers are highly susceptible to repetitive-strain injuries to their hands, wrists, and elbows. This type of injury is especially common in meat- and poultry-processing plants. Production workers often stand for long periods and may be required to lift heavy objects or use cutting, slicing, grinding, and other dangerous tools and machines. . . . In 2006, there were 7.4 cases of work-related injury or illness per 100 full-time food manufacturing workers, much higher than the rate of 4.4 cases for the private sector as a whole.

(<http://www.bls.gov/oco/cg/cgs011.htm>)<sup>xvi</sup>

Although the frozen TV dinners of the 1950s have given way to microwavable meals and snacks, streamlining meal preparation in the home, the tasks meted out alongside factory conveyor belts have remained numbingly similar over the decades—although increasingly under the control of fewer and fewer corporations.

Similarly, as subsistence agriculture gave way to commodity-based agricultural production (concentrated in the US on corn, wheat, and soybeans), farm labor itself has also adopted industrial models of scale and "efficiency." Daniel Imhoff, among many other writers, credits Earl Butz, Secretary of Agriculture during the Nixon administration, with ushering in the farm policies that changed the face of contemporary agriculture, making it "increasingly industrialized and dominated by concentrated corporate interests in almost every sector" (39). Imhoff cites Peter Riggs' work with the Forum on Democracy and Trade as revealing that

the top 150,000 mega-farms in the United States produce most of the country's output in food and fiber. The top three or four conglomerates control at least 60 percent of the total market share in grain handling,

corn exports, beef packing, and flour milling. Oligopolies also dominate the crop insurance industry, the seed business, food retailing, food processing, fertilizer production, and ethanol manufacture, among many others. (39, 42)

The concentration of capital in agriculture along with a parallel and often overlapping concentration of capital in food manufacturing has increasingly turned farms into high-tech factories turning out meat, milk, eggs, and grain in record amounts and at an accelerated pace.

While these forms of industrial manufacture both in the factory and on the farm embody modernist ideals, they may also be argued to have contained from the outset the seeds of a postmodernist sense of disconnect and fragmentation. In one of their most poetic passages of *The Communist Manifesto*, Marx and Engels (1848) write:

The bourgeoisie cannot exist without constantly revolutionizing the instruments of production, and thereby the relations of production, and with them the whole relations of society. . . . Constant revolutionizing of production, uninterrupted disturbance of all social conditions, everlasting uncertainty and agitation distinguish the bourgeois epoch from all earlier ones. All fixed, fast-frozen relations, with their train of ancient and venerable prejudices and opinions are swept away, all new-formed ones become antiquated before they can ossify. All that is solid melts into air, all that is holy is profaned, and man is at last compelled to face with sober senses his real conditions of life and his relations with his kind. (248)

More than a century and a half later, this sense that “all that is solid melts into air” stands as one of the best descriptions of the contemporary postmodern condition. Space-time compression, along with a privileging of heterogeneity, fragmentation, and indeterminacy and an “intense distrust of all universal or totalizing discourses” (Harvey, 1989, 9) serve as some of the chief characteristics of the postmodern condition, made visible in the visual arts, literature, architecture and urban design. The myriad forms of popular culture (music, film, radio, television) have long responded to and reflected the social, political, and economic milieu they inhabit.

Theodor Adorno and Max Horkheimer were among the first to apply Marxist theory concerning industrialized labor to the products of popular culture. In “The Culture Industry” (1944) Adorno and Horkheimer critique the standardization and mass production that they characterized as increasingly shaping creative works of art and entertainment. They write, “for culture now impresses the same stamp on everything. Films, radio, and magazines make up a system which is uniform as a whole and in every part” (349). Eleven years later, television had made its way into half of all American homes—and would certainly have been included Adorno and Horkheimer’s critique had they written it in the 1950s. The business models that dominate entertainment industries, they argue, result in forms of amusement that in both their manufacture and content parallel the forms of labor of advanced capitalism. “What happens at work, in the factory, or in the office can only be escaped from by approximation to it in one’s leisure time. All amusement suffers from this incurable malady. Pleasure hardens into boredom because, if it to remain pleasure, it must not demand any effort and therefore moves rigorously in the worn grooves of association” (361). To attain their “popular” status, forms of entertainment must strike a balance between familiarity (and thus

“effortlessness”) on the one hand and novelty (to encourage continual purchases) on the other. In this way, even mass-produced and “standardized” forms of popular culture begin to reflect and revel in postmodern aesthetics.

The rise of “reality television” over the past decade marks one recent attempt to strike this successful balance. Reality television also bears a noteworthy relationship to the rise of new media. Computer technology and the internet in particular have held the promise that they would enable “ordinary citizens and activists themselves to become political actors and communicators, to reproduce and disseminate information, and to participate in debates and struggles, thus helping to realize Gramsci’s dictum that anyone could be a public intellectual” (Kellner quoted in Andrejevic, 2004). Even television, despite its high production costs, has followed suit to some extent, “drawing on the power of reality to counter mass-produced, commodified programming” as Mark Andrejevic (2004) notes (61). In the process, reality television has adopted an increasingly postmodern aesthetic, featuring more and more “ordinary citizens” in its programming and reveling in fragmentation and heterogeneity (61).

But above all, television remains a profit-oriented business. As Madger (2004) writes,

Behind the creative task of bringing programs to audiences, TV is a business. That matters because the way TV conducts its business has a direct impact on the process by which programs are selected, financed, and produced. Reality TV may have captured the attention of audiences, but it also looks good on the books and balance sheets of those

whose business is television.  
(138)

As the November 2007 writers’ strike in Hollywood helped make clear, “Reality TV costs about half as much to produce - about \$600,000 per hour - as a typical new drama or sitcom” (Shiels, 2003). Even more expensive reality programs like CBS’ *Survivor*, which cost an estimated \$1.5 million per episode to produce in the 2001-2002 season, can earn spectacular revenues through product placement deals (Madger, 140-41).

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In both *Dirty Jobs with Mike Rowe* and *How It’s Made*, postmodernist aesthetics confront modernist industrialized labor. Though the programs’ ostensible aim may be to make otherwise hidden processes of production visible and legible to viewers in an entertaining manner, the novelty of the subject matter comes face to face with the limitations of the medium. Television’s social, economic, and technical conventions and constraints together shape the programs’ content and style. Each episode’s attempts to reveal the “dirty jobs” and processes of commodity production serve, then, simultaneously as a record of the interplay of novelty and familiarity, postmodernism and modernism, obfuscation and revelation. And ultimately, regardless of what makes it to the screen, the meaning that audiences make of that content may depend to a great extent on the attitudes and experiences viewers bring with them to the act of watching television.

#### Naturalizing Modes of Production

At the start of every episode of the Discovery Channel’s *Dirty Jobs*, the program host, Mike Rowe, states the following:

I’m Mike Rowe and this is my job. I explore the country looking for people who aren’t afraid to get dirty, hard-working men and women who

earn an honest living doing the kinds of jobs that make civilized life possible for the rest of us.

This opening salvo sets the tone for each episode and for the series overall. The introduction highlights Rowe as the program's central focus. Yet despite his privileged status as host, Rowe's lines create an "us-them" dichotomy. Although the "them" is the group specifically called out for honor ("hard-working," "honest" and "not afraid"), we ("the rest of us") are the ones described as "civilized." More significantly, though, Rowe's line normalizes these various forms of "dirty" or hard, physical work, designating them as necessary for the proper functioning of modern society or civilized life. In other words, we are assured that somebody has to perform these jobs and we are thus permitted to feel relieved that others have assumed that task, leaving us free to pursue our own more "clean" (and less colorful) occupations.

Despite the comedy that underlies this entire "entertainment" program, Rowe clearly makes an effort to recognize and valorize the individuals with whom he works. They are treated for the most part with respect, sharing in, rather than serving as the butt of, his jokes. Rowe's self-deprecating humor enlivens the show and the featured workers are offered opportunities to tease him. While such a strategy may have a very practical aim (easing the challenge of finding individuals who are willing to invite Rowe and his crew to work with and film them), it also matches Rowe's own frequently professed attitudes towards the men and women who perform hard, physical labor.

Capitalizing on his TV fame, Rowe has in the past few years has become a sort of crusader in defense of hard, physical labor. In a speech delivered in Monterey, CA, in

December 2008, Rowe describes a "war" declared on work in American society. It's a civil war. It's a cold war really. We didn't set out to do it and we didn't twist our mustaches in some Machiavellian way, but we've done it. And we have waged this war on at least four fronts. ([http://www.ted.com/talks/mike\\_rowe\\_celebrates\\_dirty\\_jobs.html](http://www.ted.com/talks/mike_rowe_celebrates_dirty_jobs.html))

Those fronts, he goes on to enumerate, are: Hollywood, Madison Avenue, Washington D.C., and Silicon Valley. The Hollywood attack functions through film and television portrayals of working people steeped in stereotypes. As Rowe claims, "We turn them into heroes or we turn them into punchlines" ([http://www.ted.com/talks/mike\\_rowe\\_celebrates\\_dirty\\_jobs.html](http://www.ted.com/talks/mike_rowe_celebrates_dirty_jobs.html)).

Rowe seems intent on erring on the side of creating heroic depictions, and in doing so relies on other familiar, if less acknowledged, stereotypes. He states unequivocally that "people with dirty jobs are happier than you think. As a group, they're the happiest people I know." As evidence for this claim, he notes that roadkill picker-uppers whistle while they work. When he attempts to offer more specific examples and evidence, his argument becomes somewhat convoluted—and linked with his effort to debunk the banal career advice to "follow your passion." In an essay published in January 2009, Rowe pursues the same theme.

In fact, the happiest people I've met over the last few years have not followed their passion at all—they have instead brought it with them.

...

I could give you pages of examples; here are a few. Bob, the pig farmer in Las Vegas who collects the uneaten food from casino buffets and feeds it to his swine, which now grow faster and more profitably than any other pigs on the planet; Matt, the dairy

farmer in Connecticut who realized his cows were producing more shit than milk and launched a successful line of biodegradable “flower-pots” made from pure poo; Or John and Andy, a couple of entrepreneurs down in Florida who retrieve wayward golf balls from alligator infested water-hazards and resell them on the Internet for big bucks. (<http://osmoothie.com/2009/01/05/mike-rowe-people-with-dirty-jobs-have-more-fun-than-the-rest-of-us/>)

It is worth noting here that happiness in each of these cases correlates with profitability, economic success, or earning “big bucks.” In his Monterey speech, Rowe mentions that Bob (the casino food recycler) was recently offered 80 million for his pig operation near Las Vegas and the “poo pot” entrepreneur has a contract with Wal-Mart.

The program itself, though, generally avoids direct mention of economics, either in terms of individual salaries and wages or business revenues or expenditures. In this distinctly non-Marxist manner, jobs are treated more as spectacles than sources of income. Labor is a visual rather than an economic enterprise, with far more attention paid to “dirt” than to jobs.

#### Who Is Featured/Who Speaks?

Most of the individuals featured on the episodes concerned with food production are white and male. Many are business owners and entrepreneurs (including some who have inherited family farms dating back to the 1870s) or hold middle-management positions. These individuals belong to the same group that Marx and Engels (1848) noted “fight against the bourgeoisie, to save from ruin their existence as fractions of the middle-class. They are therefore not revolutionary, but conservative. Nay, more, they are reactionary, for they try to roll back the wheel of history” (253-54). The farmers and ranchers featured own particularly large-scale operations: a 6,000 acre grain farm with 2600 cattle in its feedlot (DVD

Collection 2), an Iowa hog operation where over 800 piglets are born and raised each year (DVD Collection 1), a dairy housing 251 cows (along with the “poo pot” business) (DVD Collection 2). As individuals who benefit substantially from current farm bill legislation, these farmers have a considerable stake in defense of the status quo as it pertains to industrialized agriculture.

This seeming disconnect between who is featured on the program (and allowed to discuss dirty jobs) and the workers who might ordinarily perform this labor is most notable on a segment on winemaking at Starmont Winery in Napa Valley, California (DVD Collection 2). The featured workers here are Remi Cohen, the vineyard’s Operations Manager, and Sean Foster, the Senior Winemaker. During his lessons with Cohen, Rowe is initially taught how to pick the grape clusters. Cohen instructs him, “Grab hold of the cluster gently, and pull, and there you go.” When Rowe responds, “So we just basically go like this and like that,” she replies, “except you have to go about a gazillion times faster.” A quick montage of images reveals the actual pickers: Hispanic men cutting grape clusters with sharp knives at an extraordinarily fast pace. Rowe comments, “So the pickers are always filling their trays and running up to the tractor” as the camera follows one worker literally running from the tractor back to the vines. Cohen again informs Rowe, “We get paid by the pound, ton here, so we have to hurry.” In a rare instance where economics are discussed, Rowe follows this comment in a voiceover, stating, “Picked grapes sell for about 150 dollars a ton and a dozen workers can pick 2 tons per hour. Since they’re paid by the ton of grapes picked, the faster they go, the more money they earn.” If one does the math, 300 dollars divided by a dozen men for two hours work equals \$12.50 an hour--if they run, in sometimes adverse weather conditions, with minimal amenities, and during a very short harvest season only.

Starmont wines range in price on the winery's own website from \$18 to \$125 dollars a bottle. Later in the episode, in response to a question from Rowe, Cohen states, "Every year I like to do all the jobs at least once for one day so I can remember and understand what it's like to do each different job in the winery." The men shown picking grapes could probably have offered a more detailed discussion of the vineyard labor, had they the luxury to pause even briefly in their work.

While *Dirty Jobs* features individuals in their jobs, *How It's Made* features and celebrates technology, industrial precision, and scale. Those individuals shown are seen literally in the service of machines. *How It's Made's* fascination with factory production is so pronounced, though, that entire episodes are filmed showing no humans at all or at most a disembodied hand serving only to pause the action and display the commodity at various stages of production. The modern dairy featured in one episode is introduced as a sort of modernist dream factory:

Getting milk out of a cow has come a long way since the days of sitting on a stool and pulling teats. Today's cutting edge dairy farms are fully automated. Sophisticated equipment feeds the cows, cleans up their manure, milks them, and even checks the quality of the milk.  
(<http://www.vidly.net/video-how-its-made-milk.html>)

Reminiscent of a sequence from a science fiction film, the state-of-the-art equipment cleans the barn floor and milks a cow without any human intervention at all. The absence of humans is reinforced by the discussion of the dairy's guiding principles. Animal welfare is at the core of this state-of-the-art dairy farm. A happy and stress-free

cow, afterall, produces better milk. So these cows aren't confined to stalls. They walk around freely, inside or outside, eating and drinking as they please.  
(<http://www.vidly.net/video-how-its-made-milk.html>)

So bright and antiseptic and devoid of humans are the scenes captured by the camera, one might begin to believe the cows are willing participants in this enterprise, contented visitors to a sort of cow paradise or day spa.

In other episodes, we do see anonymous individuals within the factory, often simply monitoring equipment, but at other times embodying the very forms of repetitive and dangerous labor described on the Department of Labor website. The work revealed by these camera shots is rarely commented upon—and the camera lingers over these repetitive motions for only a few seconds. (Each segment of *How It's Made* is only 4 to 7 minutes in length.) The narrator for an episode on the production and processing of pineapple in Hawaii cheerfully exclaims,

The new plants will come from pineapple crowns, and they're planted 26 centimeters apart in hundreds of rows. With 9,000 pineapple crowns to be planted by hand every day, it's no stroll in the park.  
(<http://www.vidly.net/video-how-its-made-pineapples.html>)

The camera devotes 20 seconds to showing this backbreaking labor. Moments later, now inside the pineapple canning factory, the narrator explains,

Peeling and pulping are next. In a one-stop shop, the pineapples are topped and tailed, skinned, and the cores

are removed. The rest of the pineapple ends up here. The workers check the fruit for any leftover skin.

(<http://www.vidly.net/video-how-its-made-pineapples.html>)

In conjunction with this final statement, the camera moves from a overhead distant shot to a close-up of the skinned pineapple spinning on a worker's thumb as she swiftly slices off tiny bits of remaining skin from the fruit with a sharp, curved knife, places it back on the conveyor belt and picks up another. The camera lingers again just 20 seconds on this activity.

#### Baby Talk and Double Entendre

Perhaps one of the pleasures sought in a program like *Dirty Jobs* is the escape afforded by the knowledge that one's own job is, by contrast, not quite so dull, difficult, or despicable. Such programming, according to Adorno and Horkheimer, pacifies the public and encourages "obedience to the social hierarchy" (357). In his analysis of popular music, Adorno (1941) attempts to identify the specific means by which popular music is standardized in its effort to appeal to a broad segment of the population. Adorno argues that the incorporation of "babytalk" in popular music is one such strategy. "The children's jokes, the purposely wrong orthography, the use of children's expressions," or more simply, "treating adults like children" is aimed, he argues, "at relieving the strain of their adult responsibilities" (30). The pursuit of the popular often takes these same forms in television programming. Few episodes of *Dirty Jobs* are free of baby talk; none are without humor. The constant references to "poo" in innumerable episodes serve as the most obvious example of baby talk. Double entendre, another form of children's jokes, offers multiple opportunities for sexual innuendo, beginning with the program title. The episode on wine-making, for example,

included a 2- or 3-minute exchange in which Rowe provides an exaggerated pronunciation and clowning facial expressions in discussing the bung hole on a barrel of wine. Adorno further argues that the use of children's language is an attempt on the part of "the plugging agencies" to bridge the distance between themselves and prospective consumers. Rowe's well-documented appeal to his fans as an "everyman" certainly owes something to his ability to engage in childlike playfulness in the midst of a "dirty" job. While his motivations may be to illustrate that hard work need not consist solely of drudgery, juvenile humor dominates the program's content.

#### The Thin Surface of Things

Postmodern aesthetics can be found in both the visual as well as verbal content of reality television. These include techniques that call attention to (rather than mask) the production process of creating the program itself. Postmodernism overall exhibits a fascination with and contentment in displaying only the thin surface of experience rather than probing for greater depth. It accomplishes this in a variety of ways.

##### a. Celebrating Artifice

Ironically, reality television eschews the conventions of "realism" that have long characterized cinematic representations. Bazin (1971) argued that the inspiration driving technological innovation in cinema was the attempt to create for viewers "as perfect an illusion of reality as possible within the limits of the logical demands of cinematographic narrative and the current limits of technique" (quoted in Maltby, 2003, 231). Films typically employ what Robert Allen (1992) labels "cinematic address," "expending tremendous effort to hide [their] operation" (117). Messaris (2001) describes this same phenomenon as "invisible editing," or the adoption of "a set of principles for creating image sequences

that seem to flow naturally, deflecting the viewer's attention away from that fact that, each time there is an edit, there is also a radical, 'impossible' shift in a movie's point of view" (185). Television, by contrast, in many of its genres has adopted a more rhetorical mode of address, frequently breaking the third wall to address viewers directly. As Allen notes, "the rhetorical mode simulates a face-to-face encounter by directly addressing the viewer, and, what is more important, acknowledging both the performer's role as addressor and the viewer's role as addressee" (118). Television blatantly solicits our attention as the intended and honored recipient of a message, the "you" explicitly addressed in many advertisements and program genres. Adopting a somewhat exaggerated form of rhetorical address, *Dirty Jobs* traffics in pastiche more than realism. Rowe not only speaks directly to (or mugs for) the camera and the camera operators, but the normally behind-the-scenes production crew find themselves in front of the cameras at times as well. In the cattle rancher episode (DVD Collection 2), Rowe pauses to say, "They don't have awards for the world's dirtiest cameraman, but if they did, he'd be right over in that general area" as a second camera relays an image of the first cameraman caught in a swirl of ground alfalfa billowing out of the Haybuster. Miscues and "bloopers" frequently air at the end of an episode or in the extended programs marking the completion of 100 or 200 dirty jobs. At the Starmont Winery, from the middle of a stainless steel wine vat, Rowe addresses a camera directly to say, Can I tell you a little secret? We thought that shoveling the skins out of a wine vat would be a quick little 10- or 15-second thing we'd kind of slip into the story just to show you that making wine is a dirty job. But you've been watching me do this for, what, over two minutes. And in real time, I've been in here for over a half hour. Which goes to show, you never know what's waiting for you on the other side of the hole.

These slightly destabilizing moments help reveal the artifice involved in filming and editing "reality" itself.

#### b. Sensory Deprivation

With its two-dimensional screen and exclusive reliance on sight and sound, even high-definition television faces severe limitations in its ability to render the world in its full sensory detail and richness. Except for rare experiments in movie theatres, inventors have yet to create a means of screening 3-D images or attaching olfactory or tactile information to the visual and auditory data of film or television. "Smell-o-vision" remains a technological dream/nightmare—and in the case of *Dirty Jobs* this limitation is a significant one. Viewers must rely exclusively on Rowe's humorous (albeit pointed) comments instead. For instance, when Rowe walks into the pig nursery in Iowa, he exclaims, "Oh good god. Good lord. What fresh hell are we in here?" But our noses register nothing out of the ordinary. And even if we have traveled past cattle or hog confinement operations in the past, it is difficult, if not impossible, to conjure up the smell on cue from the comfort of our own living rooms.

Perhaps more surprisingly, even when these programs could convey some sensory data that would offer a better understanding of worksite conditions, they appear to downplay it. The decibel level encountered on the farms and inside the factories appear toned down in both *Dirty Jobs* and *How It's Made* episodes—allowing, no doubt, for the host's or voiceover narrator's words to be better heard. "Excessive noise disrupts sleep, produces stress, impairs communication, and, in high enough doses, causes significant noise-induced hearing loss (NIHL)" (Clark and Bohne, 1999, 1658). Current OSHA regulations require employers to administer an "effective hearing conservation program" (usually ear plugs) for any employees exposed to time-weighted average sound levels of 85



decibels or higher for an 8-hour shift (US Department of Labor). While the decibel level in an “average factory” is usually cited as being 80 dB, a great deal of farming and factory equipment operates at decibel levels exceeding this. A farm tractor typically operates at 100 to 110 dB. Even when the decibel levels do spike on the audio track for these programs, they do so for only a few seconds at a time.

### c. Numbers without Context

Perhaps as a means of compensating for their heavy reliance on visual information, both programs seem to display a fascination with numbers—or at least certain types of numbers. Although economic figures are largely avoided on *Dirty Jobs*, other statistics are sometimes offered either in awe or gleeful enthusiasm. These are typically the numbers that equate to “dirt,” as measured in bushels, gallons, pounds, or tons. Animal waste, in particular, is singled out for attention. We are informed, for example, that the 251 cows on the Connecticut dairy farm produce 150 pounds of “poo” per day or 800,000 gallons of manure annually. The troughs under the nursery at the Iowa hog confinement farm hold 2,000 gallons of liquid manure, and both Rowe’s verbal commentary as well as multiple camera shots emphasize this detail. But these numbers remain discrete facts, unattached to any larger narrative and devoid of comparative analysis.

The Science Channel’s program *How It’s Made* shares this same fascination with numbers, filling its 4- to 7-minute narratives with facts and figures—again, largely in terms of centimeters and kilos, pounds and tons, liters and gallons, minutes, hours, and days. In this program, it is as if the sheer magnitude of food production explains and justifies the processes witnessed on screen. Thus, the British male voiceover for an episode detailing the mass production of hotdogs informs us that each hotdog is precisely 13 centimeters in length and that

“it takes just 35 seconds to make a chain of hotdogs that would span a football pitch twice.” Moments later, as the hotdogs undergo the final steps of production, the narrator intones,

This machine peels 700 hotdogs every minute. They manufacture an incredible 300,000 an hour. That’s close to two and a half million per shift. So they really do churn them out like it’s a sausage factory, which, of course, it is. Good thing really. It means lunch shouldn’t be a problem. (<http://www.vidly.net/video-how-its-made-hot-dogs.html>)

Regardless of which off-camera narrator is given the task of narrating the on-screen action, their voices are invariably upbeat, rapt, and authoritative.

The forms of industrialized agriculture and factory labor presented on these programs are rarely questioned; they are presented as “normal,” albeit “dirty.” In one notable exception, after watching 2,000 gallons of liquid manure pour through a pipe into an underground holding tank on the Iowa hog farm, Rowe wryly observes, “Let me tell you, there ain’t nothing normal about what’s going on here today.” But even so, the program offers no real critique of industrialized agriculture. Instead, the program carefully avoids being “preachy” or getting “too earnest” (Kelly, 2008). And so though viewers are given visual access to factory farm production processes, no connections are made between CAFO (Confined Animal Feedlot Operations) conditions and their consequences. Viewers see gallons (and in one instance a “lake”) of animal manure on various livestock and dairy operations, but not the resulting groundwater contamination due to the billion tons of animal manure generated annually by cattle feedlots and hog confinement.<sup>xvii</sup> Audiences can climb inside

a grain silo with Mike Rowe and watch him shovel corn and mix grain for cattle feed, but the diseases experienced by cattle fattened for market on a grain-based diet remain off-screen. Rowe deftly performs the tasks of clipping newborn piglets' eye teeth and tails and giving them an antibiotic shot (treatments all necessitated by CAFO conditions), but the resulting build-up of antibiotic-resistant pathogens (affecting these animals and the humans who eat them) are neither shown nor commented upon. The "dirt" on these industrialized farms is manure. *Dirty Jobs* turns that manure into a spectacle (and one that is often treated with giddy delight). Cows standing ankle deep in their own manure or, in one case, a pig defecating into its own feed trough are the source of either humor or distain directed at the animals rather than at the farmers and ranchers who have created these conditions. One consequence of this "dirt," as Eric Schlosser (2001) has famously written, is "there is shit in the meat" (197) and American consumers are eating it—along with the antibiotics meant to help offset its presence in our food system.

To understand how viewers respond and what lessons they might derive from the glimpses of industrialized labor revealed on these programs, it is useful to examine viewer commentary posted on-line.

#### Audience Responses

Most of the on-line commentary concerned with *Dirty Jobs* is focused on Mike Rowe himself. As Kelly (2008) notes, Fans crowd Discovery channel message boards to talk about the guy, MySpace abounds with dozens of Rowe-related pages: "Mike Rowe for President" and "Hot 4 Mike Rowe" among them. And one only need to a quick Google search [sic] to find legions of blog-enabled fans professing an often scary devotion for the guy. (<http://voices.washingtonpost.com/celebritol>

[oggy/2008/07/catching\\_up\\_with\\_mike\\_rowe.html](http://oggy/2008/07/catching_up_with_mike_rowe.html))

On those occasions when viewers discuss the guests featured on the show, the opinions expressed focus primarily on their entertainment value or "naturalness." Occasionally a fan will write an extended piece, offering a better sense of how the labor/laborers themselves are regarded. In a blog entry, Sheila Parker (2009), for example, listed her five favorite episodes of *Dirty Jobs*. Some episodes made the list because, as she notes, "I have to admire someone who can do something I can't." In response to the bridge painters featured on an episode, she writes,

The people who undertake this task are truly amazing and for Mike to be able to participate in something of this magnitude is something to behold. The crew grabs some truly magnificent shots during this episode, some of which actually made me dizzy. Kudos to those who take their lives into their own hands everyday [sic] to make the world a more beautiful place to live. ([http://www.associatedcontent.com/article/1552805/top\\_five\\_best\\_dirty\\_jobs\\_episodes\\_of\\_pg2.html?cat=53](http://www.associatedcontent.com/article/1552805/top_five_best_dirty_jobs_episodes_of_pg2.html?cat=53))

Her praise extends to virtually every person whose labor helps create the program: host, guests, crew. Meanwhile, watching the oyster harvesters (and Rowe's struggles with the task), gave her "a deeper appreciation for the people who make their living in the oyster beds, bringing us one of the most delicious foods ever discovered" ([http://www.associatedcontent.com/article/1552805/top\\_five\\_best\\_dirty\\_jobs\\_episodes\\_of\\_pg2.html?cat=53](http://www.associatedcontent.com/article/1552805/top_five_best_dirty_jobs_episodes_of_pg2.html?cat=53))

One rare example of an episode generating more than simply praise for Rowe's humor and aplomb was a segment entitled "Casino Food Recycler," featuring a pig farmer named Robert (Bob) Combs who gathers leftover food from Las Vegas casinos to feed his pigs (DVD Collection 1). Most comments concerned the segment's entertainment value (along with a plethora of comments on the cute boy featured during the closing credits), but Parker, among other fans, "was impressed by Bob's creativity when it came to running an efficient and cost effective operation by using the refuse from many of the local restaurants and hotels to feed and bed [sic] his pigs."<sup>xviii</sup> Other viewers, however, were less impressed and began a more critical discussion concerning the operation. On July 9<sup>th</sup>, 2006, one fan posted the comment, "Is that pig farm even legal? The ones in Iowa are much much cleaner. That farm in Vegas looked like the city dump with a pig farm in the middle." A response to this comment posted five months later read, "Unfortunately, it is legal. It is on county land, surrounded by the city of North Las Vegas. I live a couple of miles away, and when the wind is blowing from that direction, the smell is overpowering" (12-28-06). This prompted a pig farmer to write

That farm is legal ?

Would it be legal elsewhere in the USA ? How is it possible to treat such a disregard to hygiene as legal...

I can't believe how any municipal, state or federal authority in the US could not simply arrest such a "farmer" for endangering the lives of so many.

And that "Dirty Job" episode is not beeing [sic] aired only within the United States.

Probably it is already causing a lot of damage to all us pig

farming... Unbelievable...(12-31-06).

But within a few months the North Las Vegas resident was under attack on the site for being "stupid" enough to buy a house near a pig farm and the discussion died away (although it is possible to find a petition on line protesting this particular hog operation).

Viewers obviously bring their values to bear in responding to this and other *Dirty Jobs* episodes, but the participants in this case, without exception, came at the topic either from their own direct experience with other pig farms or as nearby residents in North Las Vegas. The discussion didn't seem to interest other viewers enough to inspire further points of view or to sound broader themes relevant to livestock production.

In the cache of over 100 *How It's Made* videos found on Vidly ("your daily video entertainment") each is accompanied by a brief written commentary by an anonymous author (<http://www.vidly.net/collection-how-its-made.html>). These comments often pertain more directly to the forms of labor depicted on the program than do comments typically posted in response to *Dirty Jobs* episodes. For instance, in introducing the episode featuring an Icelandic sushi factory, the writer (probably not a native speaker of English) follows almost point by point the content stressed by the voice-over narrator—repeating specific details given in the segment. But in noting the workers whose task it is to "slice fish bites in exact 10 gram pieces," the writer adds the observation, "this must be very tedious work that you quickly get tired of" (<http://www.vidly.net/video-how-its-made-sushi.html>). In this instance, even a glimpse of alienated production line labor would appear to give rise to empathic responses. But such a response appears atypical. The scenes inside the pineapple factory, by contrast, elicited only the observation that "much of the work inside the factory is done by hand so the pineapple industry needs

plenty of workers to produce the sweet pineapple that we consume” (<http://www.vidly.net/video-how-its-made-pineapples.html>).

More often, though, the introductory notes to these episodes, like the episodes themselves, lose sight of the workers completely, focusing on the overall process. Yet the viewers don’t always adopt the same enthralled tone as the program’s voice-over narrators. In introducing the *How It’s Made* episode on bacon production, the writer comments,

Before you start watching this video I want to warn all bacon lovers to watch the video, your view on bacon might change. I found the first half of the video rather disgusting because of all that fat and dead meat.

If you think you can handle the truth about bacon you will get a good look of how bacon is manufactured in the industry. As always with the *How It’s Made* videos it’s very interesting.  
(<http://www.vidly.net/video-how-its-made-bacon.html>)

Rather than commenting on the repetitive tasks glimpsed briefly in this video (and their tediousness), the writer responds to the look of the pre-processed food. And while “dead” meat may be unappetizing to look at, the writer still finds that experience valuable and interesting. Learning the “truth about bacon” seems to trump the pleasures of uninformed consumption, while not apparently undermining that consumption itself.

The Vidly archived *How It’s Made* clip that generated the strongest response, however, is one showing how hatchery chicks are bred, “the first step in commercial chicken farming.” This must be the most upsetting

video in the *How It’s Made* series, not even in my wildest imagination could I have believed this was the way chicks was brought [sic] to the world and treated. As you can see in this video the chicks are treated like any other manufactured good, not what we call a respective way of treating living animals. Perhaps not what you want to see but it’s a good thing knowing how things are made and perhaps switch over to locally produced egg and chicken, preferable organic.  
(<http://www.vidly.net/video-how-its-made-hatchery-chicks.html>)

The brief video shows eggs loaded onto racks and placed in an incubating room, then machine sorted and vaccinated (while still in the shell) against Marek, a poultry disease. About halfway through the video, the eggs become live chicks, and, I suspect, for many viewers this is where the initial discomfort sets in as the chicks move through the factory packed into trays and along various conveyor belts. The scenes are somewhat reminiscent of the nightmarish collections of ducts and pipes that mark the industrialized spaces in the film *Brazil* (1985). If the modern dairy featured in a *How It’s Made* episode is meant to represent a modernist utopia, this factory serves as its dystopian counterpart. The voiceover narrator, however, continues to describe the action in her same piercingly eager and earnest voice with a techno beat filling in the background. “Now workers roll the chicks to what’s called the separator, a machine that separates the birds from the shell halves. The shells are larger than the chicks, so they stay on top while the chicks fall down to a conveyor belt below.” The camera zooms in for a tight shot of tiny chicks struggling to maintain their footing on an angled set of rolling bars, and falling through the gaps. The camera then cuts to another view of the chicks dropping from one conveyor belt onto yet another, heading off to be “classified according to gender.” A wide shot then shows a group of women seated around a circular conveyor belt

packed densely with yellow chicks. The women pluck up chicks in each hand, examine their wing feathers, and toss them in the appropriate shoots, through which the chicks plunge, landing on yet another conveyor belt where they are mechanically counted. “The chicks now fall into specially designed transportation boxes, 102 chicks per box,” we are informed. Finally, as the camera shows a chick plucked out of a box, held by a woman’s hand, we are informed that female chicks purchased for egg production will start laying eggs in about 20 days, females for slaughter will be ready in 38 days, while males will reach market weight in 40 to 65 days. It’s a brief life. The video is unpleasant enough to prompt the Vidly commenter to at least consider switching over to locally produced or organic eggs and chickens and to urge others to take the same action. Whether these images are powerful enough to actually prompt such consumer action is unknowable.

Perhaps it is a matter of their size and newborn status, but the chicks’ treatment “like any other manufactured good” is explicitly decried. These animals—unlike the cows and pigs shown on *Dirty Jobs* or elsewhere on *How Its Made*—are perceived as the sympathetic victims of industrialized processes of production—rather than objects of humor, disdain, or indifference. The sympathy for the fluffy yellow chicks shown in this video is so strong, in fact, that no empathy is voiced on behalf of the factory workers who must witness and perform these tasks day after day in 8-hour shifts. Their treatment—and the rote tedium of their tasks—is unremarked.

#### Conclusion

The close-ups of factory farming glimpsed on these programs, whether gallons of fecal material or chicks on conveyor belts “treated like any other manufactured good,” can apparently disrupt the bucolic notions of agriculture that more often reach us on television and theatre screens. Images

have power. Yet that power is surely constrained by many of the other conventions and techniques of these programs—normalizing industrial labor, selecting the faces and limiting the voices of the workforce, humor, baby talk and innuendo, postmodern playfulness, numbers without context, and the glorification of mechanical precision and scale. The programs offer opportunities to critique of the modes of industrialized production of food that takes place on American farms and factories, but doing so requires considerable effort in reading against the grain and against the postmodern flow of words and images. There is little evidence found in on-line comments to suggest that viewers have connected the dots to understand that the land, air, water, plants, animals, and workers on the farm and in the factory have all been caught within the cogs industrialized production and that all have been exploited and damaged in the process.

David Harvey writes, “postmodernism comes dangerously close to complicity with the aestheticizing of politics upon which it is based” (117). Arguably, these programs practice a form of complicity with the status quo even in their attempts to reveal what is normally hidden. If, as Harvey asserts, postmodernism is an “intervention in politics, economy, and social life” then “changes in the way we imagine, think, plan, and rationalize” as a result of this intervention “are bound to have material consequences” (114-15). Repetitive-strain injuries, polluted air, water, and land, antibiotics in livestock, and living things “treated like any other manufactured good” are the legacy of modernism, the consequences of industrialism. If seeing these consequences on a TV screen—set to a lively soundtrack and made into grist for a joke or a pun—makes us more complacent still, we have ourselves become cogs in the machinery of postmodernism.

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## Notes

<sup>xiv</sup> This list of reality programming could be expanded to include many others, e.g. *Deadliest Catch* (fishing in Alaska), *Hell's Kitchen* (restaurant conditions) or even *Project Runway* (fashion) and *American Idol* (popular music). See M. W. Stahl's (2004) A moment like this: *American Idol* and narratives of meritocracy in *Bad Music: The Music We Love to Hate*.

<sup>xv</sup> The snack food industry products consist of only roasted nuts and nut mixes, potato, tortilla and corn chips, popped popcorn and peanut butter. It does not include cookies, candy, saltines, pies, or chocolate-covered snacks. This information and the \$23 billion dollar figure comes from Hoovers, Inc. ([http://www.hoovers.com/snack-foods-manufacturing/-ID\\_395-/free-ind-fr-profile-basic.xhtml](http://www.hoovers.com/snack-foods-manufacturing/-ID_395-/free-ind-fr-profile-basic.xhtml)).

<sup>xvi</sup> Because of the considerable mechanization in the industry, most food manufacturing plants are noisy, with limited opportunities for interaction among workers. In some highly automated plants, "hands-on" manual work has been replaced by computers and factory automation, resulting in less waste and higher productivity. While much of the basic production—such as trimming, chopping, and sorting—will remain labor intensive for many years to come, automation is increasingly being applied to various functions, including inventory management, product movement, and quality control issues such as packing and inspection. Department of Labor, Bureau of Labor Statistics.

(<http://www.bls.gov/oco/cg/cgs011.htm>)

<sup>xvii</sup> Imhoff (2007) cites a 2006 study by the United Nations Food and Agriculture Organization which reported that feedlots "are a major contributor to climate change, generating even more greenhouse emissions than automobiles, and causing land and water degradation on a global scale" (52).

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## **Linking the Production and Consumption of Border Enforcement with Symbolic Acts of Conservation and Humanitarianism**

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### **Abstract**

*Border security policies for the United States (U.S.) are produced along the border, but their ideas are consumed by persons across the nation. The concentration of border enforcement resources at urban centers along the U.S.-Mexico border provides an example of one border security policy. This increased border enforcement in urban areas has pushed migrants into remote conservation areas, threatening both vulnerable protected lands and the human migrants passing through them. Addressing a lack of data on the conservation and human rights impacts of border enforcement policy, we conducted ethnographic research in the heavily-impacted Altar Valley region of southern Arizona. Community partners included the Buenos Aires National Wildlife Refuge, the Coronado National Forest, and the No More Deaths humanitarian aid group, all located within 25 miles of the Arizona-Sonora border. Both land-management and humanitarian aid workers in this area recognize that addressing the production of environmental degradation and human suffering in the borderland region requires national level policy changes. Respondents chose to address environmental and human rights challenges for advocacy and ethical reasons. Groups devoted to conservation and human rights have taken it upon themselves to act locally and symbolically to address the borderland problems they face. Humanitarian aid groups hike migrant trails in order to treat and evacuate migrants in distress, while conservation groups tackle and prevent the conservation threats from migrant traffic. Such measures do not solve the problem, and indeed are largely symbolic actions. Nonetheless these symbolic acts do serve to link the sites for production and consumption of border security policy. By their actions and subsequent testimonies to elected officials, conservation and humanitarian aid workers on the U.S.-Mexico border bring the exploitation of border security home to those who consume it across the U.S. Respondents also emphasized deontological ethical justifications when explaining why they chose particular approaches to addressing environmental and human rights challenges. Their sense of duty towards the environment and other humans required them to act even though they knew decisions made at the site of production thwarted their ultimate objectives. These outcomes suggest at least two contexts where largely symbolic responses to the separation of production and consumption may be both conceptually justified and instrumental: when they might re-articulate the relations between production and consumption, and when participants believe they are ethically mandated.*

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### **Introduction**

The mobility that characterizes modernity means that borders are increasingly spaces of interaction and transaction between people, ideas, and goods, but these interpersonal interactions are interrupted when states enforce their borders as expressions of sovereignty (Donnan & Wilson, 1999). States prioritize

interactions they want to allow at their borders—often economic dealings—and fight interactions they want to deny—often illegal drug trade or labor migrations (Andreas, 2003; Gardner & Osella, 2003). These decisions impact not only the economic or political entities that are directly included or excluded, but also numerous social, cultural, and environmental

processes both at and away from international borders (Coleman, 2007; Gupta & Ferguson, 1992). The study of borders and evolving means of border enforcement are thus good locations to study integrated environmental, political, economic, and social factors (Donnan & Wilson, 1999; Gupta & Ferguson, 1992).

The border between the U.S. and Mexico is one of the most extensively studied international borders (Donnan & Wilson, 1999). Research on this border has covered Mexican-American culture, the dynamics of North American economic integration, the drastic changes in border enforcement since the early 1990s, and most recently the deaths of undocumented migrants entering the U.S. (Andreas, 1996, 1998-1999, 2003; Cornelius, 2001, 2005; Donnan & Wilson, 1999; Massey, Durand, & Malone, 2002; Nevins, 2002). Despite this broad coverage of the U.S.-Mexico border, there is limited research on the convergence of conservation and human rights problems caused by border enforcement. Targeting undocumented migration at points-of-entry near population centers (Office of Homeland Security, 2002; Andreas, 1999) touched off a range of effects not immediately associated with the policy's intended goal of "border security." These include the deaths of undocumented migrants, reduced quality of life for borderlands residents, and degradation of unique border ecosystems (Bustamante, 2008; Defenders of Wildlife, 2006; Good Neighbor Environmental Board, 2007; Human Rights Watch, 2003; Murphy Erfani, 2005). Such human rights and environmental problems have been most evident in Arizona, where border traffic, border enforcement, and migrant distress has increasingly converged on protected forests, wildlife refuges, and national parks (Defenders of Wildlife, 2006; Murphy Erfani, 2005).

The shift of undocumented migrant traffic into remote areas of the borderlands created environmental and human rights disasters. Yet these concerns are generally

missed in media reports on border enforcement, which largely focus on the numbers of migrants apprehended along the border (Robbins, 2006). Abuses on the border thus go largely unrecognized by U.S. residents—the majority residing away from the border—who demand border enforcement and its promise of security. This illustrates a distinct separation between the sites where border enforcement is produced and consumed. Modernity tends to veil environmental and social traumas associated with production from those who consume its goods (Harvey, 1989; Hudson & Hudson, 2003), and "border security" is no exception. As Nevins (2002, p. 92) states, "Operation Gatekeeper is many things, one of which was a political sideshow designed for public consumption to demonstrate the Clinton administration's seriousness about cracking down on unauthorized immigration." Border policy's attempt to control undocumented migrants produces ideas of national security, law enforcement, a war on drugs, and a war on terror for U.S. residents across the nation to consume, while social and ecological elements are exploited in the borderlands.

In this paper we provide an analysis of border policy framed by this separation between the sites of production and consumption. This follows in line with studies that have focused on the separation between production and consumption in food systems (Allen, FitzSimmons, Goodman, & Warner, 2003; Goodman & DuPuis, 2002; Gouveia & Juska, 2002), fair trade coffee (Hudson & Hudson, 2003), tourism (Ateljevic & Doorne, 2003; Richards, 1996), and music (Hennion, 1989). We use ethnographic research with two groups, No More Deaths humanitarian aid volunteers and federal conservation agency workers, to assess how they conceptualize and resist the exploitation associated with the production of border security. We end by suggesting how the insight of NMD and conservation agency workers can help both human rights and

environmental advocates reduce abuses in the borderlands.

### **Study Area**

Since the 1990s, federal actions to control immigration across the Mexico-U.S. border have concentrated on reducing undocumented migration at points-of-entry near population centers (Andreas, 1998-1999; Office of Homeland Security, 2002). Officials relied on increased agents, construction of a border fence, and surveillance technology to reduce unauthorized traffic in urban areas (Cornelius, 2005; Murphy Erfani, 2005). Declining numbers of undocumented persons apprehended at these locales was initially interpreted as a sign of successful deterrence (Andreas, 1998-1999), but a northern pull for labor simply diverted border-crossers away from traditional points-of-entry along the border and spurred increased traffic through less-inhabited areas of the borderlands, such as the lands between Nogales, AZ/MX and Sasabe, AZ/MX (Rubio-Goldsmith, 2006).

Since 1994, as many as 5,000 migrant deaths have been estimated along the U.S.-Mexico border, the majority of them taking place in the Arizona borderlands (Coalición de Derechos Humanos, 2006; United States General Accounting Office, 2006). In addition to the migrant deaths, exploitation has also occurred in vulnerable borderland ecosystems protected by federal parks, refuges, and forests. The Altar Valley region of Arizona (see Figure 1) includes an 80-kilometer (50-mile) section of the 3,200-kilometer (2,000 mile) U.S.-Mexico border that has seen a marked increase in undocumented migrants, and in response it has seen an increase in federal border enforcement operations. This area includes lands managed by the US Forest Service Nogales Ranger District of the Coronado National Forest (CNF), the Fish and Wildlife Service's Buenos Aires National Wildlife Refuge (BANWR), and the desert camps of the humanitarian aid group No More Deaths. Personnel from both the

agencies, both on-site and in nearby Tucson, and volunteers from No More Deaths partnered in this study.

The Nogales Ranger District of CNF encompasses two parcels of land totaling 140,000 hectares at the eastern edge of the study area. The southern parcel of this district has 48 kilometers of international border, and the district includes land on both sides of Interstate 19 as it heads north from Nogales, AZ. This is the district of the Coronado National Forest receiving the greatest number of undocumented migrants. BANWR is around one-third the size of the Nogales Ranger District, covering 48,000 hectares at the western edge of the study area, near Sasabe, AZ. Refuge land includes 7.2 kilometers of international border with Mexico, but in October of 2006 virtually all the land along the border, reaching approximately one mile inward, was closed to the public due to the threat of violence against migrants and law enforcement officers from both border bandits and smugglers (Buenos Aires National Wildlife Refuge, 2006). The border fence juts east and west of Sasabe, abutting the southern edge of the refuge. No More Deaths' camp near Arivaca is situated at the intersection of BANWR and CNF lands. Volunteers are able to access migrant trails both on and near agency lands, thereby providing aid to persons travelling through and beyond both protected areas.

### **Methods**

In this study we utilized ethnographic methods as a means of examining the

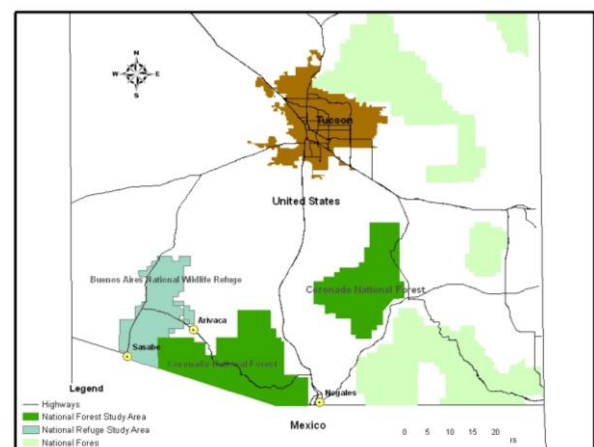


Figure 1. Map of Study

interpretations of and responses to exploitation by groups in the borderlands. Ethnography allows researchers to directly study the interactions and practices of social groups, as the ethnographer is positioned as the student who wishes to learn about the situation. With this approach, the ethnographer becomes the principle research instrument, whose interactions are a part of the research (Lincoln & Guba, 1985). Rachel Shellabarger conducted all fieldwork for this research. In order to employ these ethnographic methods and engage more fully in the research environment, the researcher lived and volunteered with each of the three community groups from May-July 2008. The researcher lived and worked with CNF for four weeks in May and June 2008, and with BANWR for the month of July 2008. The researcher volunteered with No More Deaths from June to August during summer 2007, and for three weeks total in June and July 2008. The proximity of the three groups also allowed for intermittent travel among all three sites as needed.

Data collection exhibited triangulation through a combination of a literature review, interviews, and participant observation. Three forms of data gathering serve to reduce bias in the analysis (Silverman, 2001). Literature review was carried out before, during, and after fieldwork. Reports and press releases from the three groups, as well as literature from similar human rights and conservation groups in the area, were gathered and analyzed. Local news stories, government reports, and local university research were assembled to create a better picture of community responses to migration. Participant observation was possible through volunteer work with each of the three community groups. While participating as a volunteer, observation and informal interactions provided the majority of data, and detailed field notes were taken during this time. Semi-structured, open-ended interviews were conducted with 26 community members from May-July 2008.

Employing snow-ball sampling methods, informants within each community were consulted until the possible number of sources had been exhausted or until it was clear that data exhibited saturation within each sector of the community. Interview notes were taken using pseudonyms for individual volunteers or employees. The researcher used a pre-determined set of questions to prompt these informant-directed interviews, but allowed informants to guide and direct the flow of conversation. In this way, the informant's view of the situation emerged throughout the interview (McCracken, 1988). During and after interviews, individual interview notes were open for participants to review and approve. Presenting the data collected from interviews in this open sense ensured a more inclusive and credible result (Lincoln & Guba, 1985). Data was analyzed continuously throughout fieldwork, in order to recognize and pursue emerging themes. As themes emerged throughout data collection they were shared with community partners, who could elaborate on them and suggest further avenues for research. Informants were asked to confirm statements or themes, as a means of ensuring the quality of the data through member-checking (Lincoln & Guba, 1985; McCracken, 1988). Data for this paper was analyzed using a grounded approach, which allowed themes to emerge from interview and observation notes through constant review and comparison (T. R. Peterson et al., 1994).

### **Border Policy as a Production System Perceptions of ecological degradation in production**

In the U.S. Southwest, policy-makers utilize the Arizona desert as a means to deter undocumented migrants from crossing the border (Andreas, 1998-1999; Cornelius, 2001), making it an important element in the production of border security. The desert, however, it is exploited through ecological degradation from both the migrants who are routed

through remote areas, and the border enforcement that follows them. Though migrants and enforcement agents were described as the immediate environmental problems, informants with the land-management agencies and with No More Deaths would point to border policy as ultimately responsible for the environmental degradation. Land-management informants often pointed out that the border enforcement measures were not constructed to be ecologically sensitive. In a statement typical of humanitarian volunteers, Cole explained, "By forcing migrants into more remote and rugged areas U.S. policy has had an effect on these ecosystems. We should not confuse this issue by saying that migrants are responsible for this reality. What we are talking about is a system of policies that have led to increased human impact on sensitive areas."

Informants pointed to erosion as one prominent form of ecological degradation in the borderlands, both from the migrants moving through the area and the border enforcement efforts in response to their presence. One study at BANWR concluded that 113 hectares of the 48,000 hectare refuge was denuded due to unauthorized trails, virtually all of them believed to be migrant trails. Dell described one way that border enforcement could also lead to erosion, when Border Patrol (BP) agents tried to track footprints. "BP use large heavy rubber tires to drag the roads, then they park on the side of the road, often right by an entrance or turn, and this creates a bald spot. It begins to look like a parking spot, and then everyday users use it to park because they think it's supposed to be there—it turns into a parking lot." Informants also discussed the large amounts of trash piled up in the borderlands, and Leslee was visibly disturbed as she explained, "There's a possibility for wildlife to ingest things they shouldn't, and they can die from that. When two [Student Conservation Association volunteers] were cleaning up trash, they

commonly found lizards or rodents drowned in bottles. Cattle on nearby ranches have died from swallowing plastic bags." In addition to erosion and trash, agency personnel often pointed out an increase in the frequency of human-caused fires, which they attributed to the increase in migrant traffic in the area. "Before the immigration problem human-caused fires were rare, now they are prevalent" (Aaren). Informants associated the changing patterns of fires with the changing patterns of human traffic. "The last two years we've had one mountain fire each year, that's more than the average. This may become the average because the fence is pushing more traffic into the mountains" (Tom). This was particularly problematic because of the ability for wildfires to spread quickly during the dry summer months in Arizona.

Commonly, informants stated that the combined effect of all the border policy impacts was their biggest ecological concern. Charlie described the widespread impact of undocumented traffic, saying "[human and drug] smuggling is a massively inappropriate use of federal lands, and its impact is no different than any inappropriate prohibited act on forest land, but it covers a larger area and the impacts are harder to get at." In addition to the impact migrants have, Cody expressed aggravation at the total impact of border enforcement agents. "What about the environmental impact of all the [Department of Homeland Security] endeavors together, instead of an [environmental impact assessment] for each one, where it seems insignificant? BP agents and vehicles out here have a huge impact that doesn't get looked at. It's frustrating that it all gets looked at one piece at a time and not as a whole." Informants frequently expressed anger or frustration at the total environmental impact on the borderlands, which many viewed as a policy problem. "If the U.S. government were serious about the environment, they would address the root causes of immigration, militarization, and I don't see that happening. I don't see them standing up to

the walls being built through the desert, to the policies that cause migration” (Edward).

In addition to direct ecological impacts of border enforcement, personnel saw border enforcement activities integrated into their working day. Personnel said that this impacted agency lands, as well, as they were less able to carry out the conservation tasks which were their primary aims. Agency personnel described having to rearrange land-management plans in order to facilitate border enforcement measures. As Charlie stated, “In some areas we’ve had to give up the focus on natural resources to help Border Patrol meet their tactical needs—we’re hoping to concentrate things near the border and reduce the impact, freeing our Law Enforcement to focus on the ‘other’ segments of ‘Prohibited Acts’ on [National Forest] lands.”

Land-management agency personnel often described the time spent on border tasks as taking away from their conservation goals. They saw law enforcement officers as “spending too much time on immigration issues,” and one officer suggested that as much as 95% of his time was spent on immigration-related work in a given day (Field Notes). Law enforcement officers were also involved in searching for migrants in distress, a task which is the responsibility of the BP unit BORSTAR. Outside of law enforcement, other personnel described being asked to complete various tasks necessary for border enforcement. Some personnel mentioned having “packed” materials for BP. This entailed personnel spending a full day bringing supplies into remote areas of the borderlands, where vehicles were unable to venture, so that BP agents could carry out border enforcement operations in these areas. Personnel described the time spent away from conservation tasks as an issue of job efficacy, often leading to frustration. They often described an inability to carry out what they believed to be basic land-management tasks, like habitat restoration, prompting them to question the effectiveness of their presence. Tom made

several statements to this effect, which were common among agency informants. “The refuge spends way too much time on border issues, and it takes away from the mission... It’s taken a lot of time and resources away from the mission of the refuge, a disproportionate amount of time... There’s less focus on the biology of it, so the program delivery has suffered dramatically.” In the same vein, Lee mentioned that “We have lost the focus of the refuge, which is supposed to be the masked bobwhite quail.”

In addition to lost time, personnel questioned their safety on the job, due to the number of potentially dangerous persons redirected into their work environments by border policy. Some expressed discomfort when wearing their agency uniforms in more remote areas, suggesting that dangerous persons might not recognize a land-manager uniform and try to hurt them with the assumption that they were law enforcement. This was especially a concern with Forest Service personnel, whose dark greens uniforms look similar to the green Border Patrol uniforms. The researcher was repeatedly warned about an incident in which rocks were placed in the middle of a road, and when the driver got out of the car to remove them, some smugglers in need of a vehicle attacked the driver and took off with the car. Stories of violence against migrants made personnel uneasy, as Tom recalled the story of one migrant who “was shot 5-6 times, and started a fire to get help. He had packed his bullet wounds with mud in order to keep going.” Such circumstances led Lee to the conclusion, “We must be half-cracked to stay here.” Knowing that this sort of violence took place in their work environment was disconcerting for personnel, and warranted extra security precautions. As Aaren explained, “We’re safety-minded because there’s so much extreme violence and crime associated with traffic. [The manager] often compares the extra precautions here to those in grizzly country—just some things you don’t do.”

These safety precautions mostly took place in what were considered 'high-risk zones', areas with higher prevalence of drug smugglers and bandits. Personnel largely avoided venturing into these areas alone or at night, and firefighters were prohibited from suppressing fires that broke out in these zones at night. A statement by Leslee embodied the safety concerns that personnel exhibited living and working along the border, and the steps necessary for them to feel safe. "When sitting in my yard at night, I used to wonder whether I was being observed or whether people were hiding in the brush. Now with a 7-foot fence and razor wire, my yard is secure." Informants disagreed about whether or not these precautions were necessary, but all agreed that their implementation took time away from their conservation tasks.

### **Perceptions of migrant exploitation in production**

As with the ecological degradation taking place in the borderlands, many informants pointed to the enactment of federal border policy as the cause of the distress and death of migrants moving through remote areas of the borderlands. Edward explained, "Our policies are from the status quo, they're not well thought-out or humane policies, and these result in suffering and deaths in my state." These informants expressed frustration that the government did not appear to be taking responsibility for the consequences of border policies. "If I hurt you through my actions, directly or indirectly, I have a responsibility to make sure you are OK. We teach this idea to all of our children at a very early age. Why is it different in the global community? What is so special about countries and institutions, corporate or otherwise, that they are held to a different standard?" (Cole).

A number of informants recalled finding dead bodies in the borderlands, and many were able to point out the exact spot where they had found the body. While driving along the road to the No More

Deaths camp, humanitarian aid volunteers pointed to a shrine along the roadside, where the body of a migrant had been found on the fourth of July a few years back. In another incident, while hiking migrant trails, volunteers stopped at a shrine in a dry river bed, where the body of a fourteen year-old girl was found four months earlier.

For some informants, migrant deaths seemed to be so prevalent that they began to expect them. As Lee said, "I'm surprised I haven't found a dead body yet. So many people have, there are so many bodies out there." When a land-management informant learned that the researcher had also worked with No More Deaths, he asked "How many bodies have you found?" and reacted with surprise when she responded with "none" (Field Notes). Many informants placed the prevalence of migrant deaths alongside environmental degradation, illustrating the complexity of exploitation in the borderlands. "The tragic human aspect of the immigrant issue is that persons looking for work or a better life can actually lose their lives in that quest. The trashing of the refuge, the impact on habitat quality and our time and finances is an aggravating problem for the refuge and its staff. But there is a sad and human side to this problem" (Leslee).

### **Resistance to exploitative production by federal conservation agency workers**

In managed lands along the border, personnel felt that individuals away from the border were unaware of or unable to understand the problems they saw daily. Lee suggested that "People don't realize the magnitude of what's happening here, they can't accept the reality of finding bodies or having your house broken into repeatedly or the massive trash and the innumerable trails." Charlie also saw this separation between consumers of border security with knowledge of the borderlands and other consumers without such knowledge. "It's hard for people who do not reside down here to understand the situation... People who don't work down here don't understand

it, and we— Forest Service, Border Patrol—are directed by people who don't understand." Yet personnel were mostly unsure as to how people away from the border could be better informed. One informant described how he tried to inform every volunteer he met about the numerous exploitations going on in the borderlands. He would then ask the volunteers to tell everyone at home about the problems, so that the news could spread. Personnel said they gave interviews to journalists, and took politicians on guided tours that briefly touched on the problems of the border (Field Notes). They gave educational presentations for schools that included more information about the border, for better or for worse, as Cody noted. "Now school and other groups all want to know about border issues, less about natural resources issues." All these endeavors constitute means of informing others about the exploitation in the borderlands.

In addition, frustration over ecological degradation in the borderlands propelled land-management personnel to mitigate some problems. For instance, Dell described a fight to contain an invasive species outbreak. "Buffel grass is a huge threat... However, three small spots have started up on the refuge, one right along a [undocumented alien] trail. The refuge has successfully eradicated the buffel grass on these sites but the fear is that new sites will be established from grass seeds coming in on the soles of their shoes, which is a source we have no way to control." Additionally, though informants did not feel they could mitigate many of the widespread problems like erosion, they focused on repairing fencing frequently cut by migrants, or installing cattle guards where gates were frequently left open (Field Notes). Personnel also described attempts to work with BP agents in order to limit their ecological impacts, and supported community efforts at trash clean-up.

Informants frequently described feeling some sort of ethical obligation to respond to the migrant deaths and distress

occurring on agency lands, but also expressed a dilemma regarding how to follow through on this. "I think we have some responsibility... I think we have to address it, we don't like to, but have to face the fact of what these people are dealing with" (Tom). For agency personnel, concern over the welfare of migrants was balanced by other matters of ecological degradation and law. When a humanitarian aid volunteer was cited for littering after leaving gallons of water for migrants on refuge land, many personnel found themselves on both sides of the issue. "I flipflop on supporting giving water or not—it's harsh out there. I've felt the impacts of the heat in my situations, can only imagine what it's like for them. Personally, I feel that if we can help get water, like with Humane Borders stations, that's good... It's not just an issue with leaving water, though, but also leaving big bags of food, and we can hardly keep up with the trash" (Cody). As Charlie stated, "I don't mind people giving [the migrants] water, but... legally, I can't let them put water on forest land. I have to be able to guarantee that any water given is safe, of certain quality, must meet municipal drinking water standards, and when water is left out and those who left it walk away, I can't ensure the quality of that water." Personnel thus responded to migrant distress with both personal and agency concerns in mind. Runar described his typical protocol for encountering migrants: "During my day to day job, I may encounter people, and will give them water and call Border Patrol." Similarly, Aaren described a method of providing basic aid without breaking agency policy. "Forest Service people are not trained to respond to the human element. We will respond to humanitarian situations with the first aid we have training for, generally CPR, some EMTs. We try not to take an active role, leaving that up to the sheriff's department [and others]. Do best to render first aid and provide info, try to avoid direct contact."



### **Resistance to exploitative production by humanitarian aid volunteers**

The No More Deaths humanitarian aid group was established in 2004 in response to “a morally intolerable situation” (Field Notes), and from this starting point, volunteers have expressed their commitment to directly addressing migrant distress in the borderlands, as well as educating others about its existence. Every informant expressed their role as necessary but temporary, with one informant stating the desire “to work ourselves out of business” (Field Notes). Informants described their work as a response to government deficiency, as Sol stated, “we are doing humanitarian work on the border that should be done by government agencies. They should be giving water, food and medical treatment to migrants. We’ll be happy to turn this work over to them when they respond as they should.” Hallie also remarked, “Governments are responsible for addressing these problems, but they’re not, so organizations of people do.” Most volunteers described a clear ethical imperative to volunteer in the borderlands. As Hallie stated, “The desert of Arizona is how I define who I am, where my home is. It’s wrong to let people die in my home, regardless of who they are or why they’re here.” Atticus described his reason for volunteering as coming “out of a feeling of commitment to alleviating the conditions faced by migrants crossing in the region that [No More Deaths] is based.” Many volunteers echoed this feeling of commitment to the migrants, often because they blamed U.S. policy for the migrants’ situations. “People in the US benefit from the policies that perpetuate violence in Central and South America and help drive the migrant experience. People in the US benefit from the work of migrants on a daily basis. I know that that is an issue of contention but let’s just take it as true. If we benefit from a system of violence we have a responsibility to understand and prevent

that violence on moral grounds if nothing else” (Cole).

No More Deaths volunteers also recognized a need to unveil borderland exploitation occurring in the borderlands. “There is a lack of education [about the effects of border policy], and the blind cannot lead the blind” (Shayna). Though No More Deaths’ provision of direct aid in the borderlands was often acknowledged as being a “band-aid solution,” volunteers also pointed out that it played a valuable role as a means of educating others. This was most clearly illustrated by the parable of the babies, told one night at the desert camp to a group of visiting students (Field Notes). In the parable, a community is situated alongside a river. One day a baby is seen floating down the river, and a villager goes in to save it. As days go by, babies continue to be seen in the river, with more coming each day. The community organizes a monitoring system to detect and remove any babies in the river. As more babies show up in the river, this system gets more complex. Finally, someone decides to go upriver, find out why the babies are being put in the river, and stop this from happening. The parable-teller explained that No More Deaths constituted the villagers going into the river to save the babies, because this was the most urgent need. He then asked the visiting students to be the villagers who go upriver and stop the forces sending the babies into the river. Sol described the worth of educating others through this type of direct action, saying “That may be our greatest contribution to the larger issue of immigration reform - making others aware of the suffering and death on the border.” Carma also saw a clear need for volunteers to both address exploitation in the borderlands and inform others about it. “People in general have a responsibility to their communities. I see us operating within concentric circles of community, and we are often more likely to feel truly connected to the communities that we are closest to or more centrally within. Since a national border runs through the

southwest, communities in the desert feel its impact and have a responsibility to that. That border being a national border, the rest of the country has a responsibility to listen to stories from the border and realize that they, we are also part of that community.” Beyond educating about the exploitation occurring in the borderlands, volunteers emphasized educating people about the cause of the exploitation. “There’s a need for more education on the economic context of migration, understanding and acknowledging that the wall doesn’t separate us from the decisions we make that affect people all over the world” (Annina).

While No More Deaths volunteers addressed the humanitarian problem, they also described an obligation to mitigate the ecological damage. Sol pointed out the resonance between humanitarian and conservation goals. “The sacredness of life is not just human life—it’s all of creation. Rescuing life in the desert does not mean just migrant life, it’s all life in the desert.” Much of the desire to mitigate the ecological damage was verbalized in terms of stopping the rerouting of migrants into remote areas. Hallie simply stated, “The environmental impact of the whole border deal would end if NMD is able to end the issue.” A similar sentiment was expressed by Shayna, who said “In the larger picture, if we can get just immigration reform passed we won’t have people moving through the desert, leaving trash, etc.” Environmentally-conscious measures took place among volunteers, who picked up trash and recyclable plastic jugs as they hiked migrant trails. They also collected usable clothing and backpacks from rest and layover sites along migrant trails, to be washed and donated to shelters in Tucson. For volunteers, both the direct humanitarian aid and these endeavors to mitigate ecological damage were all linked to the same sources. “The tensions, conflicts, and integrative aspects of globalization are played out on the human body (fashion, mortality rates, value standards of beauty and success, poverty-

aggravated illness, etc.) and the earth’s body (ecological devastation, areas of dense population, protected wilderness areas, ‘natural disasters,’ etc.) The border stories show this... blistered feet and a desert scarred by walls and human traffic, are the marks of the conflict in our changing world” (Carma).

## **Discussion**

Both land-management agency personnel and humanitarian volunteers in this study felt human suffering and environmental degradation resulted from the production of border security along the U.S. Southwest border. While witnessing the immediate effects in the borderlands as a result of migrant or enforcement agent presence, informants in both groups were also aware of the role federal policy played in creating these crises in the remote areas of the borderlands. Federal land-management employees were bound between an ethical desire to mitigate and prevent environmental and human abuses on one side, and a belief in the policies of their employer and nation on the other side. No More Deaths volunteers faced less of an internal struggle in their conceptions of the problem, as they clearly described opposition to the production system and a refusal to consume the abuses that came with the production of border security. They went beyond recognizing the role of federal policy, as they tied the human and ecological abuses in the borderlands to globalization and free trade markets which they felt drew labor into the U.S. from the South, and thus provided a foundation for the abuses occurring in the production of border security. Their thoughts resonated with Massey et al.’s (2002) study of Mexican immigration, which criticizes the juxtaposition of increasing economic, communication, social, and cultural ties with Mexico alongside increasingly stricter border policies as “fundamental contradictions.”

Within other research that has focused on the separation between

production and consumption, inquiries into agro-food systems provide the closest parallel to circumstances on the border, since workers and select consumers have identified the exploitation of both humans and environmental resources as problematic during production (Allen et al., 2003; Goodman & DuPuis, 2002; Gouveia & Juska, 2002; Hudson & Hudson, 2003). Just as with border security, in agro-food systems there has been a range of interpretations regarding the source of the problem. Some have focused on the structure of the current U.S. food production system as the problem that separates production from consumption (Allen et al., 2003; Goodman & DuPuis, 2002), whereas others also identified the obscuring effects of modernity as allowing for exploitation of undocumented workers (Gouveia & Juska, 2002) and other environmental and social abuse (Hudson & Hudson, 2003). These interpretations of the abuses in a production system resonate with those of conservation workers and humanitarian aid volunteers in the borderlands, further supporting border security's inclusion in production-consumption literature.

The ways that land-management agency personnel and No More Deaths volunteers resisted exploitation in the borderlands reflected their conceptions of it. Federal land-management personnel tried to balance their personal ethical conceptions and professional circumstances, focusing on directly mitigating some ecological damage and human distress (when they encountered it), and educating others about exploitation in the borderlands. In addition to these actions along the border, there have been testimonies to House Subcommittees (Ellis, 2006; Schultz, 2008; Terrell, 2006) by individuals on the part of entire land-management agencies, explaining the numerous environmental problems occurring in the face of border enforcement. No More Deaths volunteers also emphasized educating others about the abuses in the borderlands, including a

report presented to members of the U.S. Congress (No More Deaths, 2008a). Their direct action along the border involved intensive efforts to locate and mitigate human suffering, and their presence in response to the human distress allowed them to mitigate some ecological degradation. In February of 2008, No More Deaths' direct action came into conflict with the land-management agency goals, and a volunteer was cited for littering after leaving gallons of water for migrants on BANWR land. The ensuing public relations and court battles polarized the issue of exploitation in the borderlands (see No More Deaths, 2008b; U.S. Fish and Wildlife Service, 2008), and each group became a staunch defender of its primary concern (ecological degradation or human suffering). In the end the judge convicted the volunteer of littering without any punishment attached. This ruling reflected the entangled fate of human rights and conservation in the borderlands, as it gave recognition to the ecological degradation through the littering conviction and to the need for humanitarian aid through the lack of punishment.

The forms of resistance that conservation and humanitarian aid workers took on in response to the abuses in border security production fall in line with other research on the production-consumption divide in agro-food systems. As on the border, most attempts to bridge the divide between production and consumption in agro-food systems emphasized some sort of education aimed at consumers. However, as Gouveia and Juska (2002) point out, there is no guarantee that increased information about exploitation will prompt consumers to demand more just systems. Thus while carrying out education efforts, attempts to increase consumer choice in their food purchases, change food and labor policy, form alliances between producers and consumers, and create alternative knowledge systems were also advocated or put into place (Allen et al., 2003; Goodman & DuPuis, 2002; Gouveia & Juska, 2002; Hudson & Hudson, 2003).

With the exception of increasing consumer choice in purchases (there are not competitors in the provision of border security), the same methods are applicable for decreasing exploitation in the borderlands. This case study contributes to knowledge on the reactions to exploitation in production systems. In this case there was tension between both exploitative producers and dissenting workers and consumers (disagreement with federal border security policy), and among workers and consumers (as represented by the littering citation).

Persons in different groups in this study illustrated clear differences in opinion regarding the primacy of human or environmental abuses (as evidenced in the events surrounding the littering citation), the role of current laws in the struggle to reduce exploitation, and the direction of future immigration policies. These differences in opinion predict a difficult road ahead for forces that hope to reduce exploitation in the borderlands. Yet, informants did suggest some potential routes to solutions through their action and speech. At the local level, some informants suggested that a better relationship between the groups was a necessary starting point. They suggested this might take place if one group made a gesture to show that they cared about the other's primary concern. During an interview, one No More Deaths informant started brainstorming ways that volunteers could ensure that all (instead of just some) plastic water jugs were collected and recycled after use. By accepting this littering concern that was primary for land-management personnel during the littering citation case, the volunteer was acknowledging an important institution for the land-management agency. On the other side of the issue, for land-management personnel, leaving out containers of water was unacceptable because of agency regulations. However, this prohibition was circumvented on the refuge in this study by working within agency regulations. The humanitarian group Humane Borders was

given special-use permits to place three semi-permanent water stations along high-traffic migrant trails in the desert. While these tanks do not provide the extent of aid that humanitarian volunteers believe is necessary, they illustrate the potential for the land-management agency to welcome and support the volunteers' goals. More solutions like this, which utilize creativity and cooperation on the part of both groups, could create better relationships in the borderlands which properly address both humanitarian and conservation concerns.

After fostering more amiable relations, the groups could use each other as assets in reducing both types of exploitation in the borderlands. Land-management agencies could use humanitarian volunteers as a resource in two ways: volunteers are useful in their ability to do large organized trash clean-ups (as they have done both on agency lands and elsewhere), and also because they are frequently hiking different parts of agency lands and can alert officials to spots that need attention for trash, erosion, or other conservation purposes. Likewise, the humanitarian volunteers could benefit from a closer relationship with the land-management agencies, as the researcher's experience illustrated. During time spent volunteering with a land-management agency, two law enforcement officers were called to help search for a missing migrant woman. After three hours of searching, the officers had to return to their previous work, but the woman was still missing. The researcher suggested contacting No More Deaths and explaining where the woman was expected to be, so that the humanitarian volunteers could devote some of their resources to finding her. The officer present was supportive of the idea (adding that no jugs of water should be left on the refuge during the search). If a better relationship was established, the humanitarians' goals to reduce human suffering could benefit by being alerted to missing persons by land-management law enforcement officers, or a similar

arrangement. These sorts of arrangements illustrate a potential to collaboratively address both human rights and conservation goals in the borderlands.

The sheer size and momentum of modernity suggest that although place-based resistance to exploitation (as seen in this case study) can serve as a foundation for political action, the resistance must be broad and expand across space in order to enact change (Harvey, 1989). Political action leading to change requires “an active civil society engaged in real participatory democracy” (Cox, 2004) p. 201), which cannot be isolated to particular places or organizational cultures (Harvey, 1989). This type of solution, however, is not easily met. At the national level, informants expressed a desire to see policies which did not result in exploitation in the borderlands. This could result from an informed national dialogue on border security, its means of implementation, and its repercussions. This sort of dialogue must include a range of perspectives, not just the fear of what will happen if the border is not secured (Ivie, 2004), and conflict should be expected and accepted as a means of reaching legitimate policy decisions (Mouffe, 2000; M. N. Peterson, Peterson, & Peterson, 2005). In the age of the wars on terror and drugs, both of which are played out on the southern U.S. border, debate and dissent from what is purported as national security is often squashed in light of the perceived crisis. Yet, it is exactly at times of crisis when diverse and dissenting voices must be heard, so that those in power do not abuse their position (Ivie, 2004). Border security in the U.S. is one such circumstance. The voices of those along the border, who may or may not dissent from prevailing thought, must be allowed to inform a national dialogue given their specific knowledge of exploitation in the borderlands. In this way, decisions regarding the current state of border security and provisions for future changes can more fully reflect the reality of the border.

The command of space is a social power, one that is only conquered through production of space (Harvey, 1989). This means of commanding space is evidenced in the steel border fences and points-of-entry along international borders, by which governmental policymakers command space through the implementation of border security operations. The participants in this study resided and experienced the borderlands more extensively than policymakers, and their efforts to re-command that space suggest steps towards greater social power for those who experience the borderlands. Thus, while state power is asserted along the border through the stark enforcement of political lines, individual social power can be asserted by contesting the means of enforcing these lines, and the exploitation that results from it.

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## **A Theory of (De-)Naturalization: The Alchemist's Cookbook for Transforming the "Social" into the "Natural"—and Back**

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### **Abstract**

*"Naturalization" and related terms and concepts have been bandied about by a number of scholars within and outside of the communication field. In the present paper I propose a definition and framework that will hopefully provide some clarity and coherence to diverse deployments of this nascent concept. To "naturalize," I argue, is to conflate (aspects of) the social environment with the natural environment, thereby transforming what is in reality socially constructed, historical, and malleable, into something seemingly ahistorical, inevitable, and amoral. The form of such naturalization, however, depends on the particular concept of "nature" that is implicated in the conflation. I illustrate three different forms of naturalization that implicate one of the three distinct meanings of "nature" that Raymond Williams specified—nature as objective, material reality; nature as an essential characteristic (e.g., "human nature"); and nature-as-inherent-force (e.g., a heat wave or wildfire). I conclude by applying the framework to an analysis of current media coverage of global warming. By attributing global warming to human nature itself, such coverage (partially) naturalizes the phenomenon and, to that extent, renders it seemingly inevitable, ahistorical, and amoral. The purpose of illustrating such processes of naturalization is to highlight the confluences as a means of rehabilitating human agency and the possibilities of intervention.*

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Aristotle (1900) wrote that, "It is clear, then, that some men are by nature free, and others slaves, and that for these latter slavery is both expedient and right" (p. 9). Similarly, Descartes justified performing vivisections on dogs by declaring [all non-human] nature to be "totally devoid of mind and thought" (quoted in Easlea, 1981, p. 71). Countless further examples could be enumerated of influential thinkers legitimating all sorts of horrible prejudices and cruel treatment of humans and non-humans alike by portraying such prejudice and treatment as perfectly "natural." In looking back on prior historical periods, the absurdities of such justifications that are thankfully no longer accepted are often plain as day. It is considerably more challenging, however, to discern similar present-day biases and cruelties. Although they may become just as clear to future generations as Aristotle's attempted rationalization of slavery appears to us, present-day

prejudices and cruel behaviors are often invisible in the present moment. The general aim of this paper is to attempt to gain some understanding of how that which is considered perfectly natural in one historical period, or in one particular culture, can subsequently or elsewhere be denounced as inhumane, bigoted, or even downright shocking. Stated differently, I wish to investigate a particular concept that will hopefully help us, however modestly, to gaze upon the present with the kind of clarity which we generally are only able to see the past.

The concept that I will investigate in what follows is what I will refer to as the phenomenon or process of *naturalization*. Although it takes several forms, my working definition of naturalization for this paper will be the conflation of (aspects of) the social environment with the natural environment. Naturalization is a term that has been employed by a wide variety of scholars in an

even wider variety of ways, often merely in passing. Given the enormity of locating and comparing/contrasting all of the extant uses of the term, this paper is not meant to be an exhaustive exhumation of what has been written previously on the topic of naturalization. Rather, I will examine several carefully selected treatments of this nascent concept in order to build on these and construct a coherent theory of naturalization that will help scholars locate and recognize possible instances of present-day naturalizations and some of their likely effects.

In what follows, I first discuss the components of naturalization. I then illustrate three different forms of naturalization and show how each of these forms relates to a particular meaning of the word “nature.” Next, I discuss what makes naturalization so potentially dangerous. I then discuss specific “de-naturalization” strategies. Finally, I offer a brief critical examination of how I think current media coverage of global warming (partially) naturalizes this issue.

### **Heading 1: The Components of Naturalization**

The definition of naturalization that I advance in this paper is premised on the assumption that two distinct domains (i.e., the “social” and the “natural”) exist, at least conceptually<sup>2</sup>, which are on occasion conflated by being erroneously portrayed as one and the same. This conflation occurs in a number of different forms, however, and in

order to understand these different forms it is first necessary to make clear the operating distinction between the two realms. Defining the “social” realm is relatively straightforward. By “social,” I simply mean that realm which is generally considered to be “uniquely human” (composed of symbolic language, culture, social history, etc.). Defining the “natural” realm is rather more problematic, however. Due in part to its many, often contradictory usages, Raymond Williams (1976) famously observed that, “Nature is perhaps the most complex word in the [English] language” (p. 184). Fortunately, Williams offered three distinct common meanings of the word that will be central to the subsequent discussion of naturalization:

- (i) the material world itself [as distinct from the conceptual or imaginary], taken as including or not including human beings; (ii) the inherent force which directs either the world or human beings or both; (iii) the essential quality or character of something. (p.184)

### *Naturalization by “Exnomination” or the “God-trick”*

The first conception of naturalization that I will examine is based on John Fiske’s (1987) discussion of Barthes’ (1973) notion of exnomination and implicates nature (i). In his book *Television Culture*, Fiske states that exnomination occurs when a cultural or political discourse “hides its discursive nature and presents itself as natural rather than cultural, that is, as an unmediated product of, or reflection of, an innocent reality” (p. 41). According to Fiske, this exnominating trick of hiding the discursive nature of the exnominated discourse is accomplished by refusing to name that discourse. “To name a discourse,” says Fiske, “say, ‘feminist’ or ‘Marxist’ is to imply that other discourses, other points of view, are possible. Only that which is not named appears to have no alternative, only that

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#### **Notes**

<sup>2</sup> While an assumption of the culture/nature binary is a requirement for the concept of naturalization (as defined in this paper), I do not wish to suggest that I accept the validity of this binary myself. Several compelling arguments have been made that challenge such binary thinking (e.g., Biro, 2003, from a postmodern perspective; e.g., Carbaugh, 2007, from a non-postmodern perspective) and perhaps the most fruitful paths towards solutions to our current environmental predicament involve those that help us find a path that leads us out of this kind of binary thinking altogether.

which is not named can achieve the status of the natural, of common sense" (p. 43). Thus, a news report that wishes to conceal its White, heterosexual male point of view, for instance, can do so by naming other discourses (such as "feminist" and "Marxist" discourse) without naming the White, heterosexual male discourse through which those others are presented, thereby exnominating the former and treating its viewpoint as a given, an objective reflection of "innocent reality." Further, Fiske (1987) points out that when an exnominated discourse is referred to, it is referred to in the passive voice, whereas nominated discourses are referred to in the active voice. Doing so serves to convey the contested status of the nominated discourse while subtly elevating the exnominated discourse to an uncontested "status of truth" (p. 290).

Fiske's discussion of exnomination is reminiscent of, and indeed consistent with, Donna Haraway's (2001) argument about the "God-trick" of science. Haraway observes that scientists often write in a way that disguises or eliminates the human observer perspective by feigning a "view from above, from nowhere" (p. 179) based on the mythical notion that scientific methodologies and instruments are able to yield truly "objective" truths. This is accomplished, for instance, by discussing findings in the passive voice (e.g., "The analyses were conducted..." or "The variables were measured..." as opposed to "We earth-bound, situated, mortal creatures analyzed/measured our variables..."). Although Haraway does not use the term herself, we could say that the kind of trick she highlights functions to "exnominate" the scientific perspective of the world, which is then subtly passed off as an objective, "God's eye view" of things, when in reality the scientific perspective is a culturally constructed discourse and knowledge is ever and always situated. Interestingly, scientists do not generally seem reluctant to name their method as "scientific," in contrast to interlocutors of other exnominated

discourses such as *whiteness*, despite often employing the God-trick in their texts. Perhaps this relative pervasiveness of naming the scientific discourse without risking to "de-exnominate" reflects how deeply rooted in our cultural worldview is the belief that science can allow us to more or less approximate an objective understanding of the world.

Implicated in Fiske's discussion of exnomination is the notion of nature (i), that is, nature as "the material world itself." This meaning of nature, according to Williams (1976), stands in contrast to the "imaginary" or "conceptual." Fiske (1987) himself states, "Nature, or *objective reality* [my emphasis], does not 'make sense' on its own—we have only to look at the vastly different interpretations different cultures make of universal nature to see evidence for this assertion" (p. 42). Fiske also states that "that which is exnominated appears to have no alternative and is thus granted the status of the natural, the universal, or that-which-cannot-be-challenged" (p. 290). This appearance would not be possible, however, without appealing to (and thus implicating) an idea of nature as in fact universal, objective reality. In other words, for the exnominating- or God-trick to work, people must be susceptible, however subtly or non-consciously, to the notion that nature, in the sense of objective, material reality, does indeed exist. Someone for whom such a notion is incomprehensible would likely demonstrate significantly greater resistance to exnomination generally.

To summarize, the reason that exnomination is a form of naturalization as defined in this paper is that an aspect of the social environment (in this case a cultural or political discourse) is conflated with the natural environment (by linguistically evacuating the exnominated discourse), thereby "naturalizing" what is in fact cultural or political. The effect of this naturalization, to the extent that it is perceived by a given audience or reader as it is linguistically constructed, is to delegitimize possible

competing discourses by rendering them contested and partial in contrast to the seemingly uncontested and comprehensive perspective of that which is exnominated. In other words, that which is exnominated shuts out possible legitimate alternatives, thus rendering its own perspective seemingly inevitable. But exnomination is only one means of naturalization among many. I now turn to an examination of another.

*Nature-as-inherent-force form of Naturalization*

In this section, I will discuss a form of naturalization that conflates social (i.e., political, cultural, historical) human actions with nature as an inherent force. This form of naturalization is explored by Eric Klinenberg (1999) in an article examining death attributions following the 1995 Chicago heat wave. In his article, Klinenberg (1999) discusses how journalists and politicians attempted to “naturalize” the approximately seven-hundred fatalities by attributing them to nature (ii), nature-as-inherent-force (i.e., to the heat wave) when, as Klinenberg’s “social autopsy” illuminates, the vast majority of those deaths were and are in fact attributable to social-structural factors instead. For instance, the deaths were suffered disproportionately among certain demographics (e.g., African Americans, lower-income communities, and the elderly), reflecting a pattern which Klinenberg compellingly links to the city’s “social morphology and political economy of vulnerability” (p.242). The radical reduction and privatization of public services preceding the heat wave, as well as the rather extreme isolation of poorer elderly residents in some of the most violent neighborhoods (where many locked themselves inside air-conditionless homes during the heat wave, refusing to leave even to escape the fatally hot weather), are two important social factors he identifies. Klinenberg shows how politicians and journalists simply ignored the social factors and instead erroneously attributed Chicago residents’ deaths to forces of nature that lay

beyond their ability to control, thus erasing any sense of social or human responsibility for the deaths.

In a similar analysis of fatalities from a wildfire in Malibu canyon, Mike Davis (1998) notes that although wildfires are a “statistical certainty” in that area, “most of the 119 fatalities from tenement fires in the West-lake and Downtown areas might have been prevented had slumlords been held even to minimal standards of building safety” (p. 99). In other words, those “slumlords” are evidently (wittingly or unwittingly) banking on people attributing deaths following the inevitable wildfires in that area to nature-as-inherent-force as well, rather than to negligent landlords who would allow the construction of unsafe buildings (i.e., a social factor). In short, Klinenberg (1999) and Davis (1998) provide vivid illustrations (and careful documentation) of how deaths can be naturalized by concealing the social factors that could have prevented the deaths and instead attributing them entirely to forces of nature. To the extent that such naturalization is effective, no humans will be blamed and the deaths will appear inevitable.

Despite implicating a different meaning of the word nature, this form of naturalization shares important similarities in common with that of the exnomination form in that both conceal, or “invisibilize” (Klinenberg’s term), the social by conflating it with the natural. Moreover, the naturalization in both cases serves to deceptively render something inevitable that in reality is (or was) not: either a particular perspective (in Fiske’s case) or human fatalities (in Davis’s and Klinenberg’s cases).

Although Klinenberg (1999) and Davis (1998) both provide examples of the naturalization of negative events and their outcomes, I see no reason why the same method could not be used to naturalize positive events as well. For instance, one could inaccurately attribute a particularly fecund crop yield in a typically cold region to

“natural forces” that induced an unusually warm growing season when in fact the warmer weather was really the result of “human-caused” global warming. Again, the false attribution (allowing, for the sake of discussion, that a study could unequivocally establish that the warmer weather in question was in fact due to anthropogenic global warming) of the warmer weather to “natural” rather than human forces would naturalize those human forces and thus make the warmer weather—wrongly—appear inevitable.

To summarize this section, the nature-as-inherent-force form of naturalization occurs by attributing socially-caused or socially-preventable outcomes to natural forces. As with exnomination, this form of naturalization also invisibilizes and conflates the social (e.g., the social morphology of a city) with a particular conception of nature (e.g., a heat wave). *Naturalization as “biological determinism”*

A third form of naturalization involves falsely attributing particular attitudes and behaviors to an essentialist notion of human nature. Although for many postmodern thinkers the very notion of “human nature” is antiquated, a long and ugly history of this kind of naturalization exists. Not so long ago, male scientists declared women to be biologically less intelligent than men based on various, often contradictory, observations of biological differences between males and females (see Shields, 1975, for an overview of this). Similarly, Whites have been alleged (by similarly-minded individuals) to be more intelligent than Blacks, also based on a variety of biological reasons. While these particular notions have since been widely abandoned and are generally understood to have been derived from sexist and racist attitudes rather than any sound evidence, for a while they exerted a powerful naturalizing influence on perceptions of race and gender. The way this form of naturalization worked was, once again, to conflate the social with the natural. In this case, socially derived views (e.g., the sexist

notion that men are more intelligent than women) were conflated with nature (iii) as an “essential quality or character of something” (e.g., that women are “by nature” less intelligent than men). In other words, “human nature” was used as a mask to legitimize what was actually socially derived prejudice.

Like the two aforementioned forms of naturalization, this “biological determinism” form also conceals something social by deceptively passing it off as natural. One noteworthy difference between the biological determinism form and the other two, perhaps, is that the biological determinism form relies on people believing that genetics can in fact determine social behaviors, which is a highly disputed notion itself (Wilson, Dietrich, & Clark, 2003). Nevertheless, the ongoing and often heated controversy involving evolutionary psychologists who claim, among other things, that males are biologically “disposed” towards greater aggressive behavior than women (Wilson et al., 2003), is evidence of the continued presence and importance of this form of naturalization. Finally, it is also worth noting that one implication unique to the biological determinism form of naturalization, which implicates the notion of nature (iii) as essential characteristic (e.g., “human nature”), is that it portrays a particular human behavior or disposition as culturally and historically universal. This feature makes this form of naturalization and its implications particularly sweeping.

## **Heading 2: Why is Naturalization Dangerous?**

In this section I will briefly discuss some reasons why naturalization can be dangerous. To simplify references to the different forms of naturalization discussed above, I will use the following identifier scheme:

1. Naturalization by exnomination
2. Nature-as-inherent-force form of naturalization

### 3. Naturalization as biological determinism

As alluded to already, one of the main reasons why naturalization is dangerous is that it deceptively portrays what is naturalized as inevitable and therefore dispels all other possible alternatives. In the case of (1), a particular discourse or perspective is made to seem “objective,” thus making any possible alternative discourse or perspective seem implausible. In the case of (2), particular socially-caused or socially-preventable events and their outcomes are attributed to inherent natural forces, thus making those social events and outcomes seem inevitable by blocking any thoughts about possible alternative outcomes that a social understanding of the event might prompt. Finally, in the case of (3), a particular human behavior, attitude or tendency (i.e., a behavior or attitude on the group level) is attributed to human biology and is therefore portrayed as inevitable, again acting to impede any possible alternative behavior, attitude or tendency (at least, barring genetic alterations). This sense of inevitability short-circuits thinking about alternative possibilities and is therefore a powerful means in itself of getting people to resign themselves to the perceived “nature” of whatever is being naturalized. It makes the thought of changing that which is naturalized potentially as utterly futile as the thought of rewriting the law of gravity to make it push objects upward instead of pulling them downward. To the extent that naturalization successfully renders something inevitable it is easy to understand how powerful the effect is likely to be.

And yet there is also another reason why naturalization is dangerous. By transporting whatever is being naturalized from the social into the natural realm, naturalization accomplishes another trick. Specifically, doing so renders what is being naturalized immune to moral judgment. The thought of lecturing a lion about her

predatory ways strikes us as silly. When we watch a nature television show depicting lions hunting down and ultimately tearing apart their victims with tooth and claw, we may find it unsettling, but we most likely do not make a moral judgment about the lions’ behavior. Instead, we may cringe a little and tell ourselves something like, “That’s nature—survival of the fittest.” Similarly, if we become convinced that something social is in fact natural then that, too, becomes immune from moral judgment. Thus, an exnominated discourse, to the extent that we perceive it to be objective, will seem not only inevitable but will also become immune from moral condemnation, no matter how wretched we may actually find it. For instance, if we accept a White, heterosexual male-based perspective that women are warm and friendly but not particularly competent (see, e.g., Glick and Fiske, 2001) as objective truth, then we will accept that perspective as inevitable and we will also likely shy away from morally impugning it, even if something about it disturbs us. A similar feat is accomplished with the other two forms of naturalization such that what they naturalize (e.g., socially-preventable fatalities or male aggression) also acquires protection from moral condemnation. This immunization from moral indictment is further evidence of why naturalization is potentially a dangerous and powerful phenomenon.

### **Heading 3: On “De-Naturalizing”**

Given that understanding the process of naturalization, and its various forms, is likely the single most effective means of denaturalizing, a few brief explicit thoughts should suffice here. As Fiske (1987) noted regarding naturalization (1), simply naming the discourse that has been exnominated is likely the best way to instantly de-exnominate (or de-naturalize) that discourse. As Fiske notes:

“It has been one of the achievements of Marxist cultural criticism in the thirty years since

Barthes first proposed this theory [of exnomination] that capitalism can be named in the cultural and discursive domains as well as in the economic: feminism has achieved the naming of patriarchy in a very much shorter period” (p. 43).

Similarly, naming the social factors that caused or could have prevented fatalities following the 1995 Chicago heat wave or the Los Angeles wildfire goes a long way towards denaturalizing those deaths, thus pointing towards means of preventing similar deaths in the future. Similarly, naming the social prejudices or biases that may lead to establishing particular essentialist notions about human nature can serve to (at least potentially) denaturalize form (3). However, this case is perhaps a bit trickier, given that biology *is* widely understood to influence behavior to some extent and thus establishing a causal link between a particular bias or prejudice and a view about human nature can be problematic (at least, until that bias or prejudice falls out of favor). Nevertheless, naming the social factor that has been naturalized will generally go a long way towards denaturalizing it.

In the case of naturalization (3), another potential strategy for denaturalizing is to locate behaviors in existing societies or (or in earlier historical periods) that directly contradict what has been deemed universal. For instance, the very widely held notion (at least, among Western intellectuals, e.g., Sidanius & Pratto, 1993) that all societies are and always have been male-dominated (which is often used as further evidence of innate male aggression) is simply not true according to cultural anthropologists. James Woodburn, who is widely considered to be the foremost expert on surviving hunter-gatherer societies (Guenther, 2007) has shown that what he calls “immediate-return societies” have no gender hierarchy. That is, women are as politically powerful in those societies as men, according to

Woodburn (1982). In fact, these societies have no institutionalized social power at all and are basically anarchical. Clearly, this finding in itself has not yet caused everyone to revise their beliefs about the universality of patriarchy. It is difficult to say how much of the persistence of the belief in male-dominance as universal is due to Woodburn’s finding not being widely known vs. some other form of resistance. Still, it seems intuitive that demonstrating counter examples in other cultures is a potentially powerful strategy for denaturalizing misguided notions about human behavior.

In this section, I have described two denaturalizing strategies (naming that which has been denaturalized and locating cultural or historical counter-examples regarding assumptions about human nature). Surely additional strategies exist as well. The ultimate aim of any denaturalizing strategy, however, is (a) to evoke thinking about possible alternatives and (b) to bring what was naturalized back into the domain of moral judgment, thus submitting it to critical evaluation alongside other possible alternatives.

#### *A Case-Study Illustration of Naturalization Regarding Global Warming Coverage*

In this section I wish to briefly illustrate a current naturalization phenomenon of some significance *in action* that pertains to corporate media coverage of global warming. The kind of naturalization involved here is not only socially significant but also quite theoretically instructive. Moreover, the current dominant naturalizing frame that journalists employ in their global warming coverage operates so subtly as to have thus far received almost no critical comment (that I’m aware of, anyway).

Prior to publication of the Stern Report and the opening of Al Gore’s *An Inconvenient Truth* in 2006, global warming did not feature as a consistently major story in corporate news outlets. Up to then, we could say, corporate media outlets were dramatically out-of-step with the scientific consensus regarding the reality of accelerating anthropogenic global warming.

Since then, however, global warming has become a quite prominent topic to which those outlets devote a significant amount of coverage (Boykoff & Roberts, 2007).

One frame that news outlets have employed on occasion in their coverage of global warming is to attribute global warming to natural, cyclical variations that have nothing to do with human actions (see, e.g., Boykoff & Boykoff, 2004). If we accept the scientific consensus view of the reality of human-caused global warming, then this framing is a straightforward example of naturalization (2), identical in form to the kind of naturalization that Klinenberg (1999) and Davis (1998) discuss. This framing of global warming has become increasingly less frequent, however, and by now has been more or less abandoned. Most media coverage today acknowledges that humans are the primary culprit causing the globe to heat up at a frightening rate (Boykoff & Roberts, 2007).

Nevertheless, I would argue that the frame that seems to have come to replace the now largely-abandoned “global warming is attributable to nature” frame is also problematic, and also still (partially) naturalizes the issue. cursory examination of global warming coverage (presented momentarily) suggests that the kind of human society that is responsible for the current temperature increase (i.e., “industrial society” or “capitalist industrial society”) tends to be erased and global warming is thus instead mistakenly attributed to *all* forms of human societies. As I argue below in light of this paper’s naturalization framework, such framing may well have a dangerous naturalization effect that deserves careful interrogation as well. Here is what I found based on a quick (albeit not-so-scientific) search of relevant terms using Google News on January 14, 2009 (numbers indicate how many articles were found by Google News to match each search criteria):

1. “climate change” OR “global warming” AND “human activity” OR

“human induced” OR “human caused” OR “man made” OR “anthropogenic” OR – 12,515

2. Same search as #1 but WITHOUT “capitalist” OR “capitalism” OR “industrial” OR “industrialized” – 10,085

Though by no means definitive, this quick search nonetheless provides compelling preliminary evidence that newspapers currently overwhelmingly attribute global warming to humanity *writ large* much more frequently than they attribute it to industrial or capitalist related activity (explicitly anyway). To be mathematical about it, only 1/5 of the news articles about global warming that Google yielded explicitly mention industrial or capitalist factors at all, whereas 4/5 appear to make some mention of a *human* causal component. The fact that so many articles on global warming do now acknowledge that human behavior is a significant factor is certainly an important step in the right direction. Nevertheless, there is perhaps reason to think that the “humanity writ large” frame is also problematic from the naturalization perspective.

Interestingly, this framing of global warming appears to combine aspects of both the exnomination and biological determinism forms of naturalization. As discussed above, naturalization by exnomination occurs by refusing to name that which is exnominated. In the case of global warming, it is true that humans, and not non-humans, are causing global warming and in this sense the frame is accurate and designates the appropriate actors. However, it is not the case that *all* of humanity is contributing to global warming, as is implied by the term “human activity” and its variants. Indeed, many human societies have existed and still exist in which individuals who are just as fully human as the rest of humanity do not contribute in any harmful way whatsoever to global warming. Rather, global warming is being caused by a particular kind of human



society, namely “industrial human” society or “capitalist industrial human” society, or “Promethean humans,” etc. Not to name the kind of economic structure that accounts for why some humans are contributing to global warming while other humans are not is to exnominate—and thus to naturalize—that form of human society. It is to conflate “industrial humans” with *all* humans. This conflation also implicates the biological determinism form of naturalization, however, because it subtly suggests that to be human is, in part, to live in a way that contributes to global warming. By implication, then, any society where people live in a way that does *not* contribute to global warming is one that is made up of either less-than-fully-human or non-human individuals. In short, industrial humans are naturalized and treated as the *only* kind of humans (exnomination), as if one day a scientist is going to discover an “industrial society” human gene (biological determinism)!

In this light, such global warming framing carries some potentially very troubling consequences. As with any form of naturalization, in this case, too, the conflation serves to restrict thinking about possible alternatives (and responses) accordingly. Moreover, as noted, when global warming is attributed to humanity writ large it arguably implies that there is something inherent about being human, something intrinsic to human nature itself that leads to global warming. Thus, responses stemming from this framing will likely be limited to human-level responses such as lifestyle changes or to societal-level responses that do not seek to alter the basic structure of the kind of society that has been naturalized. When industrial society is seen as the *only* “natural” society for humans to live in, technology-based solutions will certainly be thought of because those solutions do not alter the basic structure of industrial societies. However, solutions that would risk altering the economic structure of capitalist industrial society (e.g., slowing, let alone halting economic growth) will not be

considered possible, because those options are shut out to the extent that “industrial humans” are naturalized via exnomination. Given the fact that a reliance on technology is what has led to the global warming mess to begin with, and given that there is no rational reason to believe that technology alone can get us out of this mess, framing global warming in a way that makes technology-based solutions seem like the only possible option is as terrifying as it is reckless.

#### **Heading 4: Conclusion**

In this paper I have attempted to synthesize and build on previous conceptualizations of the phenomenon of naturalization in order to develop the beginnings of a coherent theory. Understanding the process of naturalization is important because throughout much of human history (going back at least to Aristotle) various beliefs and practices that now appear plainly unjustifiable were temporarily accepted as natural and inevitable. Two likely effects of naturalization that make it so dangerous are (a) that it bars thinking about possible alternative explanations or understandings to currently prevailing views and (b) shields what is naturalized from moral scrutiny. Perhaps by gaining a clearer understanding of how the process of naturalization functions we can learn to see present-day naturalizations as clearly as we see those from the past. My application of the naturalization concept to a critical examination of global warming media coverage is an attempt to help illuminate what to date seems to be a rather widely unexamined framing that may indeed exert a powerful influence on how people understand and respond to the problem, thus meriting careful further investigation and discussion.

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**The Rhetoric of <Military Readiness>:  
Public Discourse, Whales and Navy Sonar**

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**Abstract**

*On November 12, 2008, the Supreme Court decided a significant case involving the use of mid-frequency active sonar in the waters off the coast of Southern California. In the decision, *Winter v. NRDC*, the High Court ruled that the Navy's need to conduct military training using active sonar outweighed the interests of environmentalists, who had contended that sonar results in devastating effects on marine mammals. This paper examines the public and legal discourse related to the case, arguing that the Navy invoked an ideograph of <military readiness> that valorized military technology and expertise at the expense of the natural environment. The paper then examines the implications of the case and the use of <military readiness> in public culture.*

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For years, the Natural Resources Defense Council (NRDC) and other environmental litigants have challenged the United States Navy over its use of sonar in military exercises. In key legal victories at the district and appellate levels, environmentalists had established "to a near certainty" that the use of sonar in military training exercises "will cause irreparable harm to the environment" (Cooper, 2007, at 33). However, when the case reached the Supreme Court in 2008, the High Court reversed these findings and lifted the ban on sonar. According to the opinion of Chief Justice Roberts in the case, *Winter v. NRDC*, "Of course, military interests do not always trump other considerations, and we have not held that they do. In this case, however, the proper determination of where the public interest lies does not strike us as a close question" (2008, at 35).

By virtue of its standing as an environmental case heard by the Supreme Court, the ruling warrants the scrutiny of environmental communication scholars. Moreover, the decision in the case has grave implications for the well being of cetaceans and the roles of public participation in environmental decision-making. Given that the Court firmly sided with the military in this instance, the case

raises questions about whether appeals to the ideograph of <military readiness> will trump <environmental protection> when military officials assert the two come in conflict. For while the need for <military readiness> seems self-evident, rhetorically it is a highly contested term that resonates culturally with public memories of vulnerability and surprise.

Of course, armed with a different perspective than the one <military readiness> allows, one might challenge the assertion by Roberts of where the public interest lies. In this essay, I argue that official military, legal, and political discourse on the controversy over military sonar and marine mammals have utilized the dominant ideograph of <military readiness> to exploit public anxiety and vulnerability over "surprise" attacks. In doing so, <military readiness> has entrenched a technological psychosis and valorized the ethos of military decision makers through a *locus* of quantity. While focusing on <military readiness> in this context as the "necessary motivations or justifications for action performed in the name of the public" (Condit and Lucaites, 1993, p. xiii), I examine a wide range of rhetorical resources that are implicated in the production and perpetuation of these ideographic boundaries, including legal

decisions, briefs submitted to the Supreme Court, oral arguments before the Supreme Court, congressional hearings, statements by military officials, and naval publications. I combine McGee's ideographic approach with Burke's dramatism and Perelman and Olbrechts-Tyteca's notion of *loci communes* to reveal how the full range of rhetorical resources complemented the Navy's use of <military readiness> in this controversy.

First, I examine the environmental dispute at issue in the *Winter v. NRDC* case. Next, I describe the complicated procedural and legal history of the case. Then I present a diachronic analysis of the <military readiness> ideograph, followed by a close textual reading of the legal decisions and briefs of the case, as well as public statements and justifications made by the Navy in this dispute. Finally, I discuss the broader rhetorical implications of the case.

### **Whales and Sonar: Environmental Impacts and Legal Challenges**

Passive sonar involves listening for the sounds created by others, while active sonar involves the transmission of various sounds and the reading of its echoes as a way of determining the presence of objects. The most common type of sonar in use is mid-frequency active (MFA) sonar, with most systems operating between 3-10 kiloHertz (KHz). MFA sonar is currently installed on nearly 200 American vessels (Jasney, 2005, p. iv). The military is also developing low-frequency active (LFA) sonar, which can detect vessels at greater distances. The Navy insists that both types of sonar are necessary to detect the new generation of diesel-electric submarines, which can operate without making noise and are virtually undetectable using passive sonar systems.

However, active sonar systems also transmit sound at frequencies perceptible to marine mammals and can "physically damage the hearing in cetaceans or cause them to modify their behavior in ways that are detrimental to their well-being" (Buck and Calvert, 2008, p. 2). MFA sonar

"generates piercing underwater sound at extreme pressure levels," causing "devastating" effects to mammals in close proximity to the sonar source (Brief for the Respondents, 2008, p. 3). Sound waves have the potential to vibrate inside the head of a marine mammal, causing massive internal injuries. According to the Navy, an analysis of whales stranded in the Bahamas in 2000 showed three with signs of bleeding in their inner ears and one whale with signs of bleeding around the brain. It "basically rips them apart," remarked Cetacean Society International president Bill Rossiter, describing the effects of resonance on marine mammals (Dooley n.d.). In addition to these effects, scientists have discovered emboli in the lungs and lesions in the liver and kidneys of stranded whales, all symptoms of a severe case of decompression sickness—"the bends"—which occurs when animals try to surface too quickly (Reynolds, 2008, p. 762). When exposed to sonar, marine mammals can experience a wide range of severe physical traumas causing "nervous and cardiovascular system dysfunction, respiratory distress, disorientation, and death" (Brief for the Respondents, 2008, p. 4).

Mass strandings of marine mammals have coincided with military use of active sonar systems in a number of locations. In 1996, twelve Cuvier's beaked whales were stranded in Greece. In 2000, 17 marine mammals were stranded in the Bahamas shortly after the Navy began exercises using MFA sonar. A subsequent study by the Navy and the National Marine Fisheries Service concluded that the sonar exercises contributed to the strandings (Joint Interim Report 2001). Other strandings have been documented in the Canary Islands, the Virgin Islands, Washington State, Hawaii, and North Carolina, all coinciding with military activities (Reynolds 2008).

There is also evidence that once exposed to sonar, marine mammals will alter their migratory habits. After Naval sonar exercises in the Bahamas in 2000, a

group of Cuvier's beaked whales that biologists had recorded for years had virtually disappeared, leading scientists to surmise that the mammals died or "were driven to permanently abandon their habitat" (Jasney, 2005, p. 11). Other effects of MFA sonar on marine mammals include adverse effects on the animals' ability to communicate, breed, and avoid predators. Environmentalists believe that the "ripple effects" of these impacts could seriously damage marine ecosystems (Brief for the Ecological Society 2008).

Several studies have confirmed the consequences of sonar on marine mammals. In its 2004 Report of the Scientific Committee, the International Whaling Commission concluded that the association between sonar and beaked whale deaths "is very convincing and appears overwhelming" (quoted in Jasney, 2005, pp. 6-7). In addition, the Navy's own Office of Naval Research has concluded that the evidence linking whale beaching to sonar is "completely convincing and there is serious issue of how best to avoid/minimize future beaching events" (quoted in Brief of California Coastal Commission, 2008, p. 30)

Although the U.S. military has resisted efforts to stem the use of active sonar systems, the international community has called for the curtailment of sonar. In October 2004, the European Parliament adopted a resolution calling on its members to stop using high-intensity active sonar systems (Dycus, 2005, p. 32). The United Nations also expressed concern about the effects of ocean noise on marine mammals. At a U.N. meeting in 2005, a coalition of more than 120 environmental organizations urged nations to take actions to protect marine mammals from unregulated ocean noise (Buck and Calvert, 2008, p. 12).

In the United States, the statutory mechanism that protects cetaceans is the Marine Mammal Protection Act of 1972, which prohibits anyone from "taking"<sup>3</sup> a

marine mammal. However, the Secretary of Defense may "exempt any action or category of actions" from the MMPA if they are "necessary for national defense" (Roberts, 2008, at 15). Tensions between the Navy and environmentalists over the use of sonar had emerged in previous disputes, resulting in a 2006 settlement that allowed training exercises to continue, so long as the Navy implemented "mitigation measures" designed to minimize the effects of MFA sonar on marine mammals. These measures included lookouts on deck to search for whales prior to the start of training exercises, and reduced decibel levels when sailors spotted whales or when inclement weather prevented the sighting of whales (Mongeon, 2008, p. 277).

Despite the settlement agreement, in early 2007 the Navy planned fourteen large-scale training exercises off the coast of Southern California (known as the "SOCAL exercises") in the two-year period from February 2007 to January 2009. The waters off the coast of Southern California "are among the richest and most biologically diverse in the world," containing at least 37 species of marine mammals, including nine of those species listed as threatened or endangered under the Endangered Species Act and others whose entire known range is along this coastline (Brief for the Respondents, 2008, p. 3). Nevertheless, in January 2007, the Navy was granted an exemption from the MMPA for these training exercises, and in February 2007, the Navy completed an Environmental Assessment (EA) of the planned SOCAL exercises, which predicted approximately 170,000 "takes" of marine mammals, an "extraordinary number relative to the size of cetacean populations off Southern California" (Brief for Respondents, 2008, p. 5). Despite the findings of its own assessment, the Navy reasoned that the environmental impact of the SOCAL exercises would be minimal, and declined to

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<sup>3</sup> As defined by federal law, a "take" means "to harass, hunt, capture, or kill, or attempt to harass,

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hunt, capture, or kill any marine mammal." 16 U.S.C. 1362(13).

prepare an Environmental Impact Statement (EIS). In addition, the Navy did not commit to using any of the mitigation measures it had agreed to in the earlier settlement (Mongeon, 2008, p. 278).

In response to the Navy's decision, NRDC and five other environmental plaintiffs<sup>4</sup> filed suit against the Navy on March 22, 2007, seeking injunctive relief for violations of the National Environmental Protection Act (NEPA), the Coastal Zone Management Act (CZMA), the Administrative Procedure Act (APA), and the Endangered Species Act (ESA). On June 22, 2007, NRDC filed a motion for a preliminary injunction against the Navy, arguing that either the military had to stop using MFA sonar in the SOCAL waters, or put in place the mitigation measures designed to protect marine mammals. On August 6, 2007, the United States District Court for the Central District of California granted a preliminary injunction against the Navy's use of sonar<sup>5</sup>. In granting NRDC's motion for a preliminary injunction, the district court found, among other things, that NRDC had demonstrated probable success on the merits of its claim that the Navy violated NEPA by failing to prepare an EIS prior to the exercises. The Navy quickly filed an emergency motion to stay the injunction, which the United States Court of Appeals for the Ninth Circuit granted on August 31, 2007, pending an expedited appeal.<sup>6</sup> Stating that the "safety of the whales must be weighed, and so must the safety of our warriors. And of the country," the appellate court criticized the district court for not weighing more explicitly the national security interests of the public, and it also suggested that the preliminary injunction could have been more narrowly

tailored to allow for the resumption of military exercises with mitigation measures.<sup>7</sup>

On November 13, 2007, the appellate court vacated the stay and remanded the case back to the district court so that it could have an opportunity to modify the injunction to include appropriate mitigation measures.<sup>8</sup> Members of the District Court then read reply briefs submitted by the parties after the remand order, and even toured the *USS Milius* at the naval base in San Diego to enhance their understanding of the Navy's sonar training procedures. Hearing the case again on January 3, 2008, district court Judge Florence-Marie Cooper ordered the Navy to adopt stricter safeguards to protect marine mammals. These mitigation measures included a twelve nautical mile exclusion zone from the California coastline, a shutdown of MFA sonar when a marine mammal ventured within 2200 yards of the source of the emission, pre-exercise monitoring for marine mammals for 60 minutes prior to using MFA sonar as well as monitoring during the exercises, a power down when surface ducting conditions (occurring when temperature differences in adjacent layers of water causes sound to travel at greater distances) are detected, the prohibition of sonar use in the Catalina Basin, and other measures.<sup>9</sup> The Navy then filed an emergency motion to stay the preliminary injunction, which the district court denied on January 14, 2008.<sup>10</sup>

Seeking to circumvent the court's order, the Navy made its case before the executive Council on Environmental Quality (CEQ), presenting it with a "one-sided portion of the district court record, containing only the Navy's evidence and arguments" and without the presence of NRDC attorneys (Brief for the Respondents, 2008, p. 11). Citing the Navy's assertion of "emergency circumstances," the CEQ approved "alternative arrangements" on

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<sup>4</sup> The other plaintiffs in the case were the Fund for Animal Welfare, the Cetacean Society International, the League for Coastal Protection, the Ocean Futures Society, and Jean-Michel Cousteau. For simplicity, I refer to the case by the lead plaintiff, the NRDC.

<sup>5</sup> *NRDC v. Winter*, 2007 U.S. Dist. LEXIS 57909, at 33.

<sup>6</sup> *NRDC v. Winter*, 502 F.3d 859.

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<sup>7</sup> *NRDC v. Winter*, 502 F.3d 859, at 864.

<sup>8</sup> *NRDC v. Winter*, 508 F.3d 885.

<sup>9</sup> *NRDC v. Winter*, 530 F. Supp. 2d 1110.

<sup>10</sup> *NRDC v. Winter*, 527 F. Supp. 2d 1216.

January 15, 2008, permitting the Navy to continue its exercises while it completed its EIS. On the same day, President George W. Bush signed an executive order that exempted the Navy from the provisions of the CZMA regulating its use of MFA sonar in the SOCAL exercises. In light of those developments, the appellate court remanded the case again to the district court on January 16, 2008, to determine what effect the executive actions had on the original preliminary injunction. On February 4, 2008, the district court left the injunction in place, noting that CEQ's approval of "alternative arrangements" was invalid because the Navy's "emergency" was a "creature of its own making," given that the military had planned the routine exercises well in advance and should have produced "adequate environmental documentation in a timely fashion, via the traditional EIS process or otherwise."<sup>11</sup> The Navy filed a notice of appeal two days later, this time taking issue with just two of the six mitigation measures imposed by the district court—the 2200-yard shutdown and the power-down during surface ducting conditions.

On February 27, 2008, the appellate court affirmed the district court's decision and left the injunction in place, arguing that it was narrowly-tailored to balance the public interests in the natural environment and a well-trained Navy. Still, "acting out of an abundance of caution," the Ninth Circuit court modified the injunction so that the Navy need only reduce, not suspend, its use of sonar in the 2200-yard zone if marine mammals are detected at a "critical point in the exercise," and power-down during surface-ducting conditions only when observers detect a marine mammal within a specified distance of the source of the sonar.<sup>12</sup>

Unsatisfied with this legal result, the Navy appealed the case, and the Supreme Court granted certiorari on June 23, 2008,

and heard oral arguments on October 8, 2008. On November 12, 2008, the high court announced a ruling in the case, coming down "solidly on the side of national security" by reversing the judgment of the U.S. Court of Appeals for the Ninth Circuit and lifting the judicial restrictions on the use of MFA sonar in submarine training exercises off the coast of Southern California (Liptak, 2008, p. A24).<sup>13</sup>

### **<National Security> and <Military Readiness> as Ideographs**

Ideographs, writes Michael Calvin McGee, are "one-term sums of an orientation" that "exist in real discourse, functioning clearly and evidently as agents of political consciousness" (1980, p. 7). They are "historically and culturally grounded commonplace rhetorical terms that sum up and invoke identification with key social commitments" (Cloud, 2004, p. 288). An analysis of ideographs involves an account of the ways that rhetors "dip into, add to, and reshape the shared cultural stock" generated by these widely used and near-universal terms and phrases (Cloud, 1998, p. 389).

McGee suggests that critics analyze both the diachronic and synchronic aspects of ideographs (McGee 1980). The diachronic structure of an ideograph "represents the full range and history of its usages for a particular rhetorical culture" (Condit and Lucaites, 1993, p. xiii). It calls for an identification of those situations where the ideograph is invoked and a description of the salient features of its use in those circumstances. A synchronic analysis of ideographs examines how rhetors make use of them presently, especially when they compete with opposing ideographs, in a situation where the hallowed term constantly reorganizes itself "to accommodate specific circumstances while maintaining its fundamental consonance and unity" (McGee, 1980, p. 14). Rhetors engage in

<sup>11</sup> *NRDC v. Winter*, 527 F. Supp. 2d 1216, at 30.

<sup>12</sup> *NRDC v. Winter*, 518 F.3d 658.

<sup>13</sup> *Winter v. NRDC*, 172 L. Ed. 2d 249.

struggles to define the boundaries of any given ideograph, but they are often constrained by the dominant understanding of the ideograph in a public culture. Celeste Michelle Condit argues that a rhetorical critic develops an understanding of persuasive discourse by examining the interaction and development of ideographs with narratives and characterizations (1987, pp. 3-4). The stories that a culture tells and the depictions it provides of particular agents, acts, scenes, purposes, and agencies helps to generate a dominant world view around a given set of ideographs.

A full accounting of the diachronic origin of <military readiness> is beyond the scope of this essay. However, appeals to <military readiness> have been invoked at strategic times throughout American history. It is widely perceived that the “ability to be ready to fight or conduct military operations successfully” is one of the most important purposes of the military (Laird, 1980, p. 1). George Washington, in his first Annual Address to Congress, declared, “To be prepared for war is one of the most effectual means of preserving peace.” With respect to maritime readiness in particular, Theodore Roosevelt observed, “the only way in which a navy can ever be made efficient is by practice at sea, under all the conditions which would have to be met if war existed” (Brief for the Petitioners, 2008, p. 48). And while Chief Justice Roberts cited both of these statements in his opinion in *Winter*, McGee (1980) urges critics to look for touchstones that serve as cultural precedents for ideographs. In particular, iconic events are those seminal moments “which seem to acquire a mythic status within the culture” (Leavy, 2007, p. 3) and generate opportunities for ideographic construction and refinement. In the context of American <military readiness>, one moment stands out as iconic: the December 7, 1941, attack on Pearl Harbor.<sup>14</sup> While

implied throughout much of the discourse in *Winter* over enemy use of diesel-electric submarines, Roberts made explicit reference to the Pearl Harbor analogy in oral arguments before the Court on October 8, 2008. At “no point,” complained the Chief Justice, “did the district judge undertake a balancing of the equities, putting on the one side the potential for harm to marine mammals...and putting on the other side the potential that a North Korean diesel electric submarine will get within range of Pearl Harbor undetected. Now, I think that’s a pretty clear balance” (Oral Arguments, 2008, p. 48).

As Michael Slackman observes, “There is little argument...that the Pearl Harbor attack was a dramatic event which in the space of a few hours plunged the United States into the most destructive war of the twentieth century and changed forever the way most Americans viewed the world around them” (1990, p. vii). Although research has confirmed that American officials had numerous warnings that a Japanese attack was pending (Wohlstetter 1962; Posner 2005; Wirtz 2006), Pearl Harbor has achieved mythic status in American culture as a moment when America was caught by surprise. “In the popular view,” writes Richard K. Betts, “the Japanese attack on Hawaii was a true ‘bolt out of the blue,’ without warning, and a pure example of unprovoked perfidy” (1982, p. 42).

One of the many cultural “lessons” that some derived from the Pearl Harbor attack was the need for constant vigilance against the strategic vulnerability that comes with complacency. Although competing narratives of the attack have circulated for decades, the dominant public memory of the event falls within the “infamy framework” that harkens back to rhetorical

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September 11, 2001, attacks on the World Trade Center and Pentagon, especially considering the comparisons that public officials have made between Pearl Harbor and 9/11. Both events resonate as examples of the lack of military preparedness, but Pearl Harbor is more relevant to the public justification of MFA sonar, given that it relies upon fears of enemy utilization of advanced military technologies.

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<sup>14</sup> An extended version of this essay includes a diachronic analysis of the uses of <military readiness> after the



traditions of the American frontier (Rosenberg 2003, pp. 12-13). According to this tradition, diabolical forces will exploit weak, feminized, and complacent publics, but salvation for the Nation is available through retributive, masculine uses of military power.

The <military readiness> ideograph thrives in this rhetorical context because it offers an antidote to the perceived vulnerability of surprise attacks. Pearl Harbor serves as an iconic touchstone, “a singular moment in modern American history” when “penetration of our borders by a hostile force...had the effect on the country that a burglary has on the family home: people never felt quite as safe again” (Jennings and Brewster, 1998, p. 239). Pearl Harbor is constructed in public memory as a cautionary tale, and combined with <military readiness> it serves as a narrative reminding citizens to stay vigilant against surprise attacks, to utilize superior American technology to uncover and thwart potential surprises, and to heed the warnings of military officials while rejecting policies that might impede military preparedness (especially when they are promoted by those who are ignorant of strategic dangers). This rhetoric functions to “persuade us of war’s necessity, but then [we] forget that it is a rhetoric” (McGee, 1980, p. 6).

### **Analysis**

Even before NRDC had initiated the legal action that led to the Supreme Court decision in *Winter v. NRDC*, the military had rehearsed <readiness> in other environmental contexts by affixing the rhetorical label of “encroachment” on any regulation that allegedly hindered military preparedness. Speaking during congressional hearings in 2001, Army Lt. Gen. Larry Ellis testified, “readiness is critical to our ability to perform the missions assigned to us and to do so efficiently and with minimum casualties” (quoted in Bethurem, 2002, p. 122).

When NRDC and the other environmental plaintiffs challenged the use of MFA sonar in training exercises off the coast of Southern California, the military utilized <military readiness> in a variety of legal and public contexts. In a statement before the Senate Environment and Public Works Committee on April 2, 2003, Rear Admiral Jonathan W. Greenert, the deputy commander of the Navy’s Pacific fleet, warned of “new ultra quiet diesel-electric submarines armed with deadly torpedoes and cruise missiles” that could only be detected by sailors who could “train realistically with the latest technology, including next-generation passive and active sonars” (pp. 244-45). Claiming, “military readiness requirements and environmental protection are out of balance,” Greenert urged lawmakers to support the Navy’s perspective. In a declaration on “The Impact of Environmental Extremism on Military Readiness,” the Senate Republican Policy Committee railed against “burdensome...environmental laws and lawsuits which prevent the military from fully achieving readiness,” and singled out lawsuits that prevented the Navy from using “sonar to track the newer, ultra-quiet submarines operated by China, North Korea, and Iran” (U.S. Senate Republican Policy Committee, 2003, p. 1). According to the Secretary of the Navy Donald C. Winter in his 2008 Posture Statement, “the most critical readiness issue relates to the Navy’s ability to train using active sonar...The inability to train effectively with active sonar literally puts the lives of thousands of Americans at risk” (p. 11).

Kenneth Burke (1984) has identified the technological psychosis as the prevailing orientation of modern society. While Burke examined a range of psychoses, the technological perspective emerged as dominant: “in and about all these, above them, beneath them, mainly responsible for their perplexities, is the technological psychosis,” the drive “to control for our purposes the forces of

technology, or machinery” (p. 44). Floyd D. Anderson and Lawrence J. Prelli (2001) explain that such an orientation typically features a pentadic ratio of agency-purpose or agency-scene as dominant: “Indeed, the central motivation locked within technological discourse is agency-purpose; its strict instrumentalism not only transforms acts, agents, and scenes into terms of agency, but even purposes themselves become meaningful only when nearly synonymous with agency” (p. 80). Subordinated in this vocabulary of motives are perspectives that feature agent, act, or scene.

In the *Winter* case, the Navy’s appeal of the preliminary injunction centered on its objection to two of the mitigation measures imposed by the district court: the 2200-yard shutdown requirement and the power-down requirement during surface ducting conditions. These requirements were hardly onerous, given the Navy’s experience conducting exercises with restrictions similar to the ones mandated by the district court. For example, the settlement between the Navy and NRDC that the parties reached shortly before the Navy’s “Rim of the Pacific” exercise off the coast of Hawaii in 2006 had similar stipulations (Fletcher, 2008, at 35-40). Following these exercises, the Navy issued an “after action report” that recorded a total of 472 hours of MFA sonar use with only eight hours of lost time due to the mitigation measures. Furthermore, NRDC presented evidence that the effect of widening the safety zone to 2200 yards would have been only one additional shutdown or power down for each exercise (Oral Arguments, 2008, p. 37), and also pointed out that the Navy certified its sonar technicians even when they had not practiced under surface ducting environments, given the infrequency of those conditions.

Still, the Navy objected to the mitigation measures on the grounds that they would inhibit readiness. In its brief, the government claimed the 2200-yard shutdown requirement “would cripple the

Navy’s ability to conduct realistic pre-deployment training and to assess a strike group’s capabilities” (Brief for the Petitioners, 2008, p. 13). The Navy also submitted numerous declarative statements in support of this argument. Vice Admiral Locklear, Commander of the U.S. Third Fleet, stated that the 2200-yard shutdown zone would “jeopardize the training and readiness” of strike groups. Rear Admiral Bird argued that training in surface ducting conditions was “critical to effective training.” And Admiral Roughead and Rear Admiral Branch contended that both requirements would create an unacceptable risk and profoundly affect national security (Statements quoted in Fletcher, 2008, at 50).

<Military readiness> functioned to highlight the importance of agency (MFA sonar) in fulfillment of the larger purpose of national security. The discourse worked to draw attention to the need for training and proficiency in a complex technology to counter the technological advancements (diesel-electric submarines) of adversaries. When drawing upon the diachronic meanings of <readiness> generated by the Pearl Harbor narrative, one perceives the enemy as being capable and willing to use technological advances to exploit American vulnerabilities. Regulations that limit the use of MFA sonar—such as the 2200-yard shutdown zone and the surface ducting requirements—became impediments to the successful mastery of agency in the service of the dominant ideograph. Thus, responding to litigants who claimed that surface ducting conditions were rare, Roberts asserted in *Winters* that the “reasoning is backwards” and that, if anything, “it is especially important for the Navy to be able to train under these conditions when they occur” (2008, at 41-42). Terminologies featuring agents (whales), scene (the environment) and act (the injunction) became subordinated to agency (sonar) and purpose (readiness).

In *The New Rhetoric: A Treatise on Argumentation*, Chaim Perelman and Lucie

Olbrechts-Tyteca identify *loci communes* as those categories (“common places”) of a general nature that advocates use to advance argumentative claims (1969, pp. 83-85). Environmental advocates have frequently invoked a *locus* of quality, particularly appeals to the irreparable, to argue on behalf of the uniqueness, precariousness, and timeliness of the natural environment (Cox 1982). But Perelman and Olbrechts-Tyteca note, “each *locus* can be confronted by one that is contrary to it” (85). The NRDC and its allies have used appeals to the irreparable to highlight the uniqueness of the species of marine mammals near the California coastline, the sensitivity of these animals to MFA sonar, and the urgent need to forestall the Navy’s use of sonar in these waters. The Navy and its allies have responded with an ideograph of <military readiness> that shifts emphasis to a *locus* of quantity, imposing difficult threshold requirements on environmental litigants while valorizing deference to military authorities.

To obtain a preliminary injunction, litigants must demonstrate a combination of probable success on the merits of its claim, the possibility of irreparable harm, and they must show that the balance of hardships tips in their favor. The lower courts found that NRDC had satisfied these requirements. However, in its brief, the government argued that a preliminary injunction was “an extraordinary and drastic remedy,” and suggested the lower courts erred in holding that litigants need only show a “mere possibility” of irreparable harm to justify granting an injunction, as opposed to the more stringent standard of a “likelihood” of irreparable injury. In its ruling in *Winter*, the Supreme Court agreed the “possibility” standard was too lenient, and instead affirmed the need for plaintiffs to demonstrate irreparable injury was *likely* in the absence of an injunction.

Aside from establishing a more challenging threshold of proof for environmental litigants, the shift from *possibility* to *likelihood* facilitated a rhetorical

transition from a *locus* of quality to a *locus* of quantity, “which affirm that one thing is better than another for quantitative reasons” (Perelman and Olbrechts-Tyteca, 1969, p. 85). This was apparent in the Navy’s oft-repeated claim that it had trained in SOCAL waters for 40 years without any evidence of marine mammal fatalities. In oral arguments, Solicitor General Garre stressed, “the Navy has been using MFA sonar in the Southern California Operating Area for more than 40 years and no one can point to any harm to marine mammals” (Oral Arguments, 2008, p. 23). The apparent persuasiveness of this claim was confirmed by the frequency by which it appears in Roberts’s majority decision—five times. “The Navy emphasizes that it has used MFA sonar during training exercises in SOCAL for 40 years,” wrote Roberts in one of these examples, “without a single documented sonar-related injury to any marine mammal.” (2008, at 14)

This rhetorical maneuver is an example of the *argumentum ad ignorantiam* fallacy, or the “appeal to ignorance,” which uses an opponent’s inability to disprove a conclusion as proof of the conclusion’s correctness (Engel, 1994, p. 227). It challenges environmentalists to produce bodies as proof of irreparable harm; otherwise, no harm is presumed to exist. There are obvious problems to this reasoning. Since the injuries occur to marine mammals while they are in the water, many whales “are dying in substantially larger numbers” than scientists realize, given that most of the dead animals do not strand on shore where people can count them (Jasney, 2005, p. v). Beaked whales, in particular, are sensitive to sonar but difficult to detect. A 2007 study by the National Marine Fisheries Service revealed, “in 90% of beaked whale stocks a decline in population of 50% over a 15-year period would go undetected as a decline at all” (Fletcher, 2008, at 31). Non-fatal injuries would be even harder to detect. It is also unclear from the record whether the Navy has been using MFA sonar over the past 40

years at the same power level, frequency, and duration as it does in the current exercises. In addition, in its “after action reports,” the Navy documented a number of marine mammal deaths in SOCAL waters following exercises using MFA sonar, but the reports did not disclose whether necropsies were performed on the carcasses to determine the cause of the deaths or whether they were linked to sonar use (Fletcher, 2008, at 28-29).

<Military readiness> accentuates the *locus* of quantity by celebrating the expertise of military officials. Writing about a similar ideograph of <necessity>, Marouf Hasian Jr. argues, “necessitous circumstances are treated as a priori facts that inform the decisions made by elites who have the special training in the handling of these affairs. This is one of the reasons why we hear so much about civilian ‘deference’ during times of war” (2005, p. 11).<sup>15</sup> In the legal and public rhetoric of <military readiness>, especially measured quantitatively and constrained by a technological psychosis emphasizing agency, deference is granted to military experts to assess both threats and capabilities. During oral arguments, for example, several justices questioned the ability of a district court judge to render an informed judgment on military strategy. “Isn’t there something incredibly odd about a single district judge making a determination on that defense question that is contrary to the determination that the Navy has made?” asked Justice Alito in a question to NRDC attorney Kendall (Oral Arguments, 2008, p. 30). When Kendall replied that the district judge made a factual determination in the case, Alito pressed a similar question later in the oral arguments: “Is Judge Cooper an expert on antisubmarine warfare?” he asked (Oral Arguments, 2008, p. 49). Even Justice

Breyer conceded during oral arguments, “Look, I don’t know anything about this. I’m not a naval officer...[and]... I know that district judge doesn’t know about it, either” (Oral Arguments, 2008, p. 35). This deference to military authority was reflected in the majority opinion in *Winters*, as well. Wrote Roberts: “We accept these officers’ assertions that the use of MFA sonar under realistic conditions during training exercises is of the utmost importance to the Navy and the Nation” (2008, 34)

Writing about the rhetoric of nukespeak, Edward Schiappa (1989) argues that military experts use strategies of domestication and bureaucratization to make the discourse about nuclear weapons paradoxically familiar and inaccessible to public audiences. In a similar way, <military readiness> encourages simplification through a narrative of surprise and vigilance, combined with deference to authorities perceived to be capable of understanding strategic military doctrine. The fact that members of the district court visited a naval ship relegated their experiences to those of tourists and reinforced a presumed dependence on military experts to decipher and explain the complexities of military technology. Alito’s question about Judge Cooper’s knowledge of ASW further diminished her stature as a credible authority, even though she carefully crafted mitigation measures based on her extensive knowledge of the facts in the case. <Military readiness> functioned to juxtapose a masculine ethos of military experience with a feminized, sentimental pathos for marine mammals.

### **Conclusion**

In their attempts to dismiss evidence linking MFA sonar to the deaths and injuries of marine mammals, the Navy and its proponents have resorted to absurd arguments, such as the claim that marine mammals are not affected by sonar because they spend most of their time out of the water, or that whales “just swim in a different direction” when they hear the noise

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<sup>15</sup> While similar, the ideographs of military <necessity> and <readiness> are distinct in many ways, since <readiness> places emphasis on future action to prevent perceived vulnerabilities, especially with respect to the marshaling of military technology to reduce strategic uncertainties.

produced by sonar (Oral Arguments, 2008, pp. 8-9). Perhaps realizing that the scientific case linking military sonar with cetacean mortalities and injuries has “progressed well beyond the point of finding a smoking gun” (Parsons et. al., 2008, p. 1255), the Navy has relied increasingly on rhetorics emphasizing <military readiness> to show that “national security can trump marine mammal protection” (Brief for the Petitioners, 2008, p. 35). In this essay, I have demonstrated that this ideograph constitutes public audiences as victims vulnerable to surprise attack, whose best option relies on deference to military authorities to protect them with technology that should be used without constraints.

There are several “potential consequences of public adherence to a particular vocabulary of motives” (Cloud, 1998, p. 389). From a legal standpoint, *Winter v. NRDC* raises several troubling prospects. First, military officials are certain to invoke <military readiness> with renewed vigor when confronted with situations that “encroach” on military training, and there are numerous instances where they believe this is the case (Dycus 1996; Burke 2008; Babcock 2007; Yap 2004). Second, as mentioned earlier, environmental advocates will need to establish a “likelihood” of irreparable harm in future cases to warrant an injunction against damaging practices. Thus, even though the military faced no threshold of proof when it asserted its harms in *Winter* (there was no discussion of the likelihood of an attack by diesel-electric submarines, and such harms were assumed plausible based only on the declarative statements of military authorities), advocates will be faced with a high threshold in future cases where they seek injunctive relief against environmental harms. Third, the case has potentially significant implications for public participation in environmental decisions. When it enacted NEPA in 1969, Congress created a process that, for the first time, involved “the public in environmental decision making in a comprehensive

manner” (Cox, 2006, p. 93). NEPA requires agencies to prepare an EIS when significant environmental impacts result from proposed actions. But the Navy avoided the requirement for public comment by only completing an environmental assessment (EA) of its SOCAL exercises.<sup>16</sup> An EIS wasn’t scheduled for completion until the conclusion of those exercises. While some suggested the scope of *Winter* is limited (Eubanks 2009), if a similar pattern is followed in future cases, the public will either be left out of deliberations or allowed to participate only after the environmental harms have occurred.

Rhetorically, advocates working within the existing legal framework are constrained by <military readiness> and often do not challenge it directly. Although he noted that “the Navy cannot be the judge of its own cause” and that “deference does have its limits,” NRDC attorney Kendall admitted that Naval training was “of the highest importance” (Oral Arguments, 2008, p. 50). Constrained by the coercive dimensions of ideographic adherence, advocates working in the court system might rely heavily on the precautionary principle, with preference given to the probable (harm to whales) over the improbable (reduced readiness as a result of mitigation measures). However, while this balancing of risk was persuasive to the lower courts, the Supreme Court decision in *Winter* makes this option difficult. This is perhaps the reason why NRDC settled recently a separate lawsuit against the Navy over sonar, agreeing to a proposal requiring the Navy to spend \$14.75 million over three years on marine mammal research, but does not include any of the additional measures to protect animals when the

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<sup>16</sup> An EIS has far more stringent requirements than an EA. An EIS must “[r]igourously explore and objectively evaluate all reasonable alternatives” to the agency’s action (Amici Curiae Brief for Defenders, 2008, pp. 36-37), which in this case would have meant examining and evaluating the effects of implementing mitigation measures. In addition, the EIS allows for an “early and open process” for public comment on the proposed action (Amici Curiae Brief for Defenders, 2008, p. 36).

military uses sonar ("Navy Settles," 2008, p. A13).

In countering a scientific, military, and technological orientation, Kenneth Burke (1984) urges critics to adopt a dialectical process that seeks counterstatements to prevailing perspectives. In a similar move, Kevin Michael DeLuca (1999) draws upon the work of Laclau and Mouffe to suggest "antagonism chains" that might "challenge and transform the hegemonic discourse of modern society (p. 45). Such options might not be available in legal venues constrained by the decorum of precedent, but they would be available to advocates in the larger public sphere who might rearticulate <military readiness> in ways that challenged the presumed linkage between security, technology, and the domination of nature. Already, once dominant appeals to national security are encountering pressure points, as issues concerning detainees and warrantless wiretapping reveal the excesses of ideographic commitments.

In a revealing moment during the oral arguments before the Supreme Court on October 8, 2008, Justice Breyer stated, "To a layperson, when I think of the armed forces preparing an environmental impact statement, I think, the whole point of the armed forces is to hurt the environment" (Oral Arguments, 2008, p. 44). The transcript notes there was laughter in the courtroom, indicating perhaps that the comment was intended as a joke to make a larger point about procedural requirements under NEPA. But if we might allow ourselves the pleasure to look back at this comment from the perspective of citizens liberated from <military readiness>, might we say that Justice Breyer was on to something?

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## **Seeking and Processing Information about Zoonotic Disease Risk: A Proposed Framework**

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### **Abstract**

*As part of zoonotic disease management, wildlife officials may strive to communicate health and safety information to promote individual behavior change and facilitate collaborative decision-making. Understanding how individuals search for and attend to information about disease risk can assist both efforts. Drawing on the risk information seeking and processing (RISP) model, this paper articulates a framework that explores how individuals seek and engage with information about zoonotic disease risk in different ways. The framework includes concepts such as need for information, social pressure to remain informed, beliefs about information channels, perceived risk and trust, and personal capacity to learn. It also extends the RISP model by exploring the role of values, wildlife value orientations, and opinion leadership. Overall, the framework synthesizes research from a variety of fields, with the goal of furthering inquiry on the human dimensions of disease management, particularly the importance of risk communication.*

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### **Introduction**

This article articulates a novel and interdisciplinary framework, based on the risk information seeking and processing (RISP) model (Griffin, Dunwoody, & Neuwirth, 1999), that explores how individuals search for and attend to information about zoonotic disease risk in different ways. The framework synthesizes research from a variety of fields, with the goal of furthering inquiry on the human dimensions of disease management, particularly the importance of persuasion and engagement-based risk communication.

Zoonoses originating in wildlife or domestic animals are high-profile public health and wildlife management concerns. For example, Jones et al. (2008) found that 60% of 335 emerging infectious disease events from 1940 to 2004 involved zoonoses, 72% of which originated in wildlife, even after controlling for surveillance and reporting effort. However, while research has begun to examine the human dimensions aspect of disease management (Decker et al., 2006;

Peterson, Mertig, & Liu, 2006), there remains a shortage of theory-based studies that speak to the importance of effective risk communication and which blend perspectives from a variety of relevant disciplines, including communication, psychology, sociology, and natural resource management (Vaske, Shelby, & Needham, 2008).

The proposed framework speaks directly to these issues. As part of management activities, wildlife officials strive to communicate disease risk to (a) promote attitude and behavior change (i.e., the adoption of disease prevention methods or support for specific policies) and (b) facilitate collaborative decision-making (Decker et al., 2006). To effectively communicate, however, officials need to understand how audiences search for and engage with information about disease risk (Griffin et al., 1999) and how information, once received and interpreted, influence risk-related attitudes and behaviors. The RISP model addresses both considerations (Griffin et al., 1999). Messages can therefore be designed that encourage people to become more informed about

disease threats, motivate them to change attitudes or behavior where appropriate, and empower them to participate in a disease management process when such opportunities arise.

The proposed framework includes many RISP model concepts, including need for information, social pressure to remain informed, beliefs about information channels, perceived risk and trust, perceived ability to avoid a risk, and personal capacity to learn. The framework also describes additional avenues for theoretical extension. Drawing on the psychology of values, it explores how values and wildlife value orientations shape perceptions of disease risk and trust associated with disease management. Using the sociological concept of “roles,” it explores how “opinion leadership” (i.e., the extent to which an individual sees himself/herself as an expert on an issue) shapes a perceived responsibility to remain informed about a disease threat.

The following sections explore the individual components of the framework. Two caveats, however, must be noted. First, “information” refers to both persuasive and non-persuasive messages disseminated by wildlife and public health agencies, the mass media, and other sources. Second, the proposed framework focuses on zoonoses (diseases that are transmissible from wildlife or domestic animals to humans and vice-versa) as opposed to diseases that circulate within animal species but do not affect humans.

#### Human Dimensions of Zoonotic Disease Management

Understanding how individuals search for and attend to information about zoonotic risk speaks to humans’ larger role in disease epidemiology and management. Humans play an integral role in disease emergence through such factors as habitat fragmentation, suburban/urban sprawl, population density, climate change, and the growth of international trade in wild and domestic animals (Daszak, Cunningham, & Hyatt, 2001). Human responses to

perceived disease risk, moreover, are key factors in developing and implementing management policies. These risks include potential disease transmission to humans as well as threats to the health of wild and domestic animals on which people depend for food, recreation, and income (Decker et al., 2006; Poortinga, Bickerstaff, Langford, Niewohner, & Pidgeon, 2004). Moreover, given that disease management represents an opportunity to “integrate biological and human dimensions insight” (Decker et al., 2006, p. 152), human dimensions research is essential for understanding stakeholder perceptions of management policies. Crucial areas of inquiry include individuals’ (a) disease-related beliefs, attitudes, behavior, and risk perceptions, (b) acceptance of specific policies, (c) perceived trust in wildlife agencies to handle outbreaks, and (d) best practices for effective persuasive and engagement-based risk communication (Covello, Peters, Wojtecki, & Hyde, 2001; Dorn & Mertig, 2005; Vaske et al., 2008).

However, unlike research on zoonotic disease epidemiology, pathology, and transmission, until recently little research has focused on the human dimensions aspect of disease management. Case studies have included bovine tuberculosis, Lyme disease, foot-and-mouth disease, and rabies (see Vaske et al., 2008 for a review). Nonetheless, Vaske et al. (2008, p. 248) noted an acute shortage of “systematic and theory-based” studies that can “facilitate understanding of the human component of [zoonotic] diseases” as well as speak to the importance of effective risk communication among diverse stakeholder groups.

#### *Risk Communication and Disease Management*

Within the context of zoonotic disease management, risk communication can take two forms, although in practice, wildlife managers may pursue a blend of the two. A persuasive approach involves providing health and safety information for the purposes of (a) increasing awareness of

and knowledge regarding disease risk and (b) changing attitude or behavior (i.e., the adoption of self-protective measures) (see, for example, Arguin, Navin, Steele, Weld, & Kozarsky, 2004; Covello et al., 2001). Conversely, the goal of engagement-based risk communication is to build stakeholder consensus around disease management policy through participatory approaches, ranging from top-down, agency-driven techniques to collaborative strategies (Decker et al., 2006). Scholars have described these approaches in detail (see Decker & Chase, 1997). In addition, wildlife officials may also seek to build stakeholder capacity--on the individual or community level--to participate in the management process, including helping to identify a problem, debate relevant solutions, mobilize resources, and implement policies (Raik, Decker, & Siemer, 2006). Failure to include stakeholders, moreover, can potentially trigger backlash, in terms of the unacceptability of specific policies (Heberlein, 2004).

#### Studying Information Seeking and Processing

Why study individuals' information seeking and processing behavior in the context of zoonotic disease risk? The proliferation of sources through which individuals can obtain information about health issues, from newspapers to television to the Internet, has spurred wildlife managers and risk communication scholars to consider how people search for and engage with health information and the effects these communication actions have on health-related attitudes and behaviors. For example, scholars have explored how individuals react to messages specifically designed to change attitudes or behavior (Petty & Cacioppo, 1981). In general, research suggests that people who actively seek and effortfully evaluate health information more readily acquire and retain health knowledge, adopt favorable attitudes toward health behaviors that are resistant to change, and (in the end) engage in healthier lifestyles (ranging from cancer screening to

exercise to fruit and vegetable consumption) (Eagley & Chaiken, 1993; Petty and Cacioppo, 1981; Shim, Kelly, & Hornik, 2006). The RISP model builds on this research in exploring how people seek and attend to risk information, with implications for the aforementioned communication strategies.

#### RISP Model Dynamics

The following sections provide a brief overview of relevant RISP model components (see Figure 1 for a model overview). First is a conceptual definition of information seeking and processing. Second is a discussion of antecedents of these two concepts, including the proposed extensions - values, wildlife value orientations, and opinion leadership.

##### *Information Seeking and Processing*

One can conceptualize information seeking as a continuum of behaviors anchored by avoidance on one end and seeking at the other. Avoidance, noted Case, Andrews, Johnson, and Allard (2005), is not simply the absence of seeking, but rather a concerted attempt to evade information about a particular issue. Seeking, by contrast, is a "goal-driven behavior," in that an individual is searching for information to achieve a particular objective or in response to specific motivating factors (some of which are described in the RISP model).

The RISP model describes a continuum of processing strategies anchored by systematic and heuristic processing at either end. When processing information systematically, one is said to "exert considerable cognitive effort in [attempting] to comprehend and evaluate the message's arguments" (Kahlor, Dunwoody, Griffin, & Neuwirth, 2003, p. 356). By contrast, heuristic processing involves "comparatively little effort [and] may rely on [more] accessible information, such as a source's identity cues" (p. 356). Research suggests that people who process health information systematically develop health attitudes that are more

resistant to change and predictive of subsequent behavior (Griffin et al., 1999).

#### *Information Sufficiency*

The RISP model assumes that in the course of making decisions, people desire to hold accurate attitudes and make correct decisions about an issue. Accuracy and correctness, in turn, are subjective assessments based on a sufficient level of issue-relevant information. A perceived knowledge deficit (“insufficiency”)—a gap between what one currently knows about an issue and what one *should* know so as to make an informed, correct decision about it—will motivate people to seek and systematically evaluate messages until a desired sufficiency threshold is achieved, and they are confident in what they know, believe, and decide (Griffin et al., 2005).

#### *Information Subjective Norms*

The concept of information subjective norms is derived from the concept of subjective norms, which describe an individual’s perceived social pressure to perform a certain behavior (Ajzen, 1988). The RISP model modifies this concept to emphasize the degree to which we think others would want us to remain *informed* about an issue. Griffin and colleagues have found that this concept is positively related to information *insufficiency* (i.e., the more we think that others want us to remain informed, the more information we feel we need) as well as to information seeking and processing behavior (positive for systematic, negative for heuristic) (Griffin, Neuwirth, Dunwoody, & Giese, 2004; Griffin et al., 2005).

#### *Perceived Information Gathering Capacity and Channel Beliefs*

According to the RISP model, how individuals seek and process information also depends on accessibility and relevance (Griffin et al., 2005). Accessibility is a function of efficacy; people need to feel confident that they can locate and understand information if motivated to look for it. In the RISP model, accessibility is represented by “perceived information gathering capacity,” or a person’s ability to

locate and process information about an issue if so desired (Griffin et al., 1999). The higher the level of perceived capacity, the more motivated one becomes to seek and systematically process messages. In terms of relevance, people will search for and engage with messages if they (a) believe that information will meet their needs and (b) believe that sources can provide such information. In terms of the first dimension, people may desire information that entertains, educates, or validates a previously-held belief (Slater, 1997). Within the RISP model, however, relevance has focused largely on the second dimension: the “beliefs about channels of information [i.e. the mass media]...[that] affect the seeking and processing strategies people employ” (Griffin et al., 2005, p. 10). These beliefs reflect judgments of quality (i.e., that media reporting reflects or distorts reality), control (i.e., that the media are too powerful), and ethics (i.e., that the media are self-serving) (Griffin et al., 1999). In terms of zoonotic disease, it is vitally important to know not only the sources through which people receive disease messages, but also the judgments people make vis-à-vis messages and sources.

#### *Perceived Hazard Characteristics*

The perceived hazard characteristics in the RISP model influence information seeking and processing indirectly through interactions with other concepts. These characteristics reflect a multidimensional view of risk perception (see Slovic, 1987) and include (a) individual judgments of danger and (b) level of institutional trust.<sup>1</sup>

Individual judgments of danger reflect perceptions of *susceptibility* (the likelihood of experiencing an event) and *severity* (the consequences should that event occur). The incorporation of trust into the model reflects a decades-long interest in how this concept—especially trust in institutions responsible for risk management—informs risk perception, risk behavior, and information seeking and processing tendencies (Slovic, 1987). In recent years, communication research has

focused on salient value similarity (SVS) as a measurement of trust. SVS posits that when an individual possesses little knowledge of the risk in question and/or of the individual or institution with formal responsibility for managing that risk, one may simplify trust judgments. This simplification involves making comparisons between personal “salient values”--the important goals, standards, processes, and actions that should be followed in a given scenario--and the values one ascribes to the entity (Earle & Cvetkovich, 1994). Scholars have found a positive relationship between perceptions of shared values and trust in wildlife management agencies, which in turn is positively related to favorable attitudes toward management policies (see Vaske, Absher, & Bright, 2007).

#### *Affective Response to a Risk*

The RISP model places affective response after perceived hazard characteristics, in effect arguing that affect (i.e., an emotional state) is an outcome of perceptions of risk and trust. (Some scholars have suggested that the relationship is two-way - see Slovic, Finucane, Peters, & MacGregor, 2004). Griffin and colleagues posited that affective response, moreover, influences other model components, including information sufficiency. These relationships build on a growing body of psychological research that explores how one’s emotional state (i.e., worry) relates to information seeking and processing behavior (Griffin et al., 1999). Worry, in this context, is an affective state often experienced in reaction to an unexpected, unpredictable and uncertain event with potentially negative consequences

#### *Extending the RISP Model: The Role of Values, Value Orientations, and Opinion Leadership*

The proposed framework describes three extensions of the RISP model that can further strengthen the conceptual relationships described above (see Figure 2 for an illustration of these additions). The

first two extensions speak to the rich literature on values and value orientations, and their relationship to perceptions of disease risk as well as trust in entities deemed responsible for managing these risks. The third extension speaks to how the concept of opinion leadership--as a role one sees oneself performing--might influence a perceived social responsibility to stay informed about a disease threat.

#### *Values*

According to Schwartz and Bilsky (1987, p. 551), values are “concepts...about desirable end states or behaviors that transcend specific situations, guide selection or evaluation of behavior and events, and are ordered by relative importance.” They are viewed as fundamental antecedents of attitude and behavior (Schwartz, 1996). Over the last three decades, moreover, Schwartz (1994) has developed a set of 10 value types that, he argues, cultures throughout the world implicitly recognize. Schwartz further condensed these categories into four clusters, two of which are relevant to the proposed framework:

- *Self-transcendence*, which emphasizes the “preservation and enhancement of the welfare of people with whom one is in frequent personal contact” (benevolence) and “understanding, appreciation, tolerance, and protection for [the] welfare of all people and for nature” (universalism) (Schwartz, 1996, p. 3).
- *Self-enhancement*, which emphasizes “social status and prestige, control or dominance over people and resources” (power) and “personal success through demonstrating competence according to social standards” (achievement) (Schwartz, 1994, p. 22).

#### *(Wildlife) Value Orientations and the Cognitive Hierarchy*

In recent years, scholars have placed values as the first step in a “cognitive hierarchy,” which links values and value orientations (which are few in number and

strongly held) with “higher order” cognitions such as attitudes and behavior (which are, by comparison, more numerous and amenable to change). Whittaker, Vaske, and Manfredo (2006, p. 517) defined value orientations as “basic beliefs about general objects, which give meaning to more abstract values.”

At the same time, a distinct line of research has also coalesced around the concept of *wildlife* value orientations, which Bruskotter and Fulton (2008, p. 209) defined as “patterns of basic beliefs governing how human beings should...use, treat, value, manage, or otherwise affect [wildlife].” These value orientations are viewed as steps in a cognitive hierarchy – one that connects values with wildlife-related attitudes (i.e., support for management policies) and behaviors (ranging from hunting to wildlife viewing) (Daigle, Hrubes, & Ajzen, 2002). Researchers have proposed a number of measures. Whittaker et al. (2006), for example, articulated the *protection-use continuum*, defined as the extent to which people believe that wildlife should be protected from human use (i.e., the concept of wildlife rights) or that people should be allowed to use them for economic or recreational purposes. In addition, Manfredo, Teel and Zinn (2008) proposed the *dominance-mutualism continuum*, which ranges from belief in human mastery over wildlife to belief in wildlife’s ability to form relationships with humans and in its intrinsic value.

#### *Values, Value Orientations, and Perceptions of Disease Risk*

As shown in Figure 2, the proposed framework posits that the types of risk we perceive in the context of zoonotic disease depend on the values and value orientations to which we adhere. Perceived risk, in turn, shapes affective response to these risks (i.e., worry) and motivates individuals to appraise their current level of risk-related knowledge (leading to information seeking and systematic processing if individuals perceive a need for information). Stern and colleagues argued that risk judgments

reflect beliefs about adverse consequences to “valued objects.” Stern and Dietz (1994, p. 72) concluded that risk “can be seen as perceived negative consequences to things people value, including personal health and safety, the health and safety of other human beings, and the welfare of other species and the biosphere.”

In the context of zoonotic disease, individuals may express concern about personal health or well-being, such as the risk of animal-human disease transmission or threats to wild and domestic animals on which people depend for food, recreation, and income (i.e., hunting, wildlife watching, or animal husbandry). People may also be concerned about the health and well-being of other people (for reasons similar to the individual example) and the animals themselves (for reasons that extend beyond human-based needs, such as risks to the larger ecosystem or biotic community). The first situation arguably reflects adherence to self-enhancement values (concern about the self) and more “use” or “utilitarian” wildlife value orientations. The second situation, in contrast, arguably reflects adherence to more self-transcendent values (concern about other people or the environment) and more “protection” and “mutualism” wildlife value orientations.

#### *Values, Value Orientations, and Perceptions of Trust in Disease Management*

The framework proposes a relationship among values, value orientations, and the SVS approach to measuring trust in risk managers. To date, scholars have simply asked individuals to rate whether, in their view, a particular entity shares their values about management of a particular risk. What is missing, Vaske et al. (2007, p. 230) suggested, is “research that directly compares SVS measures of value similarity against...value orientations” related to how people perceive and react to (in this case) zoonotic disease risk. In keeping with the value-value orientation cognitive hierarchy, the proposed framework suggests that individuals can evaluate value similarity using Schwartz’s

values (operating, in turn, through wildlife value orientations). The degree of similarity, moreover, speaks directly to trust judgments, affective response to disease risk (i.e., worry), perceived need for information, and information seeking and processing behavior (see Figure 2). That is, value dissimilarity would be associated with lower perceptions of trust, stronger affective response, greater need for information, and information seeking and systematic information processing.

Referring to the aforementioned example, an individual may consider whether a wildlife management agency that is handling a disease incident adequately reflects his or her values related to (a) protection of personal health (which reflects more self-enhancement values and use/domination wildlife value orientations) or (b) protection of the interests of other individuals or the animals themselves (which reflects more self-transcendent values and protection/mutualism wildlife value orientations).

#### *Opinion Leadership and Information Subjective Norms*

The proposed framework also explores how one's perceived role as an opinion leader might influence a perceived social responsibility to remain informed about a disease threat. In the process, the framework draws on role theory. Role theory explores links among social expectations, personal identity, and individual behavior; in essence, it provides a social basis for the concept of "self" and individual action (Hogg, Terry, & White, 1995). Specifically, it posits that individuals create and maintain unique positions in social groups (called "roles" or identities) through the performance of specific behaviors associated with those positions. Individuals have as many identities as social groups to which they belong (e.g., job, family, and friend roles). Thus, one's *overall* identity is a summative collection of these individual roles.

Roles consist of personal expectations of conduct ("what I think I

should do") as well as perceived social obligations and feedback from others ("what others think I should do"). The relationship between the two reflects a "world as a stage" metaphor, in which behavior (the performance) is determined by which role an individual plays (the actor) and the expectations that determine how one acts in that position (the script). One sees oneself as an occupant of a role, identifies personal standards of action associated with it, behaves accordingly, and seeks validation from others (i.e., the extent to which one believes that other people agree with one's performance). Validation, in turn, leads to commitment--the "strength of the forces that maintain congruity between one's identity standard and the reflected appraisals of identity-relevant meanings from the social settings" (Burke & Reitzes, 1991, pp. 244–245)

The proposed framework applies role theory to the concepts of opinion leadership and information subjective norms. Flynn, Goldsmith, and Eastman (1996) defined opinion leaders as individuals who exert influence on other peoples' decisions; the latter are called opinion seekers (see also Katz & Lazarsfeld, 1955/2006). However, while studying the *impact* of opinion leadership is important, identifying reasons *why* people become leaders is equally crucial. Role theory offers one such explanation. An individual occupying a specific role (an opinion leader) perceives an obligation to remain informed about an issue (such as zoonotic disease risk), is motivated to search for and engage with information about that issue, does so, and subsequently validates that role based on the perceived social approval of others (see Figure 2).

#### *Risk Communication Implications*

##### *Implications for Persuasive Risk Communication*

In a persuasion-oriented context, wildlife managers may want to encourage stakeholders to search for and systematically evaluate disease information so as to increase awareness about a



potential disease threat if apathy is a problem or potentially inform subsequent attitudes and behavior (Slater, 1999). Such a strategy would be useful for formal communication campaigns (Brown, Decker, Major, Curtis, Shanahan, & Siemer, 2006) as well as situations where a disease has not yet appeared in a given area, but managers want to proactively communicate potential risks (Decker et al., 2006). In addition to research suggesting that information seeking and systematic processing produce issue-related attitudes that are more resistant to change and predictive of subsequent behavior (Petty & Cacioppo, 1981), scholars contend that campaigns that motivate both actions produce far-lasting effects, in terms of higher issue awareness and knowledge, more favorable attitudes toward advocated behaviors, and, ultimately, performance of those behaviors (Rimal, Flora, & Schooler, 1999). In terms of creating such motivation, specific strategies include both individual appeals (i.e., emphasizing that there is much one does not know about a disease) and social appeals (i.e., stressing that other people expect one to be informed).

#### *Implications for Engagement-Based Risk Communication*

As a “process of governance shared between managers and stakeholders” (Decker et al., 2006, p. 154), disease management is a function not only of *outcomes* – deciding on objectives and policies to implement - but also of *process* (i.e., how best to select these policies). In addressing both areas, managers have at their disposal a variety of strategies for engaging with stakeholders, from “authoritative” techniques (in which the agency makes the bulk of the decisions) to “co-management” (in which stakeholders jointly share responsibility for identifying, implementing, and even evaluating policies) (Decker & Chase, 1997). Evidence suggests that these strategies, if well-designed and well-executed, can “help agencies and [stakeholders] resolve conflicts” (Chase, Siemer, & Decker, 2002,

p. 938), help identify socially acceptable management solutions, and “lead to higher quality decisions that are the product of more widely accepted decision processes (Arvai, 2003, p. 281; see also Lauber & Knuth, 1999).

In an engagement-oriented context, encouraging individuals to search for and attend to disease information (using the aforementioned individual and social appeals) may help managers more effectively engage with stakeholders in identifying and implementing socially-acceptable policies. Managers may capitalize on a “teachable moment” to build individual capacity, in terms of empowering people to become more aware of a disease event, the views of other stakeholders, agencies’ disease management goals, and potential opportunities for involvement in the management process.

#### *Conclusion and Future Research Directions*

Building on the RISP model, this article has articulated a framework that explores how individuals search for and attend to information about zoonotic disease risk in different ways. It both applies and extends the model into an area with important implications for zoonotic disease management. Future research with this proposed framework should focus on applying the aforementioned concepts to a variety of disease case studies and among a variety of different stakeholders. This bottom-up approach may help promote more research on the human dimensions of disease management as well as more effective communication strategies.

#### **Notes**

1. Personal control over a risk is also included in the RISP model as a hazard characteristic. Slovic (1987) argued that hazards that are not viewed as under one’s volitional control tend to elicit higher risk perception than those that are seen as personally controllable. Thus, personal control can be viewed as the counterpart of institutional trust. Whereas the former involves an individual taking personal responsibility for avoiding a risk, the latter involves an individual relying on others for risk management. Moreover, to whom one *attributes* responsibility for management (self or others) can impact how one searches for and engages with risk-related information (Griffin, Yang, ter Huurne, Boerner, Ortiz, & Dunwoody, 2008). In the case of zoonotic disease,

attribution of responsibility for disease management might likewise shape affective response and information seeking and processing behavior. For example, suppose that a zoonotic disease outbreak occurred in a particular location. If people (a) believe that a wildlife management or public health agency was responsible for disease management and (b) believe that this agency, in turn, failed to effectively do its job, these perceptions might trigger anger or worry, which could then motivate information seeking and systematic processing in an effort to learn more about the disease or to "check up" on those who were seen as "dropping the ball."

Figure 1. Model of risk information seeking and processing (RISP) (Griffin et al., 1999).

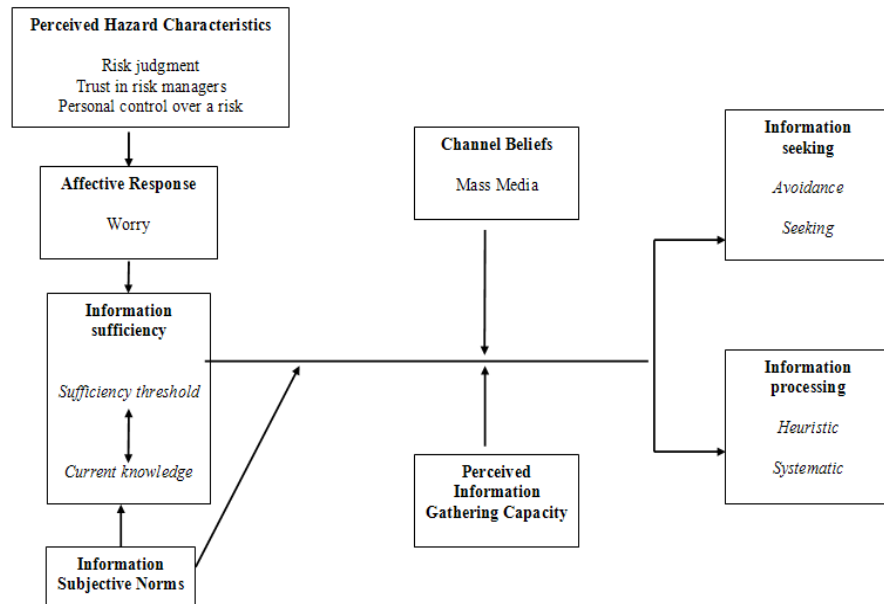
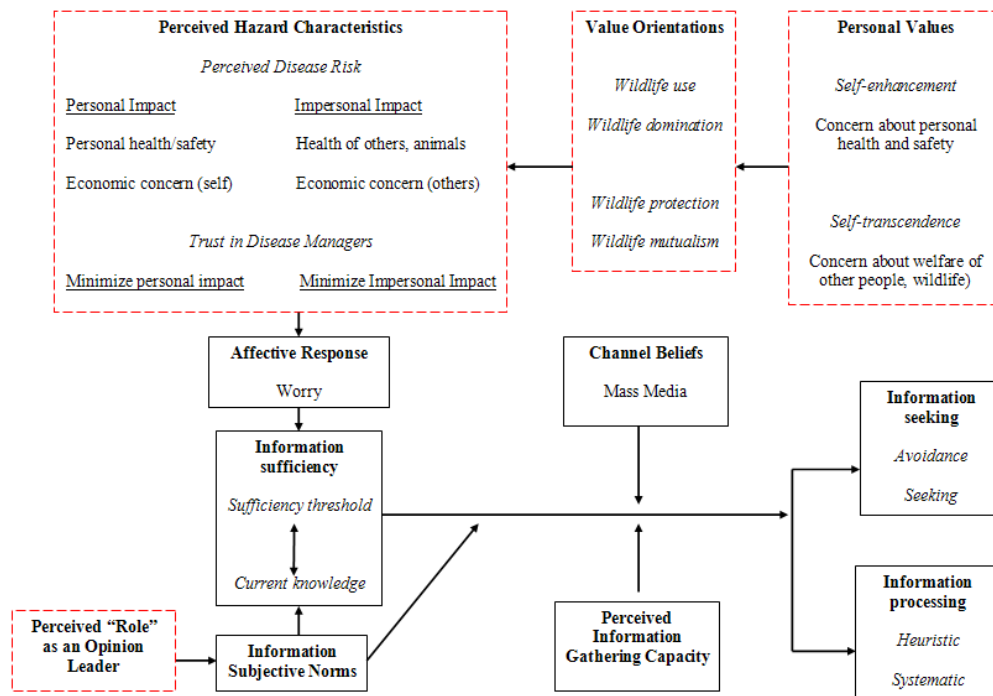


Figure 2. Seeking and processing information about zoonotic disease risk: Proposed extensions of the RISP model (see dashed lines).



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## **Application of Crisis and Emergency Risk Communication Model and Integrated Model of Organizational Learning for Crisis Management to Scaled-Up Emergency Response Drills**

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### ***Abstract***

Environmental communication scholars explore and analyze myriad aspects of the communication process in diverse contexts. More recently, Schwarze has joined other scholars in a call for convergence in terminology of the risk and crisis communication literature. Reynolds & Seeger's Crisis and Emergency Risk Communication Model demonstrates a blending of the terms. Wang's Integrated Model of Organizational Learning for Crisis Management is applied to six simulated emergency response drills conducted in diverse geographic locations to ascertain if organizational learning occurs and at what level. The results of this cross-site case study support effective assessment at all stages of the crisis response effort promotes organizational learning and more effective communication practices with key stakeholder groups.

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### **Introduction**

For more than 20 years, environmental communication scholars' contributions have populated academic journals. The formation of the Environmental Communication Commission affiliated with the National Communication Association and the distribution of an international journal dedicated to the area demonstrates the growth, diversity, and research sophistication in the field. An incomplete content analysis of the literature in this area based on analysis of the publications in the bi-annual Proceedings of the Conference on Communication and Environment and Environmental Communication: A Journal of Nature and Culture suggests that the scholarship of the field focuses on communication practices, rhetorical analyses, case studies, discourse analyses and critical analyses of definitions, public participation, conflict, media coverage, risk and crisis events, advocacy, collaboration, decision-making, environmental justice, and green marketing in interpersonal, small group, organizational and mass mediated contexts. There is no scholarship that reports organizational learning before, during, or after crisis and risk communication event

### **Wrestling with the definitions**

Health and risk communication studies aren't limited to the field of communication. Health professionals frame messages regarding the possibility of serious public health harm as risk communication (Covello, 1992; Freimuth, Linnan, & Potter, 2000; Heath, 1994; Sandman, 2002; Witte, Meyer, & Martel, 2000). Cox (2006) suggests risk communication is a form of environmental communication that emerged in the 1980's surrounding conflict between public and expert definitions of "acceptable" risk. More recently, corporate and disaster management experts have referred to this form of communication as crisis communication (Barton, 2001, Coombs, 1995; Seeger, Sellnow, & Ulmer, 1998, 2001)

Reynolds & Seeger (2005) suggest that risk communication is closely associated with "threat sensing and assessment ... and involves "the production of public messages regarding health risks and environmental hazards" (p.45) and "seeking to create a rational understanding of risk" (p. 47). Crisis communication, according to Fearn-Banks (2002) is the

verbal, visual, and/or written interaction between the organization and its stakeholders prior to, during and after a negative occurrence (p. 480). More recently, there has been an effort to collapse risk communication under the general category of crisis communication. Schwarze (2007) argues that risk and crisis communication operate concurrently and the distinctions in terminology of the respective fields limits environmental communication scholars' conceptualizations. Informed by Heath and Beck's views of risk society, Schwarze adopts Buell's notion that "crisis is the very scene in which people live and deal with ever-present risk" (p. 122). He suggests that 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.... A crisis should 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 (p.123).

In other disciplines, such as public relations, one might deduce that risk communication is proactive or occurring before an event while crisis communication is both proactive and reactive: proactive with respect to preparedness but reactive during and after a negative occurrence. The reason for this distinction lies in the role of the actors or messengers in the risk/crisis drama. Scientists tend to be responsible for the analysis and reporting of risk factors while public relations practitioners deal with the crafting and distribution of messages when risk factors have gone awry. One can deduce that across all disciplines the goal of both risk and crisis communication is to craft cogent and coherent informative and/or persuasive messages designed to be accurately decoded by myriad audiences in a timely manner during crisis events. Schwarze urges environmental

communication scholars to contemplate enhancing their research agenda to embrace judgment processes as an area of inquiry. One component of judgment encompasses how information is used by the individual, organization and/or community. Further, Schwarze (2007) promotes "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" (p. 121).

Responding to Schwarze's call, this research study focused on understanding how information acquired during a simulated emergency response drill was processed, analyzed and internalized and if organizational learning prompted a culture shift to occur. While I support and use all modes of inquiry, my primary research identity is applied, and, therefore, I attempt to test theories for their usability and generalizability in relation to real-time events. The research reported here is part of a larger data collection effort on myriad aspects of communication practices involving health and human risk during crisis emergency response efforts.

Based on the research findings presented earlier in this paper, I approached this study with the understanding that crisis communication encompasses risk messages. I present Reynolds & Seeger's Crisis and Emergency Risk Communication Model to demonstrate how risk communication can be subsumed under crisis communication. I then explain Wang's Integrated Model of Organizational Learning for Crisis Management. After establishing the American Chemical Council's role in emergency planning and response, an overview of the organization I observed during simulated scaled-up response efforts is provided. The models are applied using case study methodology where cross-site analysis of six chemical manufacturing plants engaged in scaled-up versions of their emergency response plan.

## **Literature Review**

### **Crisis and emergency risk communication model**



Reynolds & Seeger (2005) offer a blended form of crisis and risk communication and devised the five-stage Crisis Emergency Response Communication (CERC) model that shares similar stages of Wang's (2008) model and will be explained later, but with less emphasis on multi-stage assessment. CERC posits that crisis evolves in "predictable and systematic" ways: from risk to eruption, to clean-up and recovery into evaluation (p. 51). The authors suggest that the model "offers a comprehensive approach within risk and warning messages and crisis communication activities can be connected into a more encompassing communication form" (p. 51).

The stages in CERC are pre-crisis, initial event, maintenance, resolution and evaluation. In the pre-crisis stage, an emphasis on risk messages, warning and preparations for public and response communities is the focal point. In the initial event stage, communication to the general public and stakeholder groups is paramount with uncertainty reduction, self-efficacy and reassurance as the primary objective. During the Maintenance stage or stage 3, communication to the general public and affective groups with details to ensure more understanding, support and feedback from affected publics are distributed. Stage four is resolution where the communication manages the cause and new risks or new understanding of the risks to facilitate open discussion and resolution of blame, cause, responsibility and depth of response. The final stage is evaluation of the process and communication effectiveness, documentation of the process and linkages to pre-crisis activities. CERC promotes assessment of the communication and response process but not during specific stages in the process; rather a retrospective analysis of outcomes that are linked back to the first stage.

While CERC supports the blending of risk communication under the umbrella of crisis communication, the researchers focus on the response process rather than the individuals involved in the response effort.

Mitroff's (2005) research focused on the internal environment in an organizational setting and identified the components of crisis that an organization must attend to in order to ensure effective management of crisis: 1) detection of early warning signals, 2) test prevention, 3) preparation mechanisms for weaknesses, 4) test short- and long-term recovery mechanisms, 5) continuously learn and re-assess crisis management practices, and 6) utilize new information to restructure and improve current systems. Note that the CERC model falls short of describing and discussing steps 5 and 6 in Mitroff's research. Mitroff's cyclic structure encompasses the major components of systems theory (Miller, 1996), specifically, the system characteristic of feedback. If an organization has permeable boundaries between organizational units and attends to the information conveyed between units, the organization's culture and business practices reflect on-going change leading to negative entropy. If an organization's units dismiss feedback between and across units, the organization is likely to experience entropy.

Many organizations are hierarchical in structure and as such, communication across and between organizational units can be difficult. Bitto (2006) suggests that crisis management lends itself to 'silo building' due to the diversity of the players involved in the effort. "Silo building...may be so deeply ingrained in the institutional memories of organizations that people unwittingly erect barriers to development of interdisciplinary initiatives needed for appropriate community response to catastrophe" (p. 28). Bitto suggests this practice creates "vertical conceptual silos" and prevents interagency collaboration and coordinated response. Allen & Patrick (2008) writing about concerns the law enforcement community confronts when dealing with hazardous materials and/or weapons of mass destruction and emergency responders concluded that even the language used to manage a crisis can be different. "All involved agreed that

definitions should be universal and levels of responders should be clearly defined but still allow for mission-specific flexibility (p. 17).

Wang, a human resources scholar, developed a model of managing organizational crisis through organizational learning. She promotes that appropriate training and communication pertaining to crisis response efforts is rooted in the human resource function. She has developed a model that supports step-by-step assessment in a response effort. She does not distinguish between emergency planning and crisis response protocol development or bona fide crisis response efforts in her discussion of the parameters of her model. I have taken the liberty to extend her model to the first stage of crisis response planning to ascertain if organizational learning is identified during that process, and thus, resulting in culture change.

#### Integrated model of organizational learning for crisis management

Wang (2008) provides an extensive review of the literature on crisis and concludes crises generate threats and opportunities for an organization and when managed effectively, create organizational flexibility and opportunities for improvement and learning. However, the timing and use of the lessons learned during the management of crises situations and the relearning of behaviors is typically limited to during and after a crisis. Wang states, "[T]hough the relationship between organizational crisis, learning, and change is identified in the literature to a varied degree, the dynamics and interconnectedness among them is not adequately explored or clearly articulated" (p.435). As a result of the analysis, Wang developed an integrated model for organizational learning utilizing critical learning constructs and processes and interjects them in the phases of crisis management. As reflected in Table 1, the similarities in learning and the steps in crisis management are learning, reflection (recovery) and change or redesign.

However, how the learning occurs and the process by which the information is analyzed for usefulness leading to refinement or discarding typically occurs within the organizational units, and ultimately triggers change organizationally or within the unit. A review of the current research supports that changes within each organizational unit impair the organization's ability to sustain meaningful, long-term change. Wang's integrated model of organizational learning posits that [P]romoting organizational learning before, during, and after crisis will most likely put organizations in a better position in detecting crisis signals, developing action plans for preventing and handling a crisis situation, effectively learning from a crisis experience, and applying new learning to improve future practice in crisis management (Wang, 2008, p. 441).

The model identifies the following areas in organizational crisis management.

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*Table 1: Comparison of Learning Constructs/Processes with Steps in Crisis Management*

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#### Learning constructs/Processes

1. Unlearning
2. Knowledge acquisition
3. Knowledge diffusion
4. Knowledge utilization
5. Reflection
6. Organizational memory
7. Change

#### Steps in Crisis Management

1. Signal detection
2. Preparation of crisis management
3. Containment/Damage limitation
4. Learning
5. Recovery
6. Redesign

Wang's conceptual model promotes a learning loop wherein during each step of the crisis management process an evaluation occurs across organizational units and the information is used to promote the unlearning of past behaviors and the creation and implementation of new behaviors.

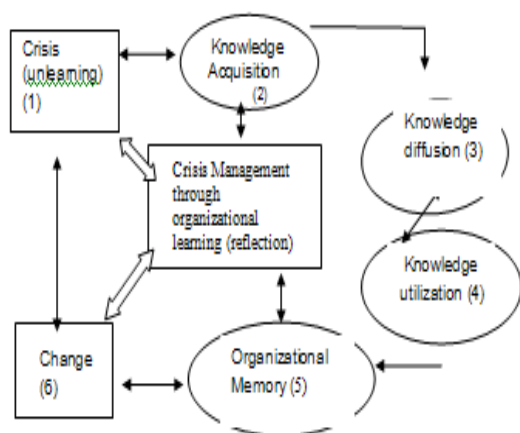


Figure 1: Wang's (2008) Integrated Model of Organizational Learning for Crisis Management

There is a dearth of research on organizational learning during crisis management. Research studies conducted by Walker, Senecah & Daniels (2005), Walker (2004), Daniels & Walker (1996) have forwarded a model of collaborative learning in environmental decision making for scholars and practitioners to better understand that effective outcomes are tied to mutual understanding of content and professional interaction procedures. While the researchers offer critical tools to manage group dynamics during conflict and decision-making efforts, their personal observation/assessment of the collaborative learning experience for the participants is focused at a single point in time; no evidence supports communication strategies are internalized or learned by the participants and/or agency and used at a later point in time; thus, lacking utility. For the purposes of this discussion, learning is

achieved when an organization and its members demonstrate the skills and ability to analyze crisis experiences and based on the outcome of such analyses generate change (Stern & Sundelius 2000). Change in organizational thinking and behavior is critical to reposition how messages are crafted and executed during such events, and thus, improving the communication effectiveness between the organization and its publics. An appropriate context to study organizational learning is multiple chemical manufacturing plants focused on perfecting emergency response protocols during simulated scaled-up drills. The next section establishes the American Chemistry Council's participation in emergency response efforts and then a description of the specific corporation will be presented.

American Chemistry Council's commitment to emergency response planning

Cherouras (2007) provides an excellent discussion regarding the history of right-to-know legislation and the current restrictions on the publics' access to information due to the Critical Infrastructure Information Act of 2002. The Emergency Planning and Community Right-to-Know Act of 1986 was designed to ensure communities were aware of potential chemical hazards in their communities and the development of emergency response plans and the local and state levels. Additionally, the legislation created State Emergency Response Commissions, Emergency Planning Districts and Local Emergency Planning Committees.

A component of the chemical industry initiative Responsible Care® is the Community Awareness and Emergency Response (CAER) code, which requires chemical companies to create an on-site response plan. Annually, member companies create and practice some form of emergency response simulation effort designed to test the workforces' response abilities and involve emergency responders, such as fire companies, health care providers, and police. These test-runs prove beneficial as shortcomings are identified and addressed before a catastrophic

immediate crisis occurs. However, few companies rehearse how to manage communicating with external publics, for example, the media, key stakeholders and stakeholders during crisis. Grunig (1992) explains that “publics arise on their own and choose the organization for attention” (p. 128) as we can deduce, a crisis creates publics for the organization which are typically diffused linkages (Grunig & Hunt, 1984) as presented in Rawlins (2006).

Hurricane Katrina was a reality check: emergency plans must be practiced in real time to determine effectiveness. While cost is a significant consideration with respect to preparedness, Bitto (2007) states that multidisciplinary collaboration on preparedness training is a critical need that hasn’t been addressed. Further, Bitto (2007) suggests “environmental health specialists may also benefit from interdisciplinary training shaped with other first responders, especially when the training focuses on the need for multidisciplinary collaboration among teams of professionals responding to crisis situations (p.28).

Likewise, in preparation for a crisis event, select management and public relations employees may attend half/full-day media training sessions where the focus is on how to manage the media. Unfortunately, “[C]risis management means more than media relations, and media relations is only a fraction of what public relations managers should be doing” (Hagan, 2008, p. 413). While the organization attempts to prepare its employees to manage crisis response events, due to the multidisciplinary nature of a crisis response effort, opportunities to rehearse how the units of an organization interface and analysis of shortcomings that arise when the emergency plan is implemented should be provided. Sylvester (2006) suggests that the learning derived from application of emergency plans is superior to table-top drills.

Manufacturing sites in the chemical industry conduct risk assessments on a regular basis and manage emerging and sustained crisis daily. Due to the nature of

the products produced, the industry must always be positioned for an immediate crisis. The concentration of companies in a geographic area dictates the level of efficiency and effectiveness during crisis response efforts. For example, Galveston, Texas features chemical manufacturing plants positioned like rows of corn on a 1,000 acre farm. The crisis response effort is meticulously coordinated by Local Emergency Management representatives and all manufacturers participate in the planning and response effort. Unlike manufacturing sites located in or near metropolitan areas, rural chemical manufacturing sites often don’t have a competitor situated for 20 to 100 miles in any direction. As recommended by Mitra, Falk and Barczyk (2003), training for a chemical release response is costly; many companies situated in rural areas need to include local police, fire fighters, local emergency planning committee members and emergency responders in the emergency training effort. While not an “every site for itself” mentality, the location in which the manufacturing site operates supports that preparedness and response training becomes the jurisdiction of the plant site with shift employees volunteering to attend numerous training sessions off-site to more effectively manage a crisis event. Some plant management invite local fire, police and other responders to participate in on-site trainings to defray cost and empower more effective response efforts by the plant employees in conjunction with local responders.

Complying with the need to better orient and prepare emergency responders, a voluntary national outreach consortium of chemical-related companies, transport /carrier companies, and industry associations, Transportation Community Awareness and Emergency Response (TRANSCAER) has launched an effort called the TRANSCAER Training Tour sponsored by Dow Chemical company, and Union Pacific Railroad to provide hands-on training to 10 communities along their shared transportation route (April 1, 2008

PR Newswire). The emergency response community has come to realize that emergency plans must be scaled up from the table-top drill setting to identify inaccuracies and shortcomings associated with the plans.

### **XYZ Corporation**

XYZ Corporation creates products used in construction, consumer electronics, pharmaceutical, agricultural, automotive transport, packaging, industrial and other areas of this market. A relatively new player to the chemical industry, this enterprise of 3,000 employees has boldly acquired key industry players, reduced production costs while increasing sales by 10% annually and held its occupational injury/illness rate at 0.88 injuries per 200,000 hours worked; a stellar record for this industry. According to XYZ's Annual Report, the company advocates and rewards innovation, holding over 1,400 patents in the United States and abroad and serves 3,200 customers in its research and development units or plants located on almost every continent.

XYZ Corporation's leadership is considered "obsessed" with safety (personal communications with employees, 7/15/05; 11/7/07) and has invested considerable financial resources and personnel to promote safe work practices. Safety initiatives supported by the C.E.O. are communicated via the Environmental, Health and Safety (EHS) hierarchy and are to be followed without exception. EHS is cutting edge; mandating plant managers and their employees pursue International Safety Organization (ISO) certifications and attain timely compliance with Responsible Care's® vision of "no accidents, injuries or harm to the environment" ([www.AmericanChemistry.com](http://www.AmericanChemistry.com)). The company is a pioneer in the establishment and maintenance of community advisory councils (CAC).

### **Simulated Emergency Response Drill Protocol**

In December of 2004, XYZ's Environmental Health Safety (EHS) Vice President determined that all (6) domestic

manufacturing sites must participate in a simulated emergency response effort requiring communication with external stakeholders. Manufacturing sites in Georgia, Arkansas, Michigan, Pennsylvania and Texas (2) participated in the drills. It was determined that the scale-up drills would be conducted every three years at all sites.

The company has designed a crisis response plan to guide the management of a crisis. XYZ's corporate managers are available for consultation via telephone during the drill and the public relations coordinator interfaces with site responders to craft messages for distribution to the media and public. Corporate EHS is notified immediately when a crisis occurs; contingent upon the severity of the mishap, one or a joint Incident Command Chief is positioned and the focus shifts to the identification and containment of the release or management of the crisis. Representatives from Human Resources, Engineering, Environmental, and/or Health and Safety typically are the individual/s identified to communicate with the media and other publics at the sites. At all six sites, there was no on-site public relations representative, but all information for distribution was coordinated with representatives from corporate public relations. The simulated drills occurred in July and November of 2007 and March of 2008.

All drills followed the same procedure. One person from the company, the "mole" worked with the corporate EHS director to create a likely incident for the plant. Representatives from key publics were identified as call-ins, walk-ins, etc. and role cards depicting the caller's focus, personality, and level of persistence were provided to each participant. A videographer accompanied the trained journalist to prepare the spokesperson for interacting with the media. During each exercise, community members or employees from other sites played members of the press, government agencies, and concerned family members. After the drill, all participants met

and debriefed about the experience, highlighting the strengths and weaknesses of the response effort while a scribe recorded the conversation. Specific action items were identified for each unit of the organization and dialogue between members of each unit focused on how to improve the individual unit's performance and streamline the effort so that all units' response efforts were timely and efficient.

### **Managing crisis response efforts**

For the purposes of this discussion, the researcher builds the argument that effective communication during crisis events is rooted in the management of a crisis. Managing crisis is a "process of maintaining change that involves unlearning, relearning and learning at individual, group, and organizational levels" (Wang, 2008, p. 435). Crisis has been studied in diverse contexts by researchers from multiple disciplines. According to Pearson and Clair (1998), "[A]n organizational crisis is a low-probability, high-impact event that threatens the viability of the organization and is characterized by ambiguity of cause, effect and means of resolution, as well as by a belief that decisions must be made swiftly" (p. 60). The timing factor associated with the crisis also impacts an organization's response efforts. Reinhardt's (1987) three specific time frames were enhanced by Cutlip, Center and Broom (2006), and include: 1) immediate crises which prevent sustained research and planning; 2) emerging crises which can be addressed with corrective action; and, 3) sustained crises, which despite numerous response strategies, leave the organization prey to rumors promulgating misinformation for long periods of time.

During crisis events, an incident command structure is formed and each member plays an integral role in the response effort. The communications coordinator interfaces with multiple units of the organization to determine key message and strategy for crisis management and information-sharing with the public. Wang suggests that simultaneous evaluation should occur at the design, implementation

and evaluation of the crisis management plan by all units of the organization to promote reflection, learning and organizational change. In essence message construction, delivery and response. The CERC model collapses risk communication into crisis communication and promotes reflection and assessment that impact future efforts. Wang's model calls for evaluation and implementation of evaluation data in a cyclic fashion to ensure that the information learned as a result of the event is utilized effectively and completely. These models were tested using the real world scenario described in the XYZ Corporation discussion.

### **Method**

This study sought to apply Reynold & Seeger's CERC model and Wang's Integrated Model of Organizational Learning for crisis management. To test the models, the following research questions were posed:

- R<sub>1</sub>: Are drill participants multidisciplinary or from one unit in the organization?
- R<sub>2</sub>: Where does assessment occur?
- R<sub>3</sub>: What is learned from emergency response drills?
- R<sub>4</sub>: If information is learned, is it used again?

The methodology used to answer the research questions focused on participant observation. As the journalist contracted to query XYZ Corporation's media spokespersons, I served as the participant observer. Transcribed field notes totaled 125 pages of single-spaced word processed notes from the drills at the six sites. Additional data for future analysis includes 14 hours of interview footage from the six sites, depth interviews conducted with select response personnel and a content analysis of the formal reports submitted to plant management assessed the media responders' performances and organizational strategy. The results reported in this paper are derived from the analysis of the field notes solely.

### **Results**

The organization requires each production site to rehearse emergency response procedures by devising and responding to a monthly drill. Off-site simulations are conducted every three years due to costs, manpower and resources. While most of the information shared with the community regarding response actions is disseminated by local emergency management spokespersons, it was determined that a company spokesperson-EMA spokesperson team seemed to prevail. Upon reflection of the experience, the team realized that a coordinated and unified message for distribution to the public should be designed. "I feel more comfortable with a trailed media spokesperson," stated a Local Emergency Management representative. An XYZ media responder stated, "I believe discussing the specifics of a release with an off-site emergency responder provides an opportunity for us to determine what content we wish to address while simultaneously conveying to the public that we each play a different role in the response effort. I think many people believe the company calls all the shots, but that's not the case."

The first research question focused on the composition of the participants in the drill. The results of this case study support that the participants in the drill were multidisciplinary. At the organizational level, more than 35 employees were involved in the response effort while corporate and community members participated in the off-site response component. The planning team made a strong effort to identify members of the community who would be likely to call-in or attempt to come to the plant to express their concerns, learn about the impact of the release or seek guidance and generate role cards that described the behaviors and concerns of the participant. Community Council members were invited to participate in the drill by playing a role described on the role card and the majority did so. The team also included representatives from the local government, schools, senior homes, government agencies, and hospitals in their response efforts. The addition of role players' queries

and frantic calls enhanced the validity of the experience and prompted immediate reflection of the experience, detection of shortcomings, suggestions for more effective ways to manage the situation and action items to address the situation.

The second research question asked if learning occurs during any phase of the drill. XYZ Corporation positioned specific employees (observers) at each location in the crisis response effort to observe the behaviors, processes and conversations of those involved in the effort. The observers took copious notes at specific time intervals. The intensity with which they observed the scenario was surreal. After the drill, all those involved in the crisis response simulated drill met to discuss the experience in a large meeting room. The corporate director of environmental, health and safety facilitated the debriefing by first asking a specific unit to describe the experience and then identify what worked and what didn't work during the drill. One person wrote the information on a board while another member of the organization took copious notes and occasionally called for clarification. The observers then confirmed or presented a different perspective on what occurred during the event and made recommendations about more effective ways to handle the situation. With the advice and consultation of those present, a commitment to design a plan to address any shortcomings or the actual remedy was identified and a particular division assumed ownership of the task. A telephone call-in responder commented, "When this woman called in and said she was on main street and wanted to know if she could leave and get her cat without being in harm's way, I realized I didn't have a local street map to track the plume and answer her question correctly".

The debriefings demonstrated knowledge acquisition, knowledge diffusion and knowledge utilization and were comparable to what educators would call "learning communities" or business would identify as "problem-solving teams" and as such created the response to the third

research question: What is learned from emergency response drills? The specific recommendations developed by reflection and evaluation from each unit in the organization based on the learning that occurred during and after the crisis events is

| Organizational Unit           | Information Learned                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|-------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Corporate Communication       | <ul style="list-style-type: none"> <li>a. Universal response templates don't work due to diversity of audiences</li> <li>b. Individuals to support the effort must be available.</li> <li>c. Information sharing must be immediate</li> <li>d. Legal Department input must be immediate.</li> <li>e. Media spokesperson isn't trained to deal w/press over prolonged time.</li> <li>f. Team media response effort is better for all involved.</li> <li>g. Distribution channels must be explored. Social media?</li> <li>h. Site Spokespersons need media training.</li> </ul>                                                                                                                                                                                                                                                                                                                         |
| Environmental Health & Safety | <ul style="list-style-type: none"> <li>a. Crisis communication necessitates more skilled spokespersons.</li> <li>b. Local emergency planning committee members and site responders work toward joint media presentation.</li> <li>c. Cellular telephone policy is critical.</li> <li>d. Call-out system for neighbors.</li> <li>e. Need more knowledgeable telephone responders when dealing with community.</li> <li>f. Need to understand neighborhoods with respect to release direction.</li> <li>g. Need to coordinate comm... btw/ incident command - media spokesperson.</li> </ul>                                                                                                                                                                                                                                                                                                             |
| Plant Responders              | <ul style="list-style-type: none"> <li>a. Simple tools, such as detailed area maps are critical.</li> <li>b. Media spokesperson ability to discuss the broad response effort w/community.</li> <li>c. Media spokesperson discusses Incident Command structure and protocol w/community.</li> <li>d. Media spokesperson needs support: another media spokesperson or an environmental expert to aid with managing media.</li> <li>e. Plant neighbors need to be updated on a very regular basis.</li> <li>f. Communication with corporate must be more effective: too long to get approval to release information to the media.</li> <li>g. Employees can serve as media "tipsters". How can this be managed?</li> <li>h. Community residents visiting plant to see what's going on during release. Dangerous.</li> <li>i. Journalists lack appropriate training to ask pertinent questions.</li> </ul> |

|                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Public Relations | <ul style="list-style-type: none"> <li>a. Release – siren sounds. Community told what to do.</li> <li>b. Responders arrive: joint incident command formed.</li> <li>c. Incident command shares information with media spokesperson.</li> <li>d. Media spokesperson contacts corporate for message creation help.</li> <li>e. Corporate communications shares statement with corporate legal.</li> <li>f. Media want information - Plant spokesperson can't give unless clear.</li> <li>g. Media get frustrated. Community needs information.</li> <li>h. How can a call-back system be installed and used in the case of emergency?</li> <li>i. Should posting be on WEB about critical pieces of information?</li> </ul> |
|------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

Table 2: Organizational Unit Debriefing Notes

summarized according to unit in Table 2. During the debriefing, the facilitator queried each unit in the effort and consistently asked, "What happened then?" At time, the respondents were able to clearly articulate what happened and at other times, members of the other response units had to provide information about what was going on. "You weren't getting our updates? Why?", queried an Incident Command member to the media spokesperson. "I don't know why, but I know that we weren't getting timely updates which prevented me from updating the media. I think we were left out a few times." The teams were actually problem-solving as the debriefing occurred and certain individuals would state, "We'll take care of that" while at times the facilitator would ask a certain individual to take responsibility. As a result of this exchange of information, the command structure agreed to post updates on a cork board outside the command center.

From the public relations perspective, the flow of information during this process was the most difficult to control due to the myriad units involved in the response effort and the ability for each unit to provide swift responses and share the information across teams. As a result of the drill, corporate communication is revisiting distribution outlets such as social media, internet



postings and cellular telephony to contact key publics. While there was strong effort to avoid “silos” during the response effort, the response effort favors environment health and safety units because they deal with the identification and containment of the release. Another critical finding was how the incident command structures organized and distributed information across sites. Urban plants had little time lag with information dissemination and retrieval to the public while rural plants had less personnel to support the effort and less external support to streamline the incident command structure function.

Research question three focused on what is learned during the drills. As per the information presented in Table 2, much was revealed as a result of the process. Multidisciplinary units engaged in the response effort agreed that when the media interaction was added to the drill, the entire effort became more complex and media training as well as response time is critical. This particular area was identified as the strongest for unlearning past behaviors. At one site, the journalist was locked in a room and denied access to any information. She and her cameraperson left the site, drove off-site and found a roadside “hazardous” sign positioned with the plant in the background that served as an ideal location for a stand-up report. I reported the story about an event at the plant for which no available information was forthcoming from the plant’s management. I discussed the company’s commitment to communicating openly with the public and asked why of all times, communication was void? I was able to demonstrate what happens if information isn’t conveyed in a timely manner. At two other locations, the reporter was left in a room with her cameraperson. A company representative came to escort them to a different location. En route to the new location, the reporter and cameraperson slipped out a side door and began shooting video of the response effort. The debriefing revealed that two company representatives should be trained and assigned to guard

media who are on-site during crisis situations.

### **CERC Model**

XYZ Corporation had effectively planned for a crisis by generating templates for use to provide statements to the public and created a plan that was to be implemented during crisis events. In the initial event stage or when the crisis is unfolding, XYZ Corporation hadn’t disseminated information to the public in a fast and efficient manner. There were a number of steps in the crafting, approval and dissemination process that were time consuming and inefficient leaving the public uncertain about the specifics of the event. The Corporation did communicate specifics about the event and whether there were any threats to human health in conjunction with Local Emergency Planning Committee members. However, different site’s response time varied. At three of the six sites, the plant manager debriefed the media about all the details surrounding the event. All sites indicated an investigation was underway and the results would be forthcoming. The final stage is evaluation of the process and communication effectiveness, documentation of the process and linkages to pre-crisis activities. As per the evaluation of the Wang model, the event debriefing was multidisciplinary and employees were assigned specific actions to perform which influenced how the next simulated drill would proceed.

### **Conclusion**

There was complete agreement that the scale-up of the emergency response drills to include all the internal and external players in a crisis response effort created a more viable experience and prompted awareness of numerous shortcomings that necessitate immediate action by individual units in the organization as well as the entire organization. These drills prompted immediate change in XYZ’s culture with the greatest change in the areas of environment, health and safety as well as corporate communication. While the

company had always focused on safety, external communication appeared to be more reactive than proactive in crisis situations. The public relations department is working to develop appropriate training for plant spokespersons and more effectively interact with other units to effectively expedite the crisis response plan. As a result of the multidisciplinary debriefing, each unit was better able to understand how the flow of information impacts the other units' ability to respond in a timely manner and what the information is used for in the overall crisis response effort. Members of emergency management indicated the experience of having to respond to an aggressive reporter on camera altered how they will prepare for their next on-camera appearance. They realized that any statements addressed to the public need to be contextualized: offering available information about how the crisis started and investigation of the short-term and long-term impact to the community and environment. Thus, the unlearning of past response behaviors and the initiation of creating a new organizational memory that instigates change was uncovered.

Wang's Organizational Learning Model and Reynolds & Seeger's CERC Model demonstrate the need to incorporate the information learned during simulation drills to ensure real world crisis response efforts will be effective and timely. The XYZ Corporation demonstrated the key components of learning and an effective crisis management plan. Wang's conceptual model promotes a learning loop wherein during each step of the crisis management process an evaluation occurs across organizational units and the information is used to promote the unlearning of past behaviors and the creation and implementation of new behaviors. XYZ Corporation positioned observers to record every minute of the response effort and make assessments regarding the outcome, time to complete a task and effort. Based on the results of the actions taken at six manufacturing sites during a simulated scaled-up crisis

response effort presented in this case study, XYZ Corporation's actions coincide with the model.

However, the real test of the model won't be performed until the next scaled-up drill occurs during which time the researcher will be able to determine if the reflection of past experiences promoted unlearning of behaviors that ignited the reconstitution of the organizational culture and ultimately a re-learning of a new way to manage crisis. The implementation of the action items identified during this drill will be evidence of change and thus, integrated learning. The CERC model promotes assessment of communication processes and response efforts creating a retrospective analysis of outcomes. While the theory promotes integration of risk and crisis processes, the lack of stage assessment makes it less accurate.

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## **Uncertainty Reduction and Media Complimentarity in Environmental Communication During Wildfire Emergencies**

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### **INTRODUCTION**

Responding to an upsurge in major and dramatic events over the past decade, researchers in environmental studies, land management, and rural sociology increasingly focus on wildfires and their impact on local ecologies and communities. Scholarship on communication processes and media use during a wildfire event offers significant contributions to this discussion. The very nature of fire, its disruptiveness to human communities, and its potential to create harm fosters uncertainty for individuals living or working in a fire's path. Studying communication that occurs during a wildfire presents a useful opportunity for understanding important dimensions unique to wildfires. For example, wildfire often affects small, rural communities with limited mass media coverage. The challenges of communication in rural places are in a number of ways quite different from those in urban areas with concentrated populations and multiple news outlets (Donohue, Tichenor, and Olien, 1986).

Several researchers have studied communication and media use relating to wildfires. Beebe and Omi (1993) point out that the media may play a key role in shaping public opinion about the risk of wildfires and support of fire management regimes. Similarly, McCaffrey (2004) focused on homeowner education about wildfires and prescribed burning and found that communicating factual information to the public via telephone reduced uncertainty about fires and increased support of fire management techniques. Bailey (1991) and Taylor et al. (2005) studied federal communication with communities affected by wildfires and suggested that proactive, effective communication strategies could reduce organizational and community chaos

during a fire. Furthermore, Kumagai et al. (2004) suggested that empathy is necessary for fire information communicators to mitigate negative community reactions to the fire or its management, and communication should be two-way between managers and community residents (see also Magill 1992; Rohrman 1995; Daniels et al. 1996). Following a fire, Daniels et al. (1996) emphasized that continuous communication in a well implemented collaborative process can produce positive community outcomes.

This essay further examines the dynamics of communication in rural communities which experience wildfire events. This research is an ex post facto look at communication from the point of view of local residents in six selected cases of wildfires in the western U.S. We focused on the use of media and other information seeking behaviors and motivations for information seeking in these events. In so doing we discovered that information seeking and media use are not uniform across all situations, as community responses are often varied and complex. It is clear that no single theory can adequately capture media use and information seeking behavior during a crisis situation (Kubey and Peluso, 1990; Massey, 1995; Hindman and Coyle, 1999; Sellnow and Seeger, 2001; Sellnow et al., 2002; Boyle et al., 2004). Accordingly, this study utilizes two theoretical traditions from communication, uncertainty reduction and media complementarity theory, to develop a richer understanding of communication dynamics and management during wildfires near rural communities.

### **THEORETICAL FRAMEWORK**

## **Uncertainty Reduction**

Uncertainty reduction theory was originally conceived in the interpersonal communication realm and attempted to explain how people deal with the uncertainty of new interpersonal encounters (Berger and Calabrese 1975). Boyle et al. (2004) and others (see Morrison 2002 and Brashers, Goldsmith, and Hsieh 2002) conducted research that tested the possibility that uncertainty reduction theory may also explain behavior in non-interpersonal settings. Generally, "Individuals in uncertain situations are likely to feel discomfort, and information seeking is a viable solution to that discomfort in many contexts" (Boyle et al. 2004, p. 157). Sellnow et al. (2002) assert that crises in particular create a heightened level of threat and uncertainty. Weick (1995) describes a crisis as a low-probability, high-impact event that demands attention from those affected as well as decision makers.

At the community level, uncertainty results from the disruption of the delivery of basic services, the threat to life and property, and the restriction of travel. During natural disasters, mass media often become the only means of addressing the intense need for information throughout the community, answering basic but crucial questions such as "is the water safe to drink," "is my property or life in danger," and "which roads are open?" (Hirschburg, Dillman, & Ball-Rokeach, 1986; Pan, Ostman, Moy, & Reynolds, 1994; Quarantelli 1971, 1996, 1997.) Disruptive events other than natural disasters can produce the widespread need for information that draws citizens to mass media. For example, in studying reaction to the 1986 Challenger disaster, Kubey and Peluso (1990) found that audiences tried to reduce uncertainty about the explosion by seeking media accounts and other individuals' reactions. Likewise, in research concerning the September 11, 2001 terrorist attacks, Boyle et al. (2004) found that individuals who had a strong negative reaction to the crisis engaged in various information seeking behaviors. Hindman

and Coyle (1999) found individuals experiencing a Midwestern flood expressed gratitude for a local radio station's "open gates" (Waxman, 1973) reporting in which all forms of information, accurate or not, was allowed to be broadcast during the peak of the disaster.

These studies indicate individuals experiencing discomfort in a crisis situation often try to reduce uncertainty by exposing themselves to media outlets and engaging in other information seeking behaviors. As Boyle et al. (2004) points out, "When a crisis hits an entire community or nation, most people experience the event largely through the media," and add that these crises often evoke negative emotions in both affected individuals and media audiences (p. 156). To alleviate these negative emotions, media and information seeking may play a positive emotional role during a natural disaster (Perez-Lugo 2004).

From a practical perspective, individuals affected by a fire experience anxiety, confusion, and the need to solve problems the fire causes in their everyday lives. These individuals, and often entire communities, cope by seeking information to reduce their uncertainty about the fire and alleviate fears. The question framed in these terms thus becomes, "What sources did individuals turn to in the information seeking process and how specifically did they use them?" Furthermore we may ask, "What sources did individuals find useful/not useful in reducing uncertainty?" And finally, "What are the communication dynamics unique to media-poor rural areas during wildfires and similar crises?" Answering these questions will provide insights concerning the information and communication used by those seeking to reduce the inherent uncertainty in a wildfire event.

## **Media Complementarity**

Uncertainty reduction theory can help us understand what dynamics lead people to turn to the media to reduce their insecurity in a time of crisis. Information seeking in the face of uncertainty typically

leads to the use of specific information sources. But the reality facing residents of rural areas is traditional media sources are limited or non-existent (Donohue, Tichenor, and Olien, 1986). Media complementarity theory on the other hand, focuses on information sources themselves as a way of explaining how and why people use particular information outlets to meet particular needs. Media complementarity is based on the notion that individuals will often attempt use several different media to meet their information needs (Dutta-Bergman 2004). Dutta-Bergman's (2004) research indicates that media consumers are generally concerned with content, and their specific route of media consumption will depend on their characteristics, preferences, and the context of the situation.

This concept can be readily applied to the context of a crisis situation. If a person is seeking information or a social connection during a crisis to reduce uncertainty, he/she may use various forms of media to meet his/her needs. In this case, the person's search for information and communication would likely be content-specific to the unfolding event, as well as to the menu of information sources available. A person might use the Internet, watch television, listen to the radio, and check a community bulletin board to find information related to the wildfire affecting his/her community, wildfires affecting other communities, or even general information about wildfire. Perhaps more importantly, we were interested in the extent to which individuals in the midst of a wildfire crisis also engage in novel and alternative information-seeking behaviors that confirm, contradict or add to the information they receive from media sources. As noted above, wildfires often affect smaller communities that may not have access to or coverage by traditional national media sources. Individuals affected by fire may thus engage in alternative ways of obtaining information, such as seeking out neighbors, driving to see the fire, or using other non-media sources. Also, wildfire

management typically encompasses several government agencies, which typically cooperate to manage information flow directly to the public and through various media. This analysis of the various sources available may suggest that media complementarity during a wildfire not only applies to traditional media outlets but also to any type of information source. Therefore we sought to document the formal and informal information sources individuals used during the fire emergencies studied and ask, "Which sources used (if any) best helped to reduce uncertainty and to provide needed information in a time frame that was appropriate to the situation?"

## **METHODS**

This study examines individuals' ex post facto reported use of and interaction with various information sources during six wildfire crises in the Western United States. Researchers selected six wildfire sites based on their proximity to communities (see Table 1 for study area descriptions). Four sites including one in Idaho, one in Utah, and two in Montana, experienced fires in 2000, and the other two sites, Arizona and Colorado, experienced fires in 2002. Researchers selected interviewees from each site using the overall framework of theoretical sampling and the specific technique of chain-referrals. Theoretical sampling involves inductively discovering categories of potential subjects based their relationships to the phenomena under study and subsequently selecting individuals from those categories (Taylor and Bogdan 1998). In this study, the categories of interview subjects were based on the variety of ways in which local residents were affected by the fire events. The major categories that emerged were personnel from firefighting agencies, evacuees, ordinary full-time and seasonal residents who did not evacuate (some who suffered property damage, some who did not), local physical and mental health care providers, business owners, and local, state, county, and federal government officials. The categories are not necessarily statistically representative of the population,

but instead provide a cross-section of the complexity of the various populations and impacts within the communities. Researchers interviewed community stakeholders in six different wildfires in the 2000 and 2002 wild fire seasons. Researchers chose specific interviewees based on chain referrals from government agencies such as the United States Forest Service, referrals from local citizens, and chain referral from other interviewees. In each study site interviews were continued until the point of saturation, which in this case meant that the fieldworkers were satisfied that the major different categories of local fire-affected stakeholders were sampled.

After selecting interviewees, experienced field workers conducted in-depth interviews with each participant on topics including: economic and health impacts, preparedness, information and communication, community capacity to deal with the crisis, rehabilitation and salvage, and desired future for the forest. The interviews were tape-recorded and transcribed. Transcriptions were then entered into a qualitative computer database, AtlasTI. Sections of the interviews, including both individual quotes and more lengthy responses, were coded for subject area.

Using the portion of the interviews that dealt with communication and media information, the analysis employed grounded theory to examine the data. According to Taylor and Bogdan (1998), the grounded theory process involves close examination of statements from interview data in the context of social phenomena. This approach requires researchers to recognize emerging themes and insights and to continuously relate these discoveries to existing theoretical assumptions. Messaris (1977) and Massey (1995) suggest that such qualitative analysis is particularly well suited to events such as wildfires, because a crisis event disrupts the behavior of individuals or entire audiences. Since the crisis event is “abnormal,” individuals may be more aware of their

information consumption during this time period. Messaris (1977) believes that such crises “enhance the accuracy of people’s perceptions of media-related needs” (p. 327). Also, qualitative media use studies can provide a richer understanding of the audience members’ individual goals, values, and evaluations of media and other information sources.

## **RESULTS**

### **Information Needs**

During the post-fire interviews, community residents were encouraged to reflect on the information needs that they had experienced during and immediately after the fire event. Their responses fall into two major thematic categories: easing anxiety/reducing uncertainty, and solving the myriad of immediate problems the fire emergency posed. The most persistent theme in all the interviews concerning communication revolves around its use as a means to reduce uncertainty in a time of distress. It is perhaps obvious to say that almost none of the interviewees reported apathy concerning the situation. Virtually all interviewees reported some type of information seeking behavior on their own part, even if it was as simple as driving up a hill or looking out a window to see where the smoke or flames were moving. They often reported finding themselves in a situation in which they felt powerless and helpless, because after whatever initial preparations they made upon learning of the fire threat (checking on family members, packing, evacuating, clearing flammables from around their homes, etc.), they simply had to “wait out” the fire in their homes or wherever they had gone to seek shelter. In fact, even government employees from the various land management agencies were often unsure of their next move, due to the unpredictable nature of wildfires.

One government official summarized the feelings of the community residents:

P49 HMYR#9: *“People were scared. People were worried, they were concerned for us*



*and they were concerned for their boats and things.”*

This uncertainty led to reported behaviors aimed at reducing anxiety. For most interviewees, uncertainty was best reduced by information seeking. Most interviewees reported being in a constant information-seeking mode during the fire. As one interviewee from Woodland Park, Colorado, put it:

P18 WPCYK#4ED.text: *“I felt like I wanted more information. I was just an information glutton, anything I could get.”*

One individual who worked for the Red Cross during the fire near Helena, Montana, said:

P35 HMYK#4: *“What we found was that the people that were displaced, whether they were permanently displaced or they made them leave for the night or the afternoon, the best thing we could give them was information, because that is what they wanted so that was critical.”*

These two comments illustrate the felt need for information during the fire. Interviewees reported believing they would “feel better” if they knew the status of the fire, the status of their homes, and how much land had already burned. A persistent theme in the interviews was a sense of fear and uncertainty that was often overwhelming during the fire. Some had never experienced a fire before, and even those who had were aware that fires behave in different ways in different situations and conditions. Thus anxiety relating to uncertainty was the prevailing emotion reported by interviewees, particularly in those cases in which the threat of the approaching fire materialized into a full scale crisis.

Interviewees also reported also needing information to solve problems. The problems faced concerned very real threats to property, families, friends, other community members, and their own short-term comfort, especially at the sites where

evacuations took place. Residents who were evacuated wanted information about the evacuation process, their homes, and when they could return to their homes. In fact, the primary question and concern most evacuees had was “When can I/we go back home?” Some interviewees expressed strong feelings of uncertainty about their property during the fire:

P18 WPCYK#4ED.text: *I was just hanging, waiting, trying to figure out if my home was still there.”*

P 35 HMYK#4: *“In the beginning it was tense because people wanted to know what was going on, they wanted to know when they could get back into their homes, and they wanted to know how close the fire was to their homes as well.”*

Interviewees also reported wanting information on the fire’s movement, how the fire was being fought, and information specific to their particular site. Community residents who were not evacuated sometimes still suffered property damage and needed to understand the extent of their losses as well as others that affected the community in general. In order to solve these problems and provide answers to their questions, residents sought information from a variety of sources.

### **Information Sources**

The interviews indicated two major categories of information sources used by affected residents. For the sake of this analysis these sources might be labeled formal and informal. Formal information sources can, in turn, be divided into two subcategories: government information sources and local, regional, and national news media sources. Government information sources included various modes of communication and media across the sites, such as fire information officers and offices; city, county, and state governments; daily community briefings held during the fire events and; toll-free hotlines; community bulletin boards; and other communication tools. News media included newspapers,

radio, television, and the Internet. Informal sources included interpersonal and novel information sources, such as word of mouth, radio scanners, local meeting places, and non-government information posts, such as local businesses.

### **Use of Formal Information Sources**

Most interviewees reported turning to government and media sources for information. Individuals were engaged in seeking government information sources and media sources simultaneously, often to confirm or disconfirm the other source. Although not all local sites had an actual fire information official or fire information office, the various government agencies involved in fighting the fire did disseminate some sort of information at every site, according to both government and community interviewees. In the fieldwork for this study, multiple modes of communication by government sources were identified, including but not limited to: community bulletin boards, public meetings, daily command briefings, published and distributed maps of the fire, direct contact with firefighters or government officials, fire assistance hotlines, local police hotlines, AM radio broadcasts, locally or federally-maintained websites, and fire information offices.

An important distinction to be made here is the differences in size and impact of the fires among the different sites. The Hayman and Rodeo-Chediski fires were among the largest in recent history; hundreds of structures were lost and thousands of people were evacuated for periods of up to three weeks. The scale of these fires undoubtedly influenced the ability of agencies to provide site-specific, timely information to all affected and therefore community members' evaluations of information sources, as they likely experienced a range of emotions from sadness over a burned home to tension resultant from living in an evacuation center (Graham 2003; Carroll et al. 2004). In addition, more government agencies and personnel are involved with the

management of larger fires, and the challenges of inter-agency or community-agency coordination may cause greater amounts of confusion and frustration. Thus it is perhaps not surprising that the communities whose residents tended to view government information sources more positively were the sites of smaller scale events and typically experienced little-to-no fire damage within the communities.

Wildfires create large and pressing challenges for the various government agencies involved. Public officials focusing on the "big picture" were occasionally accused of being insensitive to the needs and welfare of individuals affected by the fires.

P52: WPCYR#16ED.txt: *"They [The Forest Service] did not seem to care about whether I burned up or not."*

However, this perception does not necessarily represent the majority of interviewees in affected communities. Often, the individuals who admitted disliking or distrust of the government information officials and the U.S. Forest Service in general were private landowners who had some previous experience with the Forest Service; these individuals frequently admitted that their previous interactions had negatively impacted their opinion of federal land management agencies. The tension between rugged individualist landowners and outside agencies is deeply engrained part of the history of Western United States. The majority of those interviewed, even from the larger fires in Colorado and Arizona, felt the relationship with and communication from the U.S. Forest Service and other federal agencies was positive (See Carroll et al., 2006 for a discussion of specific sources of conflicts in these cases).

Some government officials were well-received and well-known throughout the communities; several community members spoke highly of Incident Command Team members or local Forest Service personnel in both the Hayman Fire and the Rodeo-Chediski fires and reported

going directly to these individuals for information during the respective events.

P 9: Amk#10ed.txt – *“[J.P.] came out of [the fire] a hero. My goodness, the guy did an excellent job, just an excellent job. And the community respected the way he put it...He put in the common language and everybody understood exactly what he was talking about...the Type one team was received well.”*

P39: WPCYR\_3ED.txt: *“We heard everything through [S.] We had probably some of the best information because we talked to him several times a day on the cell phone. He was at the Incident Command post...In terms of what I needed to know for my decision making it was all from the Forest Service through [S.]”*

The above comments exemplify the usefulness of government sources, especially specific individuals who were accessible to community members and other local agencies. In fact, government communicators in Helena, Montana, appeared to be able to stop the fire crisis from becoming a social crisis with empathy. This sentiment is most apparent from the following statement from a government official about the emotional public meeting in Helena during the fire:

P7 HMYK#7: *“Tempers were flaring [at the meeting]. And what happened in that meeting was the responders, particularly the volunteer fire people and probably me too, they got up in front of people and they cried...Because we were so tired and so stressed out and the whole mood of the meeting turned around...But the thing that was so outstanding was that outpouring of just love from the community. I think that really changed it...The whole mood of the community was not blaming the fire service or cops, it was working together to try and solve problems.”*

As a result of this meeting, the community recognized that the government officials were dealing with the same crisis and that the government officials were, as the

interviewee put it, “human.” In this way, interviewees reported that they received more than information and felt their social and psychological needs were met by the overall communication experience. Uncertainty reduction during times of crisis is related to the need for information, but is also related to the need for communication on a human and emotional level.

After the fire and at the time of the interviews, the Helena community members felt that the government officials were striving to meet their expectations:

P15 HMYK#18: *“They did their level best. All the government agencies, everybody who was involved, to keep the public as apprised of the situation as best they could given the timelines.”*

In addition to perceived “attitude” on the part of some government officials towards locals, other problems with government information sources stemmed from perceived inaccuracy and so-called “broken promises.” Because there are so many agencies and people involved in firefighting and fire information management, lines of communication often got crossed. As a result, some interviewees from fire affected communities said they did not know where to go for information, except the widely-publicized meetings that were common to all interview sites. However, these meetings were not always convenient for everyone, especially those who worked unusual hours or had long commutes. For instance:

P48 WCPR\_6ED.txt: *“The only time you could really find out any information was if you went to the school at night and they had meetings at the school every night...We couldn’t make it.”*

Other community residents named unreturned phone calls, untimely updates, out of date government Web sites, irrelevant meeting topics, and unanswered questions as the primary reasons for distrusting government sources and seeking other information sources.

P15: SUPR#6ED.txt: *"I had to threaten litigation and depositions to get anybody to talk to me. I wanted [the agency members] to explain to me what their process was, and why [the fire] happened."*

Some affected residents, like the one quoted above, felt the information from government agencies was not timely or specific to their community's fire. One community member involved in the Hayman fire, who could not find out if his/her house was still standing, said:

P41 WPCYR\_5ED.txt: *"I would call my house on my cell phone...If my answering machine answered, that meant my house was still there. That is all I had to go on...Nobody could tell us nothing."*

This comment illustrates the desperation for site-specific information that many individuals endured during the fires. Interviewees reported being generally aware of the fire's progress and impacts, but when it came to specific information about their homes, property, or other locations of community import, interviewees said they lacked enough information or that the information they received had little personal utility. For instance, the quote above shows that individuals did not have information relevant to their particular situation, so they sometimes had to invent ways of finding this information.

Furthermore, community members felt the government sources were often just as inaccurate as the media (see below for a discussion of perceived media inaccuracies).. Sometimes, residents said information they received from each source was contradictory:

P41 WPCYR\_5ED.txt *"Those people at the evac[uation] center...they are being told by the Forest Service in front of the evac[uation] center that their houses are fine, and then they watch the five o'clock news and they know exactly where their house is and the damned thing is burnt."*

When the media and government sources overlapped in information, community

members most often experienced confusion and even more uncertainty. The above comment shows disconnect in information between the two types of sources. However, many community members realized the difficulty of providing timely and accurate information during a fire. For this reason, locally based interviewees did not in all cases blame the agency for lack of information:

P18: WPCYK#4ED.txt: *"Well, obviously there is a time lag. The situation was pretty fluid and so things would change right away...I listened to the Forest Service briefings and they did a good job. I didn't have a problem with the information they were giving out, some of it wasn't accurate at times but again it was a big fire and there was a lot going on."*

This statement shows that despite some of the problems in some communities, most individuals still walked away from the fire experience with the overall perception that the government information sources, as one interviewee said, "did the best they could." Some community members even termed the communication from the various government agencies "excellent" and "informative" and seemed to forgive any minor errors or omissions that occurred. Residents seemed to appreciate officials as much for their visibility and physical presence as for the information they provided. For example, one resident of Salmon, Idaho, said:

P30 SIPK#11ed: *"[The government agencies] did the best they could to let us know all they could about it."*

This statement seems to point to the "forgiving" nature of many of the residents. Many focused on the positive attributes of the communication rather than voicing any negative concerns.

Despite fairly positive evaluations of government sources, the community members interviewed for this study pointed out areas for improvement in meeting information needs, particularly in the larger scale fire events. Overall, most community

members interviewed felt government agencies provided some useful information about the fire in general, various ways of obtaining that information, and, in some cases, personal interaction and relationships with the community. But the community members said their needs for information were in many cases not met by government sources in the following ways: 1) Residents felt a lack of empathy from some government officials in some communication situations, 2) Residents reported not always knowing where to turn for reliable, accurate information and felt there was not a systematic way to go about gathering information, 3) Residents felt the information given to them was in many cases not site-specific enough to be of use to them, and 4) Residents felt overlap or contradictions between information sources created more uncertainty.

### **Perceptions of News Media**

One commonality across all of the fire affected communities was the high value placed on AM radio station broadcasts. Of all of media sources discussed, AM radio was the most widely cited source for the most accurate and timely information.

P 7: WPCPR#2 8-22-02EDatlas.txt: *"I would tune in[to] the radio, especially when we were on stand by alert to try to get the latest that they were putting out there...That was our only quick source of local coverage."*

Often these stations have stronger signals and local programming, so information can be updated quickly and reach a large coverage area that may not be covered by local television stations.

P101: Amk\_25ed.txt: *"We weren't in a place where we had television so the local radio was our source of contact. And they kind of seem most reliant because most of [the information] came straight out from the high school."*

Also, radios are the most likely media source to still be operating if the crisis affects local power sources or signals.

Radio stations are often locally-operated, meaning they can tailor their programs to local information. Radio listeners mentioned that citizens would call in updates about road closures, burned acres, and the progress of the fire. Community members would also call the radio stations for localized information rather than trying to reach government officials. As a result of the high information demand, community members said most of the local radio stations broadcasted only fire information during the worst of the events.

Interviewees also described their experiences with local, local network-affiliated, and/or national television news, Internet sites maintained by news organizations, and local and national newspapers as other media sources. An important distinction here is between the national and local media. National media includes, nationally distributed newspapers such as The New York Times, broadband FM radio stations, and cable news channels such as CNN and MSNBC. Local network-affiliated media includes television stations based out of larger cities. For instance, the residents located in Showlow or Pinedale, Arizona, received their television news from Phoenix, Arizona. Local media may include AM radio stations, local newspapers, or local cable access channels. When the local media were involved in covering the wildfires, interviewees generally reported more accurate, less sensationalized coverage. Successful relations between the government and the local media also helped determine the interviewees' evaluations of the media sources.

In communities that were near larger cities, such as Phoenix, Arizona, and Woodland Park, Colorado, more national and local network affiliated news media were involved with the wildfire. Because the mass media is a traditional information source and are "interdependent" with society, as Livingstone (1993) suggests, it is no surprise that interviewees in these areas cited national news media as sources of information. Most interviewees were quick to learn, however, that national media could

not always satisfy their specific fire-related information needs. A large proportion of interviewees, particularly from the Hayman Fire in Colorado and the Rodeo-Chediski Fire in Arizona, (both of which were located near major media markets) mentioned the inaccuracy of national media reports, especially television accounts.

One media-related problem interviewees from the larger fires mentioned was sensationalism. Sensationalized coverage can be described as coverage that has an entertainment value and highlights the “conflict and controversy” of a situation. Sensationalism during crises is often inevitable as the nature of disasters, such as wildfires, lends itself to a conflict and controversy standpoint by some of the national news media. However, some interviewees felt the national and local network affiliated media accounts of fire served the purpose of entertainment for city residents unaffected by the fire, instead of providing needed information for those who were affected by the fire.

P3 A1pk#6: *“There was one particular area across the street from here that was burned pretty bad and all the media kept showing that same picture over and over. So the perception was that it was the entire town. So after a while you had this mental image that it was the whole community.”*

In this case (Arizona), the interviewee felt the issue was being exaggerated and sensationalized by not providing a complete picture of the fire’s impacts. Furthermore, this comment exemplifies the dramatic tendency of the national media during the fire in Arizona. Typically, these national programs were stationed in nearby Phoenix, Arizona; most community residents in this area felt these stations, such as CNN, did not adequately cover the outlying areas affected by the fire. Some community members said the media focused on conflict and controversy coverage of the fire by continuously showing images of a burned area and only interviewing people that were complaining about the management of the fire. Also, residents in some areas, such as

those affected by the Hayman fire, felt the media showed disregard for some individuals by showing pictures of houses that had burned before the owners could be notified.

Some interviewees also cited media inaccuracy as another information problem during the various fires. One interviewee affected by the Hayman fire told this story:

P18: WPCYK#4: *“[My husband] was fighting the fire. And so we didn’t have too much communication with him so we basically sat in front of the TV watched what the TV said. One day I was watching the TV and they reported 30 houses in Turkey Rock had burned down...So that night, [my husband] called me and I said, ‘I heard 30 houses in Turkey Rock burned.’ And he said, ‘No the fire hasn’t even come into Turkey Rock yet. It hasn’t. I just can’t believe that.’ But [the media] would put it on the news, even on the internet, that the homes had already burned. And the fire hadn’t even come in [Turkey Rock].”*

Although it is unclear whether this interviewee was referring to national or local network affiliated media, this story is an example of the inaccuracy of some news media organizations during the fire. Several interviewees from Woodland Park, Colorado, mentioned the Turkey Rock incident; it served as a major stress point in the community. The Turkey Rock incident also became the proverbial “poster child” for media inaccuracy during the fire. Other interviewees from Woodland Park also mentioned similar problems with both the national newspapers and television media.

Sensationalism and inaccuracy seemed to be a major problem for interviewees affected by the two larger fires. As previously mentioned, these two fires encompassed areas that garnered media coverage from larger nearby cities. Therefore, the problems experienced by residents in these two areas may represent more extreme interactions with the media. However, some of the smaller, more remote communities also experienced problems with local media. Three interview sites,

Salmon, Idaho, Ashland, Montana, and Santaquin, Utah, did not always have access to up-to-date mass media reports on the wildfires that affected their areas. For example, one resident in Ashland, Montana, pointed out the problems with using local media during the fire:

P36: AMYR#6ED.txt: *"The closest radio station is probably 87 miles away and the closest TV station is even further...They announced it on the Billings [Montana] news. They said there is a wildfire in southeastern Montana that is encompassing so many acres [and so on]. But they didn't give any information about where you should look for the water or anything like that."*

This statement exhibits the lack of coverage on the fire in more remote communities. The communities' locations did not draw significant national media coverage. In addition, the local television channels available covered larger nearby cities and towns, so the coverage was not specific to the affected communities. Furthermore, the media access in these communities was more limited than the other three sites; typically, residents had access to small weekly newspapers, cable or satellite television without local channels, AM radio stations, and the Internet in some cases.

Despite the problems experienced by residents of some areas, interviewees in each of the sites did report that the media were a useful source of information about the fire. For example, the fire crews and information officials in Helena, Montana, seemed, from the point of view of interviewees, to be exemplary in their handling of the mass media. One information official seemed to realize the nature of the media and took steps to ensure quality of information:

P26 HMYK#28: *"We have to use the media because otherwise the media just makes it up. We have to keep them informed or they will make it up."*

By understanding how the media operates in crisis situations, the information officials

were successful in managing the media by providing up-to-date and accurate information. Government officials in other fire affected sites also claimed that they sent press releases, held press conferences, and allowed time for press interviews.

In sum, evaluations of the news media performance during the wildfires were mixed. Observers applauded media that provided constant updates on the progress of the fire; visual images of the fire; information about evacuations and maps showing road closures. Residents criticized news accounts that were inaccurate and that presented false information that heightened uncertainty, and that sensationalized the fires to provide entertainment for city residents rather than information needed by locals. Residents in remote locations without access to or coverage by formal media criticized media information for not being specific to their particular location.

### **Use of Informal Information Sources**

Despite the presence of media and government information sources, respondents overwhelmingly declared that the most used, and often the most reliable, information source was other community residents. Word of mouth was the most-cited way of obtaining needed information. Interpersonal communication seemed to effectively reduce uncertainty because speaking with other community members eased fear and provided a sense of community togetherness. Because many of these communities were rather small and close-knit, residents knew each other and tended to "look out" for one another.

P34: AMYR#4ED.txt: *"When something happens in this town, being as everybody knows everybody, it's word of mouth."*

The communities typically developed their own flow of information via word of mouth; for instance, a person with direct contact with a government official would get updated news and spread it throughout the community. In addition to word of mouth,

community members also established common meeting places and places to post information about the fire or personal experiences. For example, during the Hayman fire, the local coffee shop served as an information center for several community members and firefighters to discuss the fire and post messages to other individuals.

P31: WPCPR#13ED.txt: *"We were command central [at the coffee shop]. We had the fastest information - we had scanners, computers, great sites, and knew the fire chief. They [firefighters] came here, and they had coffee everyday. So information was something that you could depend on."*

These informal meeting places were also common to other sites. Residents of some sites used post offices, grocery stores, and other local businesses to speak with other community members or government officials. Schools, which were typically used as evacuation sites, were also places that invoked a sense of community spirit for several interviewees.

Yet interpersonal communication was not the only information seeking behavior. At least one person at every study site praised the use of a police scanner to obtain information about the fire:

P41 WPCYR\_5ED.txt: *"Had I not had this [scanner], I would have just sat in the chair outside the hotel and not known a thing."*

The scanner emerged as novel information source for some residents; residents counted on their scanners in lieu of any significant information from other sources. In fact, a resident who owned a scanner would often spread that information throughout the community by word of mouth.

Still other community residents turned toward the Internet. Although most of the Web sites dealing with fire were operated by various government agencies or media organizations, some individuals reported simply using a search engine with the word "wildfire" to get information about

fire in general and the fire in their areas. One Web site seemed to stand out among the rest; community members affected by the Hayman fire frequently used the Teller County Web site as it was updated more often than other government Web sites.

P51 WPCPK\_9ED.txt: *"[Teller County] has a very good Web site. And if there was one place you could count on for accurate information, that was it. People from all over the world e mailed us."*

Most of these information seeking behaviors are considered novel to the community members; although they may have used the Internet prior to the wildfire, they probably would not have conducted an online search for fire information. Likewise, although the coffee shop described above may have been a place to chat with friends, it had not served as an information center previous to the fire.

It is evident from these results that a fair amount of complexity surrounds the issue of communication during wildfire crises. Each interview site and each community responded somewhat differently to the threat of wildfire. However, there were also similar patterns in response and in the search for and use of information during the fire events. In general, the information needs of all of the communities were focused on the reduction of uncertainty about the fire and the solution of immediate problems related to the fire. Informal sources were generally reported to be the most useful in meeting social-psychological needs, such as the reduction of uncertainty and easing anxiety. Also, informal and novel sources, such as meeting places and informal communication networks, solved residents' problems by providing a pathway for timely information. On the other hand, formal governmental and media sources were often described by interviewees as doing little to ease fears and reduce uncertainty. Interviewees attributed this largely to overlapping, contradictory, inaccurate, or untimely information. Although the interviewees generally had positive reactions to the



government agencies' communication efforts, uncertainty was not always reduced because community members felt government and media reports often contradicted each other. Furthermore, the lack of clear pathways of information retrieval or site-specific information among the formal sources did not always help community residents solve problems.

## **DISCUSSION and CONCLUSION**

### **Adaptive Management and Informal Networks**

This research resulted in two general findings that have implications for fire information management: 1.) Individual and community information-seeking needs revolve around reducing anxiety and uncertainty and solving immediate problems related to the fire, and those affected will turn to various information sources to meet those needs, and 2.) Fire information managers need an adaptive approach that incorporates informal networks as well as the more formal means to meet those needs. These implications are based on what we are labeling here as "adaptive communication management." Borrowing from the natural resources management literature, adaptive management is based on the idea that planned actions can be altered to best fit events that unfold in each management site. Adaptive management approaches also allow for flexibility in decision making, meaning that if a particular set of practices is not effective, it can be changed during application. Thus, we are suggesting that adaptive communication management is a management schema based on a communications approach that allows room for change in the information management process.

The study also revealed that individuals simultaneously used media, government, interpersonal, and novel sources to gather information to reduce their uncertainty. In fact, affected individuals used multiple sources even if their information needs were largely met-often for purposes of additional verification. For

example, one interviewee said that he had obtained "all" of his information from a firefighter and he was sure it was accurate, but he still went to the public meetings anyway to "make sure he wasn't missing anything." These observed patterns suggest that residents seek multiple information sources during a time of crisis; the uncertainty generated by a crisis leads to more media use and information seeking behaviors, which then leads to stakeholders using as many information sources as possible to obtain and corroborate information and reduce uncertainty. It also suggests that information gathering behavior during a crisis is as much about reassurance and human interaction as it is about the collection of facts.

This finding is illuminated by the way community residents went about seeking information, the sources they used, and their evaluations of those sources. This study highlights the inconsistencies between sites impacted by fire; each community sought different informal and formal sources and each community depending upon which sources were available in the community. Within communities, sometimes each interviewee evaluated the sources differently. All of these differences between communities and among individuals may be troublesome for fire information officers in that a standardized system may not be the best approach to information management. This point leads to a discussion of our second general finding: Fire information managers need an adaptive approach by which to manage future fire crises to meet the needs of a particular community.

As mentioned, each community studied responded differently to the threat of wildfire, because each is inherently different and has different needs. As Hodgson (2005) points out,

[Wildfire-caused] [D]isturbances do not happen in a vacuum. The people in the affected community have a history of other disturbances, community projects, culture, formal and informal institutions and

associations. They also have skills, experiences, knowledge, tangible assets, and other kinds of social capital. They are influenced by outside factors such as the mass media, resource management agencies, and larger institutions and traditions. (p. 5)

This community composition will ultimately impact the level of uncertainty experienced and the problems needing to be solved during a fire. More importantly, each community will have different ways of gathering and disseminating information in the time of a crisis. Smaller, more closely knit and media poor communities tend to rely on informal means of communication. Larger, more complex communities served by daily newspapers, and local radio and television news departments, tend to rely more heavily on local news media to disseminate community-specific information (Hindman, 1996; Hindman & Coyle, 1999). For this reason, communication managers must take the local social structure, culture, and knowledge base into account when dealing with the community as a whole or with individual community members (Carroll et al. 2004; Hodgson 2005; Taylor et al. 2005). Understanding and adapting to localized informal networks can help information managers tailor their communication efforts to the needs of particular communities.

The research indicates that an adaptive framework for managing the communication during a fire crisis should integrate local knowledge and networks. Taylor et al. (2005) call this type of integration “informing the networks”: “Wildland urban interface communities are served by relatively complex information networks that go well beyond traditional media . . . residents rely on these networks heavily during fires” (p. 19). This study found that in most of the communities, local informal communication networks were well-developed. Community members said word of mouth was the most-used and often the most effective way for them to communicate

site-specific information geared toward solving individual or community problems. In every community in this study, a resident or group of residents served as informal community liaisons to, in effect, be the “glue” that held the community together. It may have been a mayor, a city council or school board member, or a community elder. Managers operating within an adaptive framework will be more effective if they use these informal networks to distribute information. In the instance of a fire, these key individuals can provide information managers with contacts and also communicate information to other community members.

Another aspect of these networks is informal communication outlets. Some of these communities often did not have access to or coverage by traditional media, such as Salmon, Idaho, Ashland, Montana, and Santaquin, Utah. Residents in these sites used informal outlets, such as common meeting places, and often named them the most effective in transmitting information and reducing uncertainty. Managers can identify these outlets before a fire ever occurs as well as postulate about informal networks that do not formally exist but which may become useful during a fire event (Taylor et al 2005). For example, the coffee shop featured in the Hayman fire served as a message board and a place to meet. In times of crisis, it is necessary to recognize the greater need for information in isolated areas without traditional media outlets, and the need for timely, accurate, site specific information that is sent out independently of traditional media. As a related example, the aftermath of Gulf Coast hurricanes in 2005 is increasing emphasis on independent means of emergency communication that bypass mass media and goes directly to affected communities through the use of local networks.

Another emergent theme in the data from this study is that local knowledge can be an invaluable resource for fire information officers. Because fires have become more frequent in recent years, it is

likely rural communities near forested areas have experienced fires in the past. For example, one explanation for the positive evaluation of government information sources in Helena, Montana, is that Montana and this area in particular experienced other wildfires in that year, so the information officials essentially had more “practice” in dealing with the community. Some individuals in the featured communities had previous fire experience and even firefighting training. These individuals may have been able to translate technical information and spread it throughout the community, as well as assisting in firefighting duties. To prepare for future fires, managers can integrate the local knowledge of fire in the area into their management framework. Managers can determine the community’s fire history and locate community members that have experienced a fire in that location or elsewhere in the past (Hodgson 2005).

Finally, our research suggests that the way officials communicate with community members plays a large role in how information is received and interpreted. In Helena, Montana, government officials said they showed empathy and emotion during public meetings, and the community responded favorably. Similarly, Kumagai et al. (2004) recommended communication from information officials should be a balance of technical scientific information and empathy and emotion. This study showed that uncertainty and negative evaluations of information and communicators can be greatly reduced by simply expressing caring for the people affected. During a time of crisis, information managers are often too busy or harried to think much about residents’ emotional needs. Managers should be mindful that the affected individuals are frightened and uncertain of the future of their homes and property. Showing empathy, is an important step in gaining a community’s trust, penetrating informal communication

networks, and building potential long term relationships with key stakeholders (Kumagai et al. 2004; Hodgson 2005). Officials and residents who view each other as partners in solving the problems at hand are more likely to have success.

**Table 1: Wildfire Site Descriptions.**

| Place                                                                                             | Fire                                                            | Population                         | Number Interviewed | Evacuated?                         | Structural Damage?                                          |
|---------------------------------------------------------------------------------------------------|-----------------------------------------------------------------|------------------------------------|--------------------|------------------------------------|-------------------------------------------------------------|
| Show Low/Pinetop/Lakeside; Heber-Overgaard/Forest Lakes; Pinedale/Clay Springs/Linderoth, Arizona | Rodeo-Chediski Fire, 460,000 acres                              | 30,000+ (all affected communities) | 76                 | 30,000 total evacuated for 3 weeks | 469 total structures damaged                                |
| Teller County, Colorado                                                                           | Hayman Fire, 138,000 acres                                      | 11,000 (study area)                | 55                 | Several thousand for up to 2 weeks | 600+ total structures damaged                               |
| Salmon, Idaho                                                                                     | Clear Creek & Wilderness Complexes, 200,000 acres each          | 3,100                              | 56                 | No evacuations                     | No structures Lost                                          |
| Ashland, Montana                                                                                  | Fort Howes and Tobin Fires, 68,000 acres combined               | 500                                | 43                 | No evacuations                     | 5 structures damaged, plus pastureland and range implements |
| Helena, Canyon Ferry Lake, Townsend Basin, Montana City, Montana                                  | Canyon Ferry, High Ore, & Boulder Fires, 137,000 acres Combined | 14,400                             | 50                 | No evacuations                     | 15 total structures damaged, plus 80% of pastureland        |
| Santaquin, Utah                                                                                   | Mollie Fire, 9,000 acres                                        | 5,000                              | 34                 | 30 households evacuated            | No structures lost, some minor property damage              |

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## Communicating Organizational Resilience in the Face of Climate Change

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### Abstract

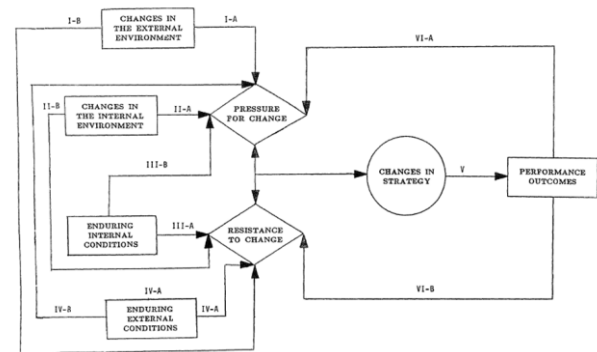
*This paper specifically looks at the process of organizational change in anticipation of or in reaction to environmental change. Social and ecological systems are in an assumed constant flux of change rather than equilibrium. Resilience will be traced back to Holling's (1973) ecological resilience to show how it has contributed to evaluating social-ecological systems. Ultimately, we seek to understand how a resilience framework can function as an evaluation tool for analyzing how organizations change in response to climate change.*

### Introduction

In this paper we propose that a resilience framework is an effective strategy for assessing organizational change. Global climate change presents significant ecological and organizational challenges to organizations and institutions. In most cases, organizations were not structured to undertake dynamic, interdisciplinary issues, such as climate change and consequently suffer in slow response times. A systems approach has not been the norm of past organizations and institutions. Yafee (1996) found that a systems focus requires cross-jurisdictional decision-making, which generally violates the current organizational structure of organizations. As environmental pressures become inescapable realities, organizations of all sectors have acknowledged the need to restructure their organizational framework to better respond to climate change. Ginsberg (1988) provides a framework to analyze internal and external changes organizations face (see Figure 1). The model explores how changes can hinder and encourage change. A resilience approach creates a framework for better understanding organizational change in times of complexity and uncertainty. Further research is needed in order to fully understand how to create resilient organizations that can effectively manage themselves as they respond to rapid global environmental change.

Figure 1. A framework for modeling changes in strategy (Ginsberg, 1988).

The goal of this paper is to theorize and more fully conceptualize a social-ecological discourse, rooted in the principles of resilience theory. We chose to focus on the history and transformation of ecological resilience into frameworks presently used for evaluating and developing resilience in social-ecological systems including organizations. For the purpose of this paper, an organization will be defined as a networked or structured group of people who work together to achieve a specific mission or set of goals.



### Ecological Resilience

The theory of resilience in ecological systems was first introduced in C.S. Holling's (1973), *Resilience and Stability of Ecological Systems*. He uses the spruce budworm and spruce-fir forests of eastern Canada to discuss two types of behavior in ecological systems: stability and the newly

applied concept of resilience (1973). Holling (1973) defines resilience as "...the persistence of relationships within a system and is a measure of the ability of these systems to absorb changes of state variables, driving variables, and parameters, and still persist" (p. 17). Years later, the Resilience Alliance (2008) defines ecosystem resilience in a similar way, "...the capacity of an ecosystem to tolerate disturbance without collapsing into a qualitatively different state that is controlled by a different set of processes. A resilient ecosystem can withstand shocks and rebuild itself when necessary" (p. 1)

Holling (1973) measured resilience by examining the boundary of a domain as opposed to centering on the equilibrium through a stability lens. He recognized that while measuring stability is more convenient, it does not show the true character and interconnectedness of an ecological system (Holling, 1973). Holling (1973) discussed the need for land managers to stay flexible in order to develop the capacity to adapt to uncertain and unexpected environmental changes that the future holds.

Ecological resilience models are often used as tools for understanding ecosystem processes including population and landscape ecology in adaptive resource management practices. Holling (1995) proposed an adaptive cycle model that was originally designed to interpret the resilience of complex ecological ecosystems (see Figure 2). Every system circulates continuously through exploitation, conservation, release and then reorganization. This groundbreaking work, founded on the understanding that the natural system is one of change rather than one of equilibrium, which has provoked researchers in many fields to ask questions about how they view and measure the systems in which they study (Holling, 1973; Holling 1995).

This process provides a better understanding of system dynamics that links together system organization, resilience, and complex dynamics. This model has

also been used to understand the relationships between social-ecological dynamics (Berkes & Folke, 1998). This same cycle can be used to examine land management organizations. The foreloop explores the organizations growth and accumulation of potential while the backloop examines the transformation and restructuring within organizations. The following section of this paper explores opportunities for interpreting ecological resilience in the context of organizational change.

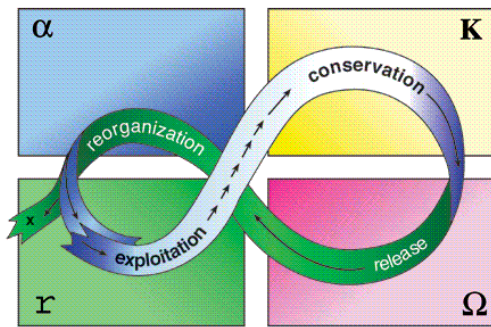
Figure 2. Adaptive cycle (Holling, 1995).

### **Social-Ecological Resilience**

Adger et al. (2002) defined social resilience as, "...the ability of a community to withstand external shocks and stresses without significant upheaval" (p. 358). The Resilience Alliance (2008) stated, "Resilience in social systems has the added capacity of humans to anticipate and plan for the future." Resilience also studies the ability of a social system to reorganize and renew following environmental change (Berkes, F., Colding, J., & Folke, 2003). The concept of social-ecological resilience is centered on understanding how society behaves and adapts to environmental changes. When social systems have the capacity and flexibility needed to manage these stresses the community remains resilient.

Adger (2000) provides examples of the connection between social and ecological resilience in his Vietnam mangrove case study. He explains, "The ability to absorb these changes depends on social capital but also on the role of surprises and the characteristics of the resource system" (Adger, 2000, p. 359). The resilience of a social-ecological system is also determined by the dependence of a social group on a single ecosystem, in this case, the mangrove ecosystem. The dependence on a single resource can lead to high levels of social vulnerability and stress within a social system. Decisions and actions taken to counter environmental





changes are often intended to reduce vulnerability and enhance the resilience of a social system and its adaptive capacity, in order to maintain the desired ways of life (Nelson et al., 2007). A social group may decide to change crops, timing, or the species in which they sustain life from in order to increase resilience (Tompkins & Adger, 2004).

Nkhata, Breen and Freimund (2008) suggested that a resilient social system must understand the complexity of the relational change that is taking place in the environment to successfully re-organize. There will always be a degree of uncertainty about how ecological processes will unfold, and because of this, it is even more important to determine how we can create resilient social-ecological systems that have the ability to withstand unanticipated change and disturbances. Institutions and organizations are the key determinants linking the non-linear relationships between social and ecological resilience (Adger, 2000). Because of this significant relationship, we begin to conceptualize organizational resilience, and the possibilities that it offers for facilitating organizational change in the face of global climate change.

### Organizational Resilience

The concept of organizational resilience is relatively new and highly debated in resilience thinking. McManus et al. (2008) defined organizational resilience as "...a function of an organization's overall situation awareness, management of keystone vulnerabilities, and adaptive capacity in a complex, dynamic, and interconnected environment" (p.82). The authors believe this definition is easy to comprehend and covers a broad spectrum of resilience qualities for all types of organizations. At present time there is very little research on how organizational change

can actually benefit the natural environment (James et al., 2007); however, conceptualizing organizational resilience with organizational change may help to better understand environmental changes. It also allows us to evaluate how organizations are going to perform and prepare before, during and after these changes (McManus, 2007). Organizations and institutions can play a huge role in building resilience in communities by managing for a state of continuous change rather than a state of equilibrium. Brundson and Dalziel (2005) stressed the importance of focusing on the future more than we ever have in the past in order to create more resilient organizations.

It is important to remember that environmental changes not always lead to negative outcomes for organizations, institutions and society. Folke (2006) reminds us, "In a resilient social-ecological system, disturbance has the potential to create opportunity for doing new things, for innovation and for development" (p. 253). Environmental changes force society and organizations to adapt and stay up to date on the latest cutting edge organizational structures. High resilience allows for institutions to successfully cope with environmental changes by promoting organizational and social learning and developing new creative ideas to address external environmental pressures. Collaborative management, adaptive management, co-management and interdisciplinary work have been shown to be effective strategies for collective decision-making to build resilience in social-ecological systems (Walker et al., 2006, Berkes et al., 2003). Adaptive management and active learning is necessary in a world of assumed constant flux and change. Tompkins and Adger (2004) suggest that, "...adaptive management processes, increase present-day resilience, which can in turn increase the ability to respond to the threats of long-term climate change" (p. 2).

Since organizational resilience is a new area of inquiry, there are only a few case studies to build a framework from. We

would like to introduce a particularly well-developed set of case studies that has informed our operationalization of organizational resilience as a theoretical framework. These case studies come from a recent study conducted in New Zealand.

### New Zealand Case Study

The Resilient Organisations research program was established to evaluate organizational resilience when facing natural disaster events. This six year project is funded by the Foundation for Research Science and Technology of New Zealand and is to be completed in 2010. Through this research, Resilient Organisations has developed a framework for assessing and improving the resilience of organizations. This includes a resilience management tool which consists of a collection of elements: (1) building awareness, (2) selection of essential organizational components, (3) self-assessment of vulnerability, (4) identification and prioritization of keystone vulnerabilities, and (5) increasing adaptive capacity (McManus, 2007).

This framework was tested on 10 case studies throughout the project so far. The 10 case studies account for several different types of organizations, from small to large, public to private, and an assortment of different industry sectors. McManus (2007) proposed the 4 R's (see Figure 3) as a model for understanding the important relationships between the components of organization resilience. Reduction, readiness, response and recovery embrace an easy framework for understanding how an organization would plan its response to environmental stresses and disturbances. In the case of the New Zealand study, the 4 R's are used to emphasize the need to plan in the pre-crisis phase of natural hazards as well as post-crisis response and recovery phases. In order for an organization to effectively plan, the model takes into account situation awareness, adaptive capacity and keystone vulnerabilities, within which the study later used to evaluate an organization's

resilience level. Situation awareness has the influence over the performance of the whole organization and in identifying and managing keystone vulnerabilities, and both of these components influence overall adaptive capacity of an organization.

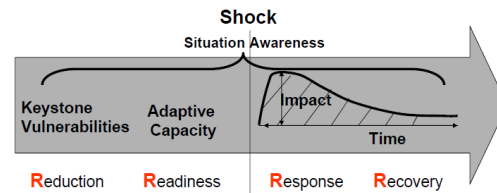


Figure 3. 4 R's (McManus, 2007).

While analyzing the case studies, McManus (2007) identified 15 resilience indicators that were found in all organizations regardless of size or industry (see figure 4.). These indicators were then categorized into the three functions of organizational resilience. The indicators can be adapted and used as a generic issues list for any type of organization. McManus (2007) developed vulnerability matrices for organizations to map the organizational components that transformed through the various steps of the resilience indicators.

| Resilience Indicators |                                           |                                        |                                               |                                                                  |
|-----------------------|-------------------------------------------|----------------------------------------|-----------------------------------------------|------------------------------------------------------------------|
| Situation Awareness   |                                           | Management of Keystone Vulnerabilities |                                               | Adaptive Capacity                                                |
| SA <sub>1</sub>       | Roles and Responsibilities                | KV <sub>1</sub>                        | Planning Strategies                           | AC <sub>1</sub> Silo Mentality                                   |
| SA <sub>2</sub>       | Understanding of Hazards and Consequences | KV <sub>2</sub>                        | Participation in Exercises                    | AC <sub>2</sub> Communications and Relationships                 |
| SA <sub>3</sub>       | Connectivity Awareness                    | KV <sub>3</sub>                        | Capability and Capacity of Internal Resources | AC <sub>3</sub> Strategic Vision and Outcome Expectancy          |
| SA <sub>4</sub>       | Insurance Awareness                       | KV <sub>4</sub>                        | Capability and Capacity of External Resources | AC <sub>4</sub> Information and Knowledge                        |
| SA <sub>5</sub>       | Recovery Priorities                       | KV <sub>5</sub>                        | Organisational Connectivity                   | AC <sub>5</sub> Leadership, Management and Governance Structures |

Figure 4. Resilience Indicators (McManus, 2007).

Vulnerability matrices (see Figure 5) examine internal and external aspects of a whole organization and are generated using preparedness, criticality and susceptibility data to produce a context specific matrix. Criticality is plotted on the x-axis and preparedness on the y-axis. Each

organizational component is indicated by a plotted circle and number. An organization's keystone vulnerabilities are identified both by the size of the circle they produce as well as their position on the matrix. The matrix allows organization members to visually pinpoint and prioritize threats within their organization.

Figure 5. Vulnerability matrix (McManus, 2007).

Keystone vulnerabilities are often everyday characteristics that have the potential to be barriers and change resistors for an organization. The vulnerability matrix is a tool that quickly assists organizations to visually identify those elements that present the greatest impending threat. The organizational components that fall within the highest vulnerability sections on the matrix are likely to be the most important keystone vulnerabilities and should be addressed first in any response strategy to the environmental change.

The final model (see Figure 6 & 7) that McManus (2007) developed is used to capture the overall resilience of an organization. This model can also be used to evaluate an organization's resilience in comparison to other organizations as well as point out strengths and weaknesses. Figure 6 represents an organization with very low resilience while Figure 7 is an illustration of an organization with very high resilience.

McManus, 2007).

McManus (2007) determined that a resilient organization has three main qualities above a non-resilient organization. A resilient organization should have a greater awareness of itself, key stakeholders and the environment in which they work in. It is also essential for organizations to have an increased knowledge of its keystone vulnerabilities, and the potential positive and negative impacts that those vulnerabilities could have on the organization. Lastly, a resilient organization should have the ability to adapt their existing structural conditions or adapt to change through new and innovative solutions.

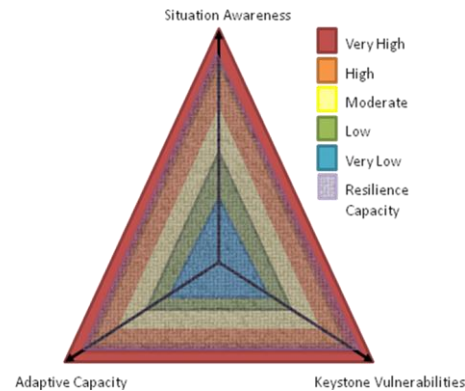
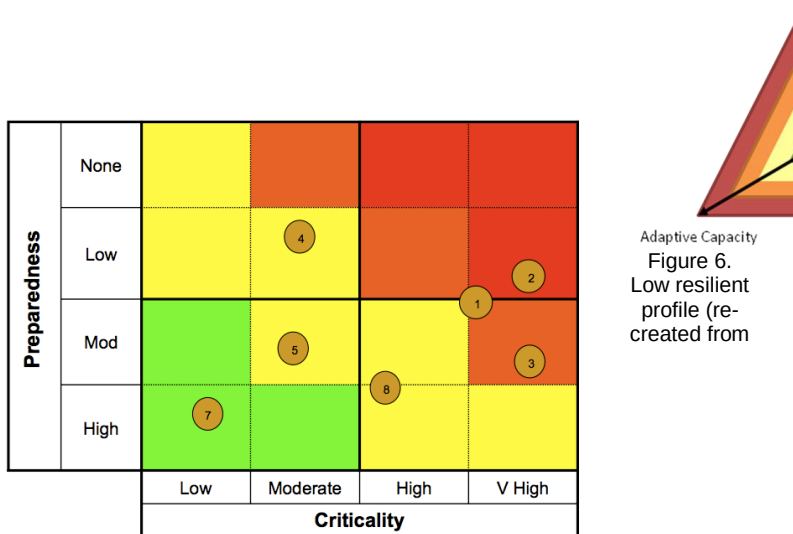


Figure 7. High resilient profile (re-created from McManus, 2007).

The Resilient Organisation research program has contributed substantial insight in determining the role of resilience in organizations. In the remaining months of the project, researchers hope to continue investigating and cataloguing current limitations on organizational resilience. In the meantime, this collection of case studies provides a foundation of the most relevant research from which we have built our proposed theoretical framework.

## Measuring Resilience

Historical ecological resilience has been measured by empirical observations of ecosystem processes (Folke, 2006). While ecological resilience can be measured empirically, social resilience, when standing alone cannot. Instead, it can be evaluated



through temporal and spatial scales by examining institutional change, economic structure and demographic changes (Adger, 2000).

Several new measurements have been developed to evaluate the resilience of a system. Nelson and colleagues (2007) suggested using adaptive capacity on a case by case basis as an evaluation tool for resilience. Adaptive capacity is defined as a, "...unique blend of cognitive, behavioral, and contextual properties that increase a firm's ability to understand its current situation and to develop customized responses that reflect that understanding" (Lengnick-Hall & Beck, 2008, p. 750). Adaptive capacity is an internal organizational attribute that contributes to creating routines, diversity, innovation and memory.

The temporal scale of environmental change and the scale of society will determine how resilience is measured within the system. A rapid environmental change affecting a community will not be measured the same as a slow environmental change affecting the global community. It is also essential to determine what system and specific component within the system is being analyzed in order to effectively measure it (Carpenter, Walker, Anderies, & Abel, 2001). Proxy measures and flexibility are necessary in order to respond and monitor resilience systems in the face of ongoing environmental and social change, especially when the stimulus is a long term pressure. Some even argue that resilience offers a better approach to study long term environmental changes rather than rapid changes (Nkhata et al., 2008). This confirms our proposal to use resilience as a framework to better investigate and understand how organizations respond to climate change.

### **Organizational Resilience: A Climate Change Framework**

We propose an integrated framework to understand organizational responses to climate change, rooted in the recent work and case studies of resilience

theory. Our proposed framework will provide a foundation for how organizations, specifically land management agencies, change and adapt in the face of climate change. Many agencies have recognized that there is no structured mechanism for coordinating climate change communication and management efforts. The traditional agency structure does not have the capacity to change as quickly as the climate is changing. They now need to manage at landscape scales instead of traditional boundaries and jurisdictions, which is forcing a shift in responsibilities. Effectively responding to the challenge of climate change will require thoughtful and coordinated responses across the agency. By analyzing organizational change, from this perspective, we hope to create an integrated mechanism to help organizations, such as land management agencies increase their resilience to climate change.

In order to test our theoretical framework and actually measure organizational resilience; we suggest an in-depth case study approach, including qualitative interviews with organizational members. We will conclude this paper by outlining a research strategy to operationalize the conceptualization of organizational resilience that we have presented. The process we propose is characterized by four main components: (1) conducting an organizational situation assessment, (2) measuring the organization or agency's adaptive capacity, (3) overlaying McManus' models and matrices in other organizational contexts, and (4) ultimately generating proxy measures and long-term assessment tools to identify increased resilience and facilitate organizational reflection and capacity building.

In conducting an organizational situation assessment we will be able to identify current needs for effectively managing resources and evaluate past performances, achievements and failures in responding to climate change. After identifying past experiences and present needs we will be able to determine future

opportunities for the agency to build its adaptive capacity and resilience across multiple disciplines and scales. The situation assessment includes conducting a feasibility study of the appropriate amount of effort and resources available to implement climate change response and adaptation actions within the organization or agency. The last part of the assessment would include integrating information into a climate change action plan with short and long term goals and objectives to meet these goals. Once compiled, the situation assessment provides the agency with a foundation to determine its adaptive capacity.

Adaptive capacity, in this context, consists of the agency's ability to integrate past experiences with current knowledge to help create flexibility and innovation in problem solving. Loss of adaptive capacity will contribute to an agency's inability to manage organizational change in the face of climate change. High adaptive capacity allows an organization to excel and generate new opportunities during times of environmental stress as opposed to constraining the organization's reaction to climate change.

We propose re-creating several of McManus' (2007) models to evaluate and illustrate organizational resilience within land management agencies. The vulnerability matrix (see Figure 5) will provide a visual of identified organizational threats and keystone vulnerabilities. It will serve as a prioritization tool for organizational employees. Several matrices will be developed to scope vulnerability in ecological systems, organizational dynamics and environmental communication. The matrices will also be used to compare conditions across different scales and divisions across the agency.

Finally, proxy measures, flexibility and long-term assessment are all communication and management tools necessary to respond and monitor organizational resilience in the face of ongoing environmental pressures such as climate change. Such tools allow for the reflection necessary to inspire change and

facilitate higher levels of adaptive capacity in the context of uncertain and complex situations. Overall, we believe the conceptualization and operationalization of this framework has the potential to contribute to a deeper, multifaceted understanding of organizational change in the face of climate change.

## **Conclusion**

Gunderson and Holling (2002) argue that understanding how people respond to change and how society reorganizes following change is the most neglected issue in natural resources systems and science. Further research is drastically needed in order to fully understand how to create a resilient ecological and social system. This demand is being heard now more than ever with the increasing global environmental problems facing the world. Measurement, re-organization and institutional learning are all issues that can be explored within the human and social dimensions fields.

The recent trend in interdisciplinary collaboration and research, including the Resilience Alliance, shows hopeful advancements in understanding the nonlinear complexity of resilience. The Resilience Alliance has recently published workbooks for practitioners and scientists to assess and manage for resilience in social-ecological systems (2008). This is a promising example of how resilience theory is moving from conceptualization to operationalization, as well as the movement from theory to action. .

The organizational resilience framework outlined in this paper will be used to conduct an organizational assessment for the National Park Service. This assessment will determine their ability to react, cope and change to an environmental stimulus, specifically climate change. It will help to test our theoretical understanding of organizational change and resilience, and help us to better recognize how climate change pressures are causing transformation within social systems. To end with a thought of change, Kessler and

Salwasser (1995) remind us: "Change is not just a fact of life. It is the very essence of life. To remain relevant and viable, institutions must adapt to the changing environment that is the context of their existence" (as cited in Knight & Meffe, 1997).

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## **A Comparative Rhetorical Analysis of US and UK Newspaper Coverage of the Correlation between Livestock Production and Climate Change**

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### **Abstract**

*In November 2006, the Food and Agricultural Organization (FAO) of the United Nations released a 408-page report entitled "Livestock's Long Shadow." The report attributed 18 percent, or one-fifth, of human-induced global greenhouse gas emissions to livestock production, a figure higher than transportation. Despite the implications of the report, the correlation between the production and consumption of livestock and anthropogenic climate change has received only minimal print media coverage in the United States and the United Kingdom. This research paper offers a comparative rhetorical analysis of selected articles from US and UK print media sources that cover the effects of livestock production on climate change subsequent to the release of the U.N. report. Specifically, the analysis will compare articles from the New York Times to articles from The Guardian and its sibling Sunday newspaper, The Observer. The units of analysis will include media framing and reasoning devices, measurements of content analysis that discern levels of bias and balance in reporting, and the cultural context of the country of newspaper origin in terms of per capita meat and dairy consumption rates, climate change legislation and media coverage trends of climate change.*

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### **I The Correlation between Livestock Production and Climate Change**

In November 2006, the United Nation's Food and Agricultural Organization (FAO) released a 408-page report entitled *Livestock's Long Shadow*. The report indicted livestock production as a major contributor to every form of ecological devastation, including anthropogenic global climate change. According to the FAO, livestock production is accountable for 18 percent, or one-fifth, of human-induced global greenhouse gas emissions. By comparison, transportation only accounts for 13 percent. The effects of livestock on climate change include the methane (CH<sub>4</sub>) and nitrous oxide (N<sub>2</sub>O) produced from the enteric fermentation of cattle, deforestation to accommodate grazing ruminants and to grow crops for livestock feed, extensive use of nitrogen fertilizer, soil carbon losses due to erosion from improper grazing, and fossil fuel use in the transport of grain to feedlots and in use of machinery on the farm. According to the United Nations livestock

production is "one of the top two or three most significant contributors to the most serious environmental problems at every scale" (Steinfeld, et al. 2006).

Livestock comprises 30 percent of all land surface area on the planet and 70 percent of all agricultural land use (FAO, 2006). Livestock rearing and maintenance is responsible for generating 65 percent of nitrous oxide emissions, which has 296 times the Global Warming Potential (GWP) of CO<sub>2</sub>; it is also accountable for 37 percent of all human-related methane, which has at least 23 times the amount of GWP than CO<sub>2</sub>. Livestock is one of the single most determining factors in deforestation, which accounts for nearly a quarter of global man-made CO<sub>2</sub> emissions. Since the 1950s, at least 70 of the acreage that has been deforested in the Amazon is accredited to livestock production either through the creation of pastureland for grazing or to grow livestock feed crops, such as soya (Steinfeld, et al. 2006).

According to a study conducted by the Center for a Livable Future at the Johns Hopkins University Bloomberg School of Public Health, very little media attention has been paid to the correlation between food and climate change. The study surveyed 16 major daily newspapers in the United States, including the *New York Times*. Using the LexisNexis database, the Center searched for the key phrases “food,” “farm” or “agriculture.” Of the 4,582 articles surveyed that contained terms “climate change” or “global warming” in the lead paragraph, only 109, or 2-4 percent, also included one or more of the aforementioned key phrases in the article. Furthermore, only 20 out of the 109 articles, or 18 percent, were specifically on the subject of food and/or agriculture as it relates to climate change. The remaining 82 percent contained only ‘minimal’ or ‘short’ mentions of food or agriculture. However, towards the end of the study period, the presence of these key phrases in climate change articles increased by more than 20 percent (Neff et. al, 2008). Thirteen percent of the surveyed articles mentioned food-related contributions to climate change specific to livestock.

Neff et al. contends that the substantial disparity of coverage of climate change contributions in favor of transportation and energy emissions over agricultural emissions, despite the findings of the FAO, may be due to what is termed a “CO<sub>2</sub> bias.” Most peer-reviewed journals, popular magazines, and major newspapers that cover climate change, tend to emphasize the energy and transportation sectors as the main causalities. Carbon dioxide is also considered the premiere greenhouse gas of concern by most climate scientists, leading to public oversight of less frequent but more potent gases, like nitrous oxide and methane, which are more closely associated with agriculture. Furthermore, the film *An Inconvenient Truth*, which propelled climate science into the limelight and raised general public awareness about the concept of personal responsibility in

emissions mitigation, did not mention agriculture as a contributing factor.

The public learns a substantial amount about scientific topics such as climate change through the consumption of mass media news (Wilson, 1995). In fact, daily newspapers are one of the primary sources of information in developed nations (Project for Excellence in Journalism, 2006). In the United States, 29 to 40 percent of news consumed by American citizens is provided by print media sources (National Science Foundation, 2004; Pew Research Center for People and the Press, 2006). Therefore, it is important for journalists to relay science to the citizenship in a manner that is both accurate and easy to comprehend. Also, journalists must exercise adept judgment in the sources they choose to illustrate an article topic and in what facets of a particular topic they choose to emphasize. Media scholar Hannigan asserts that media visibility of environmental issues is critical in moving it from the arena of science to that of policy: “Without media coverage the odds are low that an erstwhile [environmental] problem will enter into the arena of public discourse or become part of the political process” (2007).

In considering the effects of livestock production on climate change as relayed by the United Nations, and the findings of Neff et. al regarding domestic print media coverage of the correlation between food systems and climate change, this paper endeavors to address the rhetorical discourses offered by specific U.S. newspaper articles and compare it to that of another nation, the UK.

Rhetorical analysis is the study of human communication through symbolic actions, including creation of ‘artifacts’ such as news articles (Foss, 1996). Specifically, rhetorical criticism is “the process of systematically investigating and explaining the symbolic artifacts for the purpose of understanding rhetorical processes” (Foss, 1996). According to Hart and Daughton, three features are standard in rhetorical messaging: 1.) delineations of the good, 2.)

resonance with an intended audience, and 3) clarifying policy recommendations (2005). Additionally, a rhetorical task attempts to exert social changes and convince the target audience that they must make new choices regarding a particular subject matter. Usually, for this to be successful, the rhetor will in turn narrow the options for making these choices, in a manner that is often subtle.

### **Cultural Context: the United States v. the United Kingdom**

The United States and the United Kingdom make interesting case studies for print media comparison of this topic. In addition to sharing a common language, the U.S. and UK share many cultural similarities; many basic and enduring U.S. agricultural practices and dietary norms were initially derived from the early British settlers. The United Kingdom resembles the U.S. in dietary and lifestyle choices more than other Western European nation and is its closest military ally (Pew Center, 2007). Moreover, both countries have a robust livestock industry and per capita meat and dairy consumption rates that far outweigh that of the global average. However, both nations are currently very distinct in their social perceptions and policy agendas regarding climate change. The United Kingdom is a current and original signatory of the Kyoto Protocol, a pact of developed nations committed to cutting greenhouse gas emissions. Additionally, the UK has its own national framework, the Climate Change Act, which was made effective in November 2008. The Act mandates an 80 percent cut in greenhouse gas emissions prior to 1990 baseline estimates by the year 2050. In addition to empowering British ministers with the ability to introduce measures to mitigate GHG emissions, a Committee on Climate Change was also created under the Act to advise Parliament on emission reduction targets and related policies.

By contrast, the United States has so far abstained from becoming a signatory of the Kyoto Protocol and lacks any binding domestic legislation that would federally

mandate cuts in GHG emissions. Moreover, the current presidential administration that has been in place since 2001 has been hostile to climate science and research (Boykoff, 2006). Though public opinion on climate change has become increasingly concerned, it still lags behind that of most other nations, even though the U.S. expends a quarter of the world's petroleum while comprising only five percent of the world population. According to recent polls conducted by the Pew Research Center for People and the Press, though 77 percent of Americans contend that the phenomenon of global warming is genuine, only 47 percent attribute human activities as a causal factor. Furthermore, despite a substantial increase in American media coverage of climate change in recent years, it still has ranked relatively low in the public priorities cited by U.S. citizens. For instance, in another Pew Center-sponsored survey, only 19 percent of Americans familiar with the concept of climate change expressed a "great deal of personal concern" about the issue. This ranked U.S. concern over climate change the lowest of all 15 countries that partook in the survey.

The dietary norms of each nation also deserve scrutiny in the context of this analysis as both have high per capita rates of meat and dairy consumption. The United Kingdom, which has a population of approximately 70 million, consumes about 40 percent more meat than the global average (AAAS Atlas of Population & Environment, 2007). However, the rate of consumption has remained relatively stable for the past 30 years, with a small decline in beef consumption and inversely, an increase in the consumption of poultry products. With a population of over 300 million, the United States has the highest per capita animal product consumption rate in the world, and the second highest overall consumption rate (USDA, 2004). The average U.S. citizen consumes 50 lbs. more meat per year today than 50 years ago, and three times more meat than the global average. Meat consumption rates in the U.S. continue to steadily increase every

year as part of a long-term upward trend. Specifically, the Economic Research Service of the United States Department of Agriculture indicated that the average annual meat consumption rate was 216 lbs. per person in 2004 and was projected to be over 222lbs. per person for 2008 (2005). These rates do not include per capita consumption rates of eggs and dairy products, which would bring annual per capita animal product consumption to an impressive 456 lbs. (USDA, 2005).

The history of media coverage of climate change in major U.S. and UK newspapers are both similar in the early years of climate science, in that both sources offered scant coverage. Major newspapers from both countries have substantially increased coverage in the past several years. However, there is a distinguishable disparity in coverage between the two nations. In particular, major UK newspapers (including the *Guardian/Observer*) published three times more articles pertaining to climate change in 2006 than their U.S. counterparts (Boykoff, 2007). A larger survey yielded a consistent trend of UK newspaper coverage of climate change, outnumbering U.S. coverage at a rate of two times or higher nearly every year from 1988 to 2006 (Boykoff, 2007). Therefore, studies on media trends regarding coverage of climate change seem to indicate that the quantity of print coverage from UK newspapers dominates that offered by the U.S. print media. This disparity in media coverage could be a determinant factor in deviating public perceptions regarding climate change in these countries and in why the UK favors mandated caps on greenhouse gas emissions and stronger political action on climate change in comparison to the U.S.

### **Methodology**

A major newspaper conglomerate from each nation was selected: *The New York Times* from the United States and sibling newspapers *The Guardian* and *The Observer* from the United Kingdom. Both newspaper conglomerates have a significant international readership of approximately one million and are

considered major first-tier newspapers that are part of the “prestige-press.” After indentifying the newspapers that would serve the case study, articles were then selected using the LexisNexis search database. For both searches, four different key phrases were used to optimize search results. These terms were: “Livestock’s Long Shadow,” “livestock and climate change,” “meat and climate change,” and “livestock, meat and climate change.” Additionally, the search was limited to a timeline of articles that were published between November 2006 (when the U.N. report was released to the public) and December 2008. Articles were then tallied, read and analyzed by type (news article, feature, editorial and op-ed) and word count, framing and reasoning devices as described by Hannigan et al., and revised measurements of content analysis regarding climate coverage as devised by Boykoff & Boykoff (2004).

Article type has relevance in media coverage in that it implies different intentions and levels of pertinence. A news article would suggest a higher degree of pertinence and immediacy than a features story, though features are often used as a vehicle to explore the human interest dimension of a news topic. Editorials and op-ed pieces are an expression of an opinion as opposed to fact, and therefore may not often carry the weight of legitimacy or level of engagement of a news or features piece. Editorials are the expressed platform on a given topic (often a news “debate”) of the newspaper in which it is printed, whereas an op-ed is a commentary piece by a staff writer (in the form of a “column”) or a guest writer, who is often not a professional journalist. Though often not a journalist, the author of an op-ed piece usually writes on a subject with which he or she has personal or professional experience. This experience often leads to an assertion of bias for or against an aspect of the topic, which may or may not have pertinent political or social implications. In the respect that it expresses bias, an op-ed

format may undermine valid judgment on the subject matter; however, the author's experience may be interpreted to lend a unique perspective that would evade a journalist, therefore possibly offering the opinion credibility with its intended audience.

### **Units of Analysis**

*Media framing* is an oft-used term to describe the literary tools applied in journalistic articles in order to make a certain impression upon the readership. It is a manner of content construction that enables cognition of issues, events and information. In other words, it is a method of assembling the elements of a discourse to allow for specific interpretations (Goffman 1974). It is also a pervasive component in the interactions between science, policy, media and the public.

Hannigan et. al expounds upon five media framing devices identified by Gamson and Modigliani: metaphor, exemplars, catchphrases, depiction and visual images. Furthermore, journalistic rhetoric is often supported by one or more reasoning devices that complement media framing: the "roots" of the problem or subject explored by the article (a causal analysis), the consequences associated with the subject, and an appeal to principle. These indicators make useful units of analysis when attempting to identify the purpose and intent of an article.

Media coverage trends on the phenomenon of climate change have been the subject of extensive peer reviewed literature. In particular, the United States, where political and social action to climate change has been slow in comparison to other developed nations, is a common case study. Boykoff & Boykoff have an extensive body of literature on this subject (2004; 2005; 2007). In "Balance as bias: global warming and the US prestige press," Boykoff and Boykoff devised two segments of discourse analysis to distinguish levels of bias present in

particular articles on climate change (2004). For the purposes of this paper, these measurements have been adopted and amended to reflect the subject variation. They are as follows:

### **Measurement 1: Coverage of debate over the correlation of livestock production and animal product consumption to anthropogenic climate change**

- Only presents argument that correlation exists (via data from UN report or other peer-reviewed studies)
- Presents both sides, but emphasizes that correlation exists
- Presents a balanced account of debates surrounding correlation
- Presents both sides, but emphasizes the perspective of correlation as invalid or overstated

### **Measurement 2: Coverage of decisions regarding action on correlation of livestock production and animal product consumption to anthropogenic climate change**

- Dominant coverage of decisions/assertions regarding immediate/mandatory action to mitigate GHG emissions associated with livestock production and emissions (mandated cap, lowering production rate, rationing)
- Dominant coverage of decisions/assertions regarding cautious/voluntary approaches (different methods of production, small diet changes, technological innovation)
- Balanced accounts of various decisions regarding action (aggressive and conservative approaches)

Selected articles from the *New York Times* and the *Guardian/Observer* will be categorized by framing and reasoning devices, and as adhering to one or more of the bullets in each measurement, so that the first bullet from Measurement 1, will read 'M1a.,' and then follow in that

sequence with consecutive bullets: 'M1b.,' 'M1c.' and 'M1d.' Likewise, the first bullet from Measurement 2, will read 'M2a.' and then proceed in the same consecutive sequence as appropriated to the first Measurement: 'M2b.,' and 'M2c.' For articles that cannot be categorized under any bullet options of a measurement, "n/a" (not applicable) will be used instead.

### Analysis

The LexisNexis search of *The New York Times* yielded three articles on the topic of the correlation between livestock production and/or animal product consumption and climate change: "Meat and the Planet," "Rethinking the Meat Guzzler," and from "Hoof to Dinner Table, A New Bid to Cut Emissions." The articles were published on December 27, 2006, January 27, 2008 and December 4, 2008, respectively.

*The Guardian/Observer* search yielded six articles on the topic of the correlation between livestock production and/or animal product consumption and climate change: "Ethical living: Eat your greens: The government is keen to start telling us how different foods affect our carbon footprint. But it's not just about food miles" (*The Guardian*; June 7, 2007), "Why eating less meat could cut global warming: What you choose to put on your plate can have a huge impact on the planet" (*The Observer*; November 11, 2007), "A load of hot air?" (*The Guardian*; January 30, 2008), "UN says eat less meat to curb global warming: Climate expert urges radical diet shift: Industry unfairly targeted – farmers" (*The Observer*; September 7, 2008), "Is our taste for Sunday roast killing the planet?: A UN expert has blamed meat eaters for visiting environmental mayhem on the world as the demand for beef drives deforestation, water scarcity, air pollution and climate change" (*The Observer*; September 7, 2008), and "Meat must be rationed to four portions a week, says report on climate change: Study looks at food impact on greenhouse gases: Return to old-fashioned cooking habits urged," (*The Guardian*; September 30, 2008).

### Summary of Findings and Discussion

Both the *New York Times* of the United States and the *Guardian/Sunday Observer* from the United Kingdom yielded low search results on the topic through the use of the key search phrases of "Livestock's Long Shadow," "livestock and climate change," "meat and climate change," and "livestock, meat and climate change" between November 2006 and December 2008. However, the *Guardian/Sunday Observer* yielded twice as many results as the *New York Times*. Furthermore, the *Guardian/Sunday Observer* contained four times as many news articles (four articles, as opposed to only one news article in the *New York Times*), as well as one features article; the *New York Times* did not yield a features article. In terms of similarities, both print sources utilized "depiction" as its dominant framing device and relied relatively evenly on all three reasoning devices.

Regarding the amended Boycoff framework, both sources also generally supported the correlation between livestock production and climate change. Specifically, both sources either presented data in support of the connection between livestock and climate, or offered deviating standpoints while allowing the argument in favor of a connection (in line with the FAO estimates) to be the dominant position. The UK and U.S. sources also both contained one opinion piece each. Interestingly, the U.S. opinion piece asserted a strong position in favor of the FAO estimates, and appealed to the principles of the readership to adopt personal behavior changes in terms of dietary choices. By contrast, the UK opinion piece questioned the FAO estimates and asserted to undermine the implications of the U.N. report. This is notable because it contradicts the rest of the articles published in the *Guardian/Sunday Observer*, which outnumber that of the *New York Times*, and often contains more aggressive positions and visual imagery that favor the position of the FAO report. However, the most noteworthy consistency in both sources is that cautious/voluntary approaches to

address livestock production and climate change was the dominant measurement proposed for mitigation. Most articles focused on technological advances (like “methane digesters”), sustainable grazing methods, and small dietary adjustments. More aggressive/mandatory approaches—such as a mandated cap on livestock emissions, taxing animal products (akin to a “sin tax” associated with cigarettes), and labeling animal products (emissions associated with the product)—comprised a much smaller component of the articles in both sources. Also, in terms of dietary choices, most articles emphasized small changes, such as eating one meat free day a week or choosing sustainably produced meat and dairy products. More aggressive dietary changes, such as halving meat and dairy consumption, or rationing meat to four days a week, as one headline suggested, were minimal.

### **Conclusion**

The fact that the UK source yielded more search results on the connection between livestock and climate change seems consistent with the preceding data, which maintains that media coverage on climate change in the UK outnumbers U.S. coverage by an average of 2:1, and in recent years, 3:1 (Boykoff, 2007). Therefore, it would seem any facet of climate change—such as a potential contributing factor, and mitigation options associated with that factor—would also receive more coverage in the UK as opposed to the U.S. This is also consistent with the political and social norms of the UK regarding climate change. However, coverage in the *Guardian/Sunday Observer* is still sparse in comparison to its overall census of climate change articles in the past two years, comprising less than .13% of articles with the search phrase “climate change.”

Based on the current projections for population increases and trends in dietary habits, global consumption rates of meat and dairy would have to decrease at a per capita rate of 90 grams a day by 2050 to

stabilize livestock emissions (McMichael, et al., 2008). In turn, United States citizens, as the leading per capita consumers of animal products, would have to decrease individual consumption of meat and dairy products by two-thirds (Neff et. al., 2008). Relying on literature review, Neff et. al. concedes that media plays a central role in affecting public perception and therefore influencing public decisions, especially through article framing (2008). Since journalists are the “gatekeepers” of important information, they have the ability to play a direct role in transforming social constructions and redefining what constitute as common sense practices (Brulle & Dispensa, 2006). Therefore, without meaningful media coverage, it is unlikely that an issue will enter mainstream public discourse, and thus even more unlikely that it will be addressed by public policy (Brulle & Dispensa, 2006).

In order to affect the necessary dietary shifts that will stabilize livestock emissions, it is crucial for the government and industry to become involved and offer focused responses (Neff et. al., 2008). The media can help facilitate this change in both the U.S. and the UK through increasing the quantity of articles that cover this topic and offering a more in-depth analysis of opportunities to mitigate livestock emissions, including aggressive and mandatory actions.

*New York Times*

| Article                           | Word Count | Type                | Framing Device/s                                | Reasoning Device/s                         | M1. | M2. |
|-----------------------------------|------------|---------------------|-------------------------------------------------|--------------------------------------------|-----|-----|
| Meat and the Planet               | 277        | editorial           | visual image, depiction                         | appeal to principle                        | a.  | n/a |
| Rethinking<br>b. the Meat Guzzler | 2,260      | column<br>(opinion) | metaphor, visual image,<br>exemplars, depiction | roots, consequences                        |     | a.  |
| Hoof to Dinner Table              | 1,497      | news                | visual image, depiction,<br>exemplars           | roots, consequences<br>appeal to principle | b.  | b.  |

*Fig. 1*

*The Guardian/Sunday Observer*

| Article                                           | Word Count | Type     | Framing Device/s                       | Reasoning Device/s         | M1. | M2. |
|---------------------------------------------------|------------|----------|----------------------------------------|----------------------------|-----|-----|
| Eat your greens...                                | 1,510      | features | exemplars                              | appeal to principle        | a.  | b.  |
| Why eating less meat<br>could curb global warming | 952        | news     | depiction, metaphor                    | roots, appeal to principle | a.  | b.  |
| A load of hot air?                                | 1,065      | op-ed    | catchphrase, depiction                 | roots (causal analysis)    | d.  | b.  |
| UN says eat less meat...                          | 733        | news     | depiction                              | appeal to principle, roots | b.  | b.  |
| Is your Sunday roast<br>killing the planet?       | 1,638      | news     | visual image,<br>catchphrase, metaphor | roots, consequences        | b.  | b.  |
| Meat must be rationed ...                         | 899        | news     | depiction, exemplars                   | consequences, roots        | b.  | a.  |

*Fig. 2*



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## **NIMBY, Inverted Quarantine, and GHOST: A Comparative Look at Constructions of Environmental Risk and Their Implications for Environmental Action**

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### **Abstract**

*Global warming and its human and environmental consequences often defy the imagination in their immensity and complexity. It is therefore to be expected that the rhetorical constructions in the public discourse of global warming tend to lack tangibility and a sense of material reality—what I have termed the “spectral” construction of risk. This essay identifies the rhetorical dimensions of the global warming specter and a potential response to environmental risk this constructed view engenders represented by the acronym GHOST (Giving up Hope Of Stopping the Threat). I argue that unlike two other constructions of risk that lead to individual and collective action (NIMBY and Inverted Quarantine), the discursive construction of global warming serves to constrain environmental action.*

We live in an increasingly risky society. Rapid technological advancements have created what German sociologist, Ulrich Beck (1996), terms a “risk society” in which “autonomous modernization processes” have created universal and unaccountable risks “which are blind and deaf to the consequences and dangers” (p. 28). Technological innovations, according to Beck, have overwhelmed our ability to control or deal with the attendant risks—many of which are unknown and unintended. Perhaps at no other time in recorded history have we been faced with the degree risk we currently confront in the form of global warming.

Warnings are now so numerous that they have had almost a numbing effect. As Tim Flannery, in his influential book *The Weathermakers* (2005) remarks, “One of the biggest obstacles to making a start on climate change is that it has become cliché before it has even been understood” (p. 8). Despite the persistent barrage of prophetic warnings, the response from lawmakers, industry, and consumers has been less than inspiring. I believe and will argue that one of the reasons for the lethargic response can be found in the

discursively constructed nature of the threat.

Daily, we are confronted with the apparitions of our planetary demise—rising sea levels, changing ocean currents, melting ice caps, migrating species—all of which defy the imagination in their immensity and complexity.

Other-worldly rationalizations, commonly used to explain natural disasters, are often appropriated to explain human-caused disasters. Indeed the line between natural disasters and human-caused disasters has become increasingly blurred. Was Hurricane Katrina, for example, the caprice of Mother Nature or the wrath of God, or was it the product of anthropogenic global warming? Environmental problems, whether “natural” or “human-caused,” are often viewed as the work of some mysterious agent over which we have no control and their symbolic constructions often lack a sense of tangibility or material reality.

This essay examines some of the conventional constructions of environmental risk and is offered as a heuristic device to better understand, specifically, the public discourse of global warming and its potential for

motivating or constraining action. I will argue that, unlike other constructions of risk that lead to collective or individual action (NIMBY and inverted quarantine), the discursive construction of global warming serves to constrain environmental action. I begin with a brief discussion of two contemporary critiques of technological risk that provide a psychological and sociological grounding for what I have termed the “spectral view of environmental risk.” The essay then looks at the potential response this view engenders which happens to effortlessly construct an appropriately representative acronym—GHOST (Giving up Hope Of Stopping the Threat).

## **Two Contemporary Perceptions of Technological Risk**

The literature provides numerous social, psychological, political, and economic critiques of technological risks (see for example Barrett, 1978; Beck, 1996; Daly, 1970; Ellul, 1964; Galbraith, 1968; Marcuse, 1964; Mumford, 1970; Slack, 1984; Winner, 1977). I briefly mention two that are of particular relevance to this study.

Daly (1970) examined the psychological impacts of technology and suggested that when unexplainable events occur and are experienced by a number of people, “agencies” or powers are created to account for these events which take on a supernatural status. He describes what he terms the “spectral view of technology” that arises as a defense mechanism for coping with powers that “are known to be imminent in the world and are widely acknowledged to be capable of shaping the destinies of persons” (pp. 417-418). According to Daly, these specters are not merely the constructions of any given individual’s psychopathology. They are, in his view, products of mass cultural conditions and arise from “a sense of domination by mysterious agencies or forces which are, or were, linked to technological enterprises but which are now apprehended as being beyond the control of any particular man [or

woman] or collection of men [or women]” (p. 421).

In a similar vein, Winner (1977) examined a number of contemporary critiques of technology and suggested that many of these conceptions of technology reveal “a disorientation that borders on dissociation from reality” (p. 8). One “central obsession” of nineteenth and twentieth century literature, suggests Winner, is the idea of autonomous technology or the notion that “somehow technology has ‘run amok,’ is ‘no longer guided by human purposes,’ is ‘self-directing,’ or has ‘escaped all reasonable limits’” (p. 13).

Drawing on the analogy of Mary Shelley’s *Frankenstein*, Winner describes a view of technology as an unfinished creation that, like Dr. Frankenstein’s monster, is abandoned by its creator and forced to make its way in the world without responsible direction and control. Winner suggests that such “Frankensteinian” conceptions of technology are questionable, misleading, and can have destructive consequences. Among these consequences are passivity and what he terms “plausible deniability.”

Passivity stems from the complexity of technological innovations whereby “people are confronted with extraordinary events and functions that are literally unintelligible to them....Under these circumstances, all persons do and, indeed, must accept a great number of things on faith” (p. 284). People must trust with unquestioning acceptance the technologies over which they have no control and trust that the “experts” know what they are doing. This results in an “inherent tendency towards forgetfulness” in which one expects the technology to be present and working, but gives little thought or consideration to the “structure or principles of its internal workings” (p. 325). The products of technology are obtained, observes Winner, “without having to understand the factory or the distribution network. Energy is to be utilized without understanding the myriad of connections that made its generation and

delivery possible. Technology, then, allows us to ignore our own works. It is a license to forget” (p. 315).

“Plausible deniability” is likewise related to the complex nature of technology—so complex, in fact, that it extends its unintelligibility to the technicians as well. The human operators are often highly specialized in one small part of a complex technological system. This creates difficulties for assigning blame or responsibility for a system failure and sets the stage for “a novel doctrine of organizational cynicism—‘plausible deniability’” (p. 305). Under a system of complex specialization and compartmentalization, the human operators and controllers of technology can make the claim that “their complex environment prevents crucial information from reaching them and ‘truthfully’ claim later that they simply did not know” (p. 305).

The preceding contemporary critiques of technology emphasize the prevailing notion of risk as the product of autonomous technologies that somehow elude controlling agents. These critiques offer valuable psychological and sociological insights into the influences that lead to a view of technology-run-amok, and serve as a useful starting place for understanding the spectral view of risk. Yet, I suggest that not all environmental risks engender constructions of uncontrollable specters as discussed by Daly, nor do all kinds of environmental risk lead to passivity and plausible deniability, as discussed by Winner. There are some constructions of risk that lead to actions in one form or another to control the risk. The following takes a look at two such action-inducing constructions of risk and their related behavioral responses in the form of NIMBY and inverted quarantine.

#### **NIMBY**

One response to risk is public opposition in the form of what is

commonly referred to as the NIMBY (not in my back yard) syndrome. This happens when community members unite in opposition to the siting of a locally unwanted land use (LULU) that they fear will negatively impact the health and quality of life of the neighboring communities.

NIMBY phenomenon is not unique to contemporary risks. In their examination of what they term “locational conflict,” in nineteenth century Worcester, Massachusetts, Myer and Brown (1989) found that the newspapers of the time reported multiple cases of vociferous community opposition to the siting of such things as rendering plants, slaughter houses, and saloons. A frequent target of local uprising was millponds which were believed to generate a “miasma” or atmospheric poison. Among the most vigorously protested contemporary land uses are such things as hazardous waste incinerators, landfill sites, nuclear facilities, airports, and prisons.

Public opposition to LULUs is conventionally characterized by those who must face a determined and angry public as irrational, self-serving, parochial obstruction of land use projects that are necessary and will benefit the greater community. Consider, for example, this definition of NIMBY offered by Dear (1992): “NIMBY is the motivation of people who want to protect their turf” making it “almost impossible to build or locate vital facilities that the city needs to function” (p. 288). He even goes so far as to warn of a regression to feudalism if our leaders cave in to the fears and suspicions of NIMBY sentiments. “At the very moment when barriers are coming down around the world,” observes Dear, “we will find ourselves marching backward toward the imaginary safety of feudal fiefdoms defended by NIMBY walls” (p. 288).

When public opposition is viewed as a “feudal” protectionism that obstructs

necessary, “rational” planning, it should come as no surprise that the reaction to the opposition frequently takes the form of “overcoming irrationality through attitude adjustment: education to change selfish attitudes, persuading balky residents of the greater social benefit of a more rational approach, or constructing a legislative or judicial mechanism strong enough to steamroll the parochial impulse” (Lake, 1993, p. 88).

Characterizing NIMBY opposition as merely the self-serving reaction of those trying to defend their piece of turf at the expense of the greater societal good, fails to take into account a number of social factors that come into play, not the least of which is the significance of the stakes--“the property entitlement of a modest citizen that represents the bulk of her material wealth and that provides her stake in the broader political society (Brion, 1991, p. 208). The conventional characterization of NIMBY also fails to consider that the act of imposing these hazards against the will of those who are most impacted is “strongly at odds with two principles that are basic elements of our political myth: participatory democracy and the pluralism of values” (Brion, 1991, p. 208). Seen from this perspective, NIMBY objections are expressions of the sense of disenfranchisement that inevitably accompanies one’s exclusion from the democratic process at a time when personal stakes are the highest.

Robert Lake (1993) from the Center for Urban Policy Research at Rutgers University offers yet another way to frame the NIMBY phenomenon. As he explains, the conventional view of NIMBY is based on the assumptions that the LULU in question is necessary and provides an important social benefit--that waste incinerators, for example are necessary to protect the health and safety of the larger community. Lake calls this assumption into question by suggesting that “such

facilities are needed not by society, but rather by capital” and that NIMBY opposition does not obstruct societal goals so much as the goals of capital. As such, NIMBY represents a “struggle between capital and community through the intermediary of the state [the government entity responsible for permitting the facility]” (p. 288).

The strategy of siting unwanted facilities concentrates costs on local communities and ignores the alternative strategy of placing the costs on capital to restructure production so as to lessen the problem at its source by producing less waste. Ultimately, suggests Lake, the short term fix, whereby the community subsidizes the production industry, weakens incentives for producers to reduce waste production and fails to address the problem at its source.

Whether NIMBY is constructed as a self-serving protectionism or as opposition to subsidizing corporate capital, the behavioral response is the same—a community mobilized against a very real, tangible, immediate threat.

### **NIMBY and Implications for Environmental Action**

Community mobilization repeatedly has proven to be successful in not only stopping LULUs from moving forward, but also in compelling industry and government regulators to examine ways to ameliorate problems at their source. New Jersey offers a case in point. After proposed waste treatment and disposal sites in eleven different municipalities were quashed as a result of community opposition or environmental factors, and faced with the dilemma of a growing need for such facilities, New Jersey lawmakers enacted the Pollution Prevention Act of 1991. This act requires producers to reduce their use of hazardous materials and the production of hazardous wastes. Community activists in New Jersey, in creating the impetus to pass legislation,

scored a tactical win for their own communities and, at the same time, created the impetus for strategic pro-environmental planning that ultimately helps to protect all communities from being targeted as hosts for LULUs. Thus, the NIMBY response transcended local interests to represent a broader and ultimately more sustainable approach--NIABY (not-in-anyone's back yard). The majority of states now have similar forms of pollution prevention legislation in place.

To the extent that local victories lead to proactive strategies for pollution prevention, the outcome is increased environmental protection. Even when communities lose the siting battle, facility plans are often safer and cleaner as a result of community action. Yet, one must be cautious when characterizing NIMBY as pro-environmental action. The NIMBY response represents a wait-until-it-gets-close-and-then-react approach. NIMBY as tactical opposition will not and cannot always be successful. The fact remains that there is an ever present and increasing need for the services provided by the unsavory facilities. Successful opposition in one community may only serve to doom someone else's back yard and local victories may not ultimately translate into greater public good or pro-environmental policies.

The NIMBY response to threat presupposes a tangible, knowable threat that can be controlled by corporate or regulatory agents. The following examines a response to environmental risk that, although not as tangible and controllable as the NIMBY threat, can nevertheless be managed so as to reduce the threat.

### **Inverted Quarantine**

Sociologist Andrew Szasz (2007) discusses another response to risk in the form of what he terms "**inverted quarantine.**" This is a response in which individuals engage in acts of self-protection (like drinking bottled water,

applying sun screen, or eating organically grown produce) to keep the risk at bay. Szasz calls this "inverted quarantine" because unlike traditional quarantine where the purpose is to isolate a diseased individual in order to prevent contamination of the greater community, inverted quarantine involves the healthy individual isolating herself from a diseased community.

Inverted quarantine, which most often takes the form of self-protection through consumer products, is a rapidly growing industry in the United States. Bottled water, for example, is the nation's second best-selling beverage—second only to soft drinks (Szasz, 2007). Inverted quarantine also manifests itself in the rapidly growing organic food market. A few decades ago, organic foods represented only a small share of the food market, but after years of steady growth of the industry, are now a mainstream market. One can purchase organic foods in local supermarkets and chain stores across the country. Add to that the number of other organic products that consumers purchase—shampoos, soaps, household cleansers, cosmetics, clothing—and one begins to get the sense of the perceived vulnerability to risk that leads the consuming public, at least those who can afford it, to purchase protection in the form of inverted quarantine goods.

### **Inverted Quarantine and Implications for Environmental Action**

Szasz suggests that one of the consequences of inverted quarantine is what he terms "political anesthesia." This stems from the feeling that one has successfully insulated oneself from the toxic surroundings, thus reducing one's sense of urgency to do something more about that particular risk. In this way, the inverted quarantine mentality serves as an obstacle to pro-environmental action.

Although there are some collective benefits to purchasing some of the

inverted quarantine products, (as the market for organic foods increases, for example, the use of chemical fertilizers and pesticides decreases), many inverted quarantine products add significantly to the environmental contaminants from which these products aim to protect us. Bottled water, for instance, takes a tremendous amount of energy and raw materials to produce the fifty billion plastic bottles that American consumers purchase each year, most of which eventually end up in our landfills and lakes (Szasz, 2007).

Szasz is not suggesting that we should stop purchasing organic foods or other products to protect ourselves from the very real toxins in our environment. Rather, he is warning us that while inverted quarantine may reduce our exposure somewhat, it does not work well enough to truly protect us from the pervasive hazards. This will require collective environmental action and the rejection of “the comforting illusion” that there are purely individual solutions to our collective problems.

Thus far, two potential public responses to risk and their implications for environmental action have been examined—opposition in the form of NIMBY (or NIABY) and self-protection in the form of inverted quarantine. I suggest that there is another potential response to risk that stems from a patently different conceptual framework than either NIMBY or inverted quarantine. I offer a rhetorical perspective involving what I term “the spectral view of environmental risk” that is akin to Daly’s psychological explanation of the technological specter and Winner’s sociological explanation of the technological monster let loose without responsible controlling agents. I suggest that one possible response to the spectral construction of risk is what I have termed the “GHOST (Giving up Hope Of Stopping the Threat)” response.

Although all three responses--NIMBY, inverted quarantine, and GHOST--share a common view of risk as a powerful and foreboding threat, in the case of NIMBY and inverted quarantine, the threat is viewed as a tangible, knowable, material reality (the waste incinerator, the chemicals in foods), whereas with the spectral view it is seen as a mysterious, intangible threat. In the case of NIMBY and inverted quarantine, there is a sense that the risk can be controlled (the incinerator can be made to go away by the decision-makers; threat can be eliminated by careful food purchasing choices), whereas with the spectral view, there is a sense that the threat is beyond humans’ capacity to control. In the case of NIMBY and inverted quarantine, the risks are imposed by outside forces creating a sense of victimage, whereas with the spectral view there is recognition of individual and collective responsibility for the creation of the risk. The specter is the product of one’s own iniquitous behavior that has come back to haunt the modern world and exact revenge.

The following discussion draws on examples from the rhetoric used in global warming discourse to support my thesis that public discourse has rhetorically constructed a global warming “specter.” My aim is to demystify the specter by identifying and bringing to light its rhetorically constructed dimensions.

### **Rhetorical Dimensions of the Global Warming Specter**

The spectral dimensions of global warming discourse emerge prominently in the rhetoric of a multitude of environmental prophets. I offer only a few of examples to demonstrate the rhetorical sorcery that is used to conjure up the awesome specter. The examples are drawn from four influential books that have been published within the last five years. These include *Boiling Point* by Ross Gelbspan (2004),



*The Weather Makers* by Tim Flannery (2005), *Field Notes from a Catastrophe* by Elizabeth Kolbert (2006), and *Ecological Debt* by Andrew Simms (2005).

This is by no means an attempt at an exhaustive analysis of the discourse of global warming. The volume of literature would make this a massive undertaking far beyond the scope of this essay. The examples serve merely to demonstrate common rhetorical themes in global warming rhetoric. Nor do the themes I have selected to highlight comprise an exhaustive coding of the rhetoric of these talented and influential writers. In addition to their dire warnings, all four authors, in true jeremiadic fashion, offer direction for action and a sense of hope. I offer these theoretical musings as a means to open up the discussion in an effort to better understand and demystify the constructed reality of global warming.

The spectral construction of global warming has at least four rhetorical dimensions: 1) the specter is a powerful, foreboding threat; 2) that is mysterious and unknowable; 3) it is a product of our own past iniquities; and 4) it is beyond the capacities of humans to control.

We are repeatedly warned of the *powerful and foreboding threat* that the specter of global warming represents. Global warming literature is rife with examples of this rhetorical dimension. Consider, for example, the foreboding future implied by Gelbspan in the following statement: "The deep oceans are warming, the tundra is thawing, the glaciers are melting, infectious diseases are migrating, and the timing of the seasons has changed. And all that has resulted from *one degree* of warming. By contrast, the earth will become 3° F to 10° F warmer later in this century, according to the IPCC" (p. 183). Flannery describes the threat more tangibly when he states, "Given the scale of change confronting us, I think there is abundant evidence to support

Lovelock's idea that climate change may well bring about the end of our civilization" (p. 209).

Despite the numerous warnings of the foreboding threat, we also hear a great deal about the uncertainty of this *mysterious, unknowable* specter. The complexity of global warming easily lends itself to the rhetorical construction of a mysterious, unknowable specter. Even the most ardent global warming prophets like Tim Flannery recognize our current inability to know for sure exactly what we face: "Because concern about climate change is so new, and the issues so multidisciplinary, there are few true experts in the field, and even fewer who can articulate what the problem might mean to the general public and what we should do about it" (p. 4). Andrew Simms offers another description of the mysterious and unknowable nature of the specter when he states, "in fact, nobody knows precisely how the complex interactions in our biosphere will respond to global warming over coming centuries. We could be surprised in a few good ways, and many very bad" (p. 5).

Like many of our most celebrated apparitions, the global warming specter is a *product of past iniquities* and cannot rest until vengeance is carried out and justice is served. The public discourse on global warming frequently calls our attention to the fact that we have created the haunting threat by our own thoughtless consumer practices and must now bear the consequences. As Gelbspan points out, "Our fossil fuels have brought us to a level of abundance and prosperity that was unimaginable a century ago. Today they are propelling us forward into a century of disintegration" (p. 61). Flannery reprimands us for our iniquitous behavior and failure to acknowledge our own culpability when he states, "... there has been little reason for our blindness except perhaps an unwillingness to look such horror in the face and say, 'you are

my creation” (p. 210). Kolbert’s implies intentional, self-destructive behavioral choice when she states, “It may seem impossible to imagine that a technologically advanced society could choose, in essence to destroy itself, but that is what we are now in the process of doing” (p. 187).

Now that the specter has been let loose on the world as a result of our own iniquitous behaviors, it is *beyond humans’ capacity to control*—another discursively constructed characteristic of the global warming specter. Global warming prophets warn of “tipping points” and “thresholds” towards which we are rapidly advancing and which, when once reached, will set in motion irreversible and rapid climate change. Kolbert warns that “whether the threshold for ‘dangerous anthropogenic interference’ is 450 parts per million of CO<sub>2</sub> or 500, or even 550 or 600, the world is rapidly approaching the point at which, for all practical purposes, the crossing of that threshold will become impossible to prevent” (p. 185). Simms warns not just of possibilities, but of likely probabilities when he tells us, “There is now the real possibility of runaway climate change. The melting of ice shelves, death of vegetation and different factors feeding off each other point in the future to the submergence of the world’s major capitals. Even the expected reality of warming based on the continuation of observed patterns creates the specter of a problem beyond the capacity of humans to control” (p. 119).

### **Consequences of the Spectral View of Risk**

Operating on the assumption that any solution requires the recognition of a tangible problem and the identification of the agents who can bring about the necessary changes, the spectral view of environmental risk presents obstacles to pro-environmental action. When environmental problems are viewed as

mysterious, intangible, uncontrollable specters, we are inevitably left with a sense of overwhelming powerlessness in the face of an inscrutable foe. These constructions obscure constructions of material problems with tangible solutions and accountable controlling agents. As such, the specter serves as an obstacle to pro-environmental action in at least four ways.

First, the construction of an environmental problem as a mysterious, unknowable force encourages skepticism regarding the existence of the problem or the degree of the problem and promotes business-as-usual-until-we-know-more attitudes. The scientific uncertainty of global warming has been rhetorically played out in the public arena as a justification for failure to act on the part of U.S. policy-makers. Republican pollster and political consultant Frank Luntz actually goes so far as to recommend the strategic use of uncertainty to defer action in his now (in)famous memo to Republican leaders. “The scientific debate is closing (against us) but not yet closed” writes Luntz. “Voters believe that there is no consensus about global warming in the scientific community. Should the public come to believe that scientific issues are settled, their views about global warming will change accordingly” (Luntz, 2004).

Newspapers and other mainstream news outlets have perpetuated the myth of uncertainty. Despite the fact that in scientific circles it is almost impossible to find disagreement about the fundamentals of global warming (see for example, Oreskes, 2004; Weart, 2003), news organizations have created an artificial balance by their tendency to frame it as a conflict between opposing groups of scientists. Adding to this sense of uncertainty are groups like the Global Climate Coalition funded by dozens of major corporations in the petroleum, automotive, and energy industries. This organization was

dissolved in 2000 after several major supporters defected in light of the growing consensus and concern, but not before achieving the wholesale distribution of uncertainty through well-funded campaigns and lobbying efforts.

Even if we accept the certainty of the threat, the construction of the specter as a force beyond our capacity to control inhibits the construction of an alternative view in which accountability and control by responsible social agents is expected and demanded, a second consequence of the spectral construction. Rather than problematizing the failures of political and corporate decision makers, a kind of fatalistic cynicism arises—this is the standard we have come to expect. We place little faith in our leaders and lawmakers to solve the problem. In fact, a great deal of global warming rhetoric constructs government and industry as the specter's corporeal consorts who, rather than trying to constrain the specter, work to ensure its continued freedom from restraint in exchange for the earthly rewards it offers.

In the absence of social agents of control, responsibility falls to the individual—a third consequence of the spectral construction. The specter is, after all, a product of our own past iniquitous behaviors that have come back to haunt us. We are given numerous directives that we, as individuals can do to change our behaviors and mitigate the problem of global warming (using compact florescent bulbs, carpooling, planting a tree, etcetera). In light of the magnitude of the problem, however, it is difficult for me to believe that most people will naively accept the illusory notion of individual solutions. While our culpability as consumers is frequently brought to our attention, our options for changing our iniquitous behaviors and making restitution are limited. Thus, we are left with un-absolved guilt and little that can be done in the face of this invincible, revengeful specter. It is a

resigned acceptance of the unfortunate but inevitable—a genuine remorse, but a problem too big to solve. As such the spectral view is unlikely to spark the massive uprising of popular and political will that is needed to combat global warming.

A fourth potential consequence of the spectral view of risk is that it perpetuates the prevailing view that environmental problems must be solved by more advanced science and technology. Since there is little that political and corporate agents of control will do, and since there is little the individual can do, we call on the enigmatic sorcery of scientists and engineers to solve our problems. In this way, the specter serves to reinforce the reigning discourse in which science and technology are viewed as the key or only legitimate means of addressing our environmental problems.

Scientists play a crucial role in understanding the complex interactions of complex natural systems. Climate science and related fields have made rapid advancements in the past decade because of truly heroic efforts on the part of the scientific community. Their achievements have been and must continue to be rewarded and funded. A critical component of any solution will depend on their knowledge, creative problem-solving skills, and innovations in alternative fuels, renewable energies, and green technologies. Yet, in the long run, global warming cannot be studied and engineered out of existence. The real solution depends on the aggressive and cooperative efforts of individuals, industry, and governments.

### **An Alternative Construction of Global Warming**

Much of our environmental communication research is grounded in the postmodern assumption that much of what we know of reality is a symbolically constructed reality. The incumbent responsibility of the rhetorical scholar operating under this assumption

is to recommend ways to revision or reframe alternative, more sustainable constructions of reality. At the same time, we must continually remind ourselves that nature plays by its own inscrutable rules which are indifferent to symbolic refashioning. Shanahan and McComas (1999) describe this dialectical relationship of symbolic and objective reality in this way:

One may conceive of the environment as a rocket that cannot escape the gravitational pull of the objective reality of the natural environment. Although we can power ourselves on fanciful flights, reconceptualizing nature as we go, the reality of the physical environment will inevitably tend to pull us back. Any narrative will have to deal with this gravitational pull. (p. 5).

The gravitational pull of an increasingly unstable climate system places challenging constraints on our flights of symbolic fancy. How does one reconstruct the specter of global warming when it is inescapably tied to a powerful, foreboding reality? How does one go about rhetorically constructing a more efficacious, action-inducing flight of symbolic fancy without downplaying the significance of the problems we face?

If, as Cantril and Oravec (1996) suggest, "the only hope we ever have of preserving our environment is collectively to understand and alter the fundamental ways we discuss what we continually recreate" (p. 2), then a new discourse is in order if we are to create a unifying movement to drastically cut the consumption of carbon fuels. It seems to me that a good place to start is through demystifying the specter through the construction of a tangible, defeat-able threat. One possible way to do this is by dissecting the seemingly

impossible solution into more easily comprehensible component parts.

Researchers Pacala and Socolow (2004) suggest that the problem can be more easily

understood and addressed by breaking it down into more manageable blocks which they call

"stabilization wedges." Each wedge represents a step that would be sufficient to prevent one

billion metric tons of carbon per year from being emitted--the amount needed to cut

emissions in half by 2055. Since emissions need to be cut by a minimum of seven billion tons, seven wedges would theoretically be needed. Altogether, Pacala and Socolow came up with 15 different wedges. The following seven examples of their wedges demonstrate the encouraging news (the technologies we already have to do it) and the sobering news (the magnitude of effort it will take).

1) Wedge #1: Fuel economy: Increase fuel economy for 2 billion cars from 30 to 60 mpg;.

2) Wedge #2: Reduced vehicle use: Reduce travel for 2 billion cars from 10,000 to 5,000 miles per year;

3) Wedge #3: Efficient buildings and appliances: Cut carbon emissions by one-fourth in buildings and appliances;

4) Wedge #9: Nuclear power: Add 700 GW of nuclear power (twice the current global nuclear power capacity) to displace coal power;

5) Wedge #10: Wind power: Add 2 million 1-MW-peak windmills (50 times the current capacity);

6) Wedge #11: Solar power: Add 2000 GW-peak photovoltaic cells (100 times the

current capacity;

7) Wedge #13: Biomass fuel: Add 100 times the current Brazil or U.S. ethanol

production.

To put the effort required to implement these wedges into perspective, one million wind turbines, as called for by wedge #10, would take up an area roughly the size of the state of New York. The solar power wedge (#11) would require enough photovoltaic cells to cover the surface of Connecticut. It would require one-sixth of the world's total cropland to produce enough bio-fuels to meet the goals set in wedge #13.

If this seems like it is just too much to accomplish in the pressing time frame, one can take heart in the fact that there are still seven wedges left to consider. It is worth noting, however, that the model upon which Pacala and Socolow have based their predictions has been criticized for not being rigorous enough. Physicist Martin Hoffert (cited in Kolbert, 2006), believes that it will take as many as twelve wedges to simply keep emissions on the same upward trajectory. It should also be noted that the model is based on a fifty percent reduction of CO<sub>2</sub> emissions by the year 2050. Many climate change models now call for a 70 or even 80 percent reduction. Nobody said it would

be easy, but the wedge approach to viewing the solutions serves to demonstrate that we already possess the scientific and technological capabilities to do it without having to depend on the sorcery of new innovations. Standing on this solid base of optimism, new technologies serve to advance the pace towards an already attainable goal.

I have drawn on Pacala and Socolow's wedge approach as an example because I believe they have found one way of presenting the options so as to make it seem feasible to curb emissions and they have done so without downplaying the magnitude, complexity, and seriousness of the problem or offering false hope. In other words, they have presented a picture of a powerful threat, but without creating a sense that it is uncontrollable or left to individuals or the sorcery of science to control.

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## **A Sublime Junkyard?! Placing the Sublime in Contemporary Environmentalism**

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### **Abstract**

*This essay considers the role of the sublime in environmental rhetoric. Appeals to the sublime carry significant rhetorical force when advocating for the protection of pristine wilderness, but such appeals are limited in their applicability to a contemporary environmentalism concerned with inhabited environments and environmental justice issues. This essay details the problems of environmental rhetoric based on sublime appeals and suggests supplementing conventional notions of sublime (untouched) nature with a sense of the sublimity of a home environment. Excerpts from Janisse Ray's *Ecology of a Cracker Childhood* highlight the potential for environmental advocates to locate the sublime response in everyday environments. Ray's ability to find sublime nature in her home—a junkyard—demonstrates the possibility for appeals to the sublime to be used for more diverse environmental projects. Although historically used as a rhetorical appeal for pristine wilderness protection, contemporary rhetors may also activate the sublime response to encourage nature restoration and protection projects at home.*

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The sublimity of nature is a central theme of many appeals for environmental preservation. It is arguably, as Christine Oravec (1996) suggests, “the founding narrative—the primary trope—in the rhetoric of environmentalism” (p. 73). As a rhetorical convention, the sublime “is an integral part of the way we perceive nature, act with reference to it, and construct its relationship to ourselves” (p. 58). It “provides the perceptual foundation upon which we view the natural scene” (p. 73). A powerful example of the rhetorical significance of appeals to sublime nature can be found in the creation and preservation of Yosemite National Park. In Oravec’s (1981) examination of John Muir’s natural history essays on Yosemite, she demonstrates how “[h]is use of the sublime as a persuasive appeal encouraged an audience steeped in its social and ethical implications to consider seriously the creation of a national park” (p. 257). Kevin DeLuca and Anne Demo (2000) similarly discuss the sublime vision of Yosemite constructed in Carleton Watkins’ landscape photography as a primary rhetorical force for the wilderness preservation movement. They find that

“Watkins’ photographs established both an iconic vocabulary for environmentalist claims to public preservation and a way of viewing landscapes that endures in contemporary renderings of the American West” (p. 244).

As demonstrated in the preservation of Yosemite, the aesthetic of the sublime may serve as a powerful tool for the protection of wilderness. However, this rhetorical trope is not without limitations. Oravec (1996) questions how the convention of the sublime may also be used to “exploit nature,” not just “participate in saving it” (p. 71). DeLuca and Demo offer an insightful critique of the larger racist and classist cultural narratives called forth by Watkins’ sublime Yosemite photographs. The foundation for many critiques of the sublime convention in environmental rhetoric is the connection between the sublime and a “pristine” or “wilderness” version of nature. For example, while sublime appeals have provided support for preserving scenic “wilderness” like Yosemite, Oravec points out that they have not facilitated the creation of a diverse national park system that prioritizes “the

ecological goals of habitat maintenance, species preservation, or wilderness management” (p. 71).<sup>xix</sup> Similarly, DeLuca and Demo critique Watkins’ use of the sublime aesthetic for contributing to “the national myth of pristine nature” devoid of Native Americans (p. 256). In building support for the preservation of a particular kind of environment—pristine wilderness—appeals to sublime nature have historically denied the importance of protecting other, inhabited environments.

In response to the limitations presented by a sublime environmentalism, DeLuca and Demo briefly discuss how “environmental groups are finally constructing a vision of nature that transcends the sublime wilderness created in no small part by the visual rhetoric of Carleton Watkins and his successors” (p. 258). While I do not dispute the need to address the problematic consequences of an environmentalism focused solely on the preservation of *sublime wilderness*, this essay questions whether transcending the *sublime convention* is the best method for tackling these problems.<sup>xx</sup> As a discursive convention capable of prompting a strong affective response toward the environment, sublime appeals may provide a powerful resource for environmentalism beyond wilderness preservation. Although the sublime response has historically been activated in support of wilderness preservation, this essay considers whether it may also be used for a more diverse form of environmental appeal. Like William Cronon’s (1995) attempt to locate the wildness of wilderness at home, I look for the possibility of locating the sublime response in inhabited environments.<sup>xxi</sup> Just as Cronon suggests “[w]ilderness gets us into trouble only if we imagine that this experience of wonder and otherness is limited to the remote corners of the planet, or that it somehow depends on pristine landscapes we ourselves do not inhabit,” I suggest the sublime convention “gets us into trouble” only if we fail to see its potential application to inhabited environments (p. 88).

To examine the possibility for sublime appeals to be used for environmental advocacy other than wilderness preservation, this essay begins by outlining the rhetorical function of the sublime convention. After detailing the distinguishing characteristics of sublime appeals, the essay provides a more complete account of the historical limitations of environmentalism based on appeals to sublime nature. Then, a brief analysis of excerpts from Janisse Ray’s *Ecology of a Cracker Childhood* (1999) demonstrates how environmental rhetors may begin to locate the sublime response in everyday, inhabited environments. Ray’s ability to find sublime nature in her home—a junkyard—demonstrates the possibility for appeals to the sublime to be used for more diverse environmental projects. The essay closes with a reflection on the significance of supplementing traditional notions of sublime (untouched) nature with a sense of the sublimity of inhabited nature. Activating the sublime response to a home environment may ultimately encourage nature restoration and protection projects in the places we inhabit.

### The Rhetorical Function of the Sublime Convention

In the context of environmental rhetoric, the sublime may be understood as a “discursive convention” with two primary components (Oravec, p. 58). First, the sublime is a discursive pattern (linguistic or visual) used to depict nature. Second, the sublime is an affective pattern of response to that depiction. Oravec suggests the “tropic or conventional nature of the sublime might be the essence of its effectiveness as a basis for environmental advocacy,” so it is important to consider more specifically how the convention operates rhetorically (p. 70).

Oravec explains the sublime as a rhetorical convention that “prescribe[s] a set form of language and pictorial elements for describing nature” (p. 58). These elements frequently emphasize the “vastness, infinity, power, massiveness, mystery, and death”



found in nature (DeLuca & Demo, p. 246). Drawing from Edmund Burke, DeLuca and Demo contrast the language of the sublime with the language of the beautiful to highlight the characteristics of the sublime convention: "While the sublime is infinite, vast, massive, solid, rugged, vertical, and obscure mystery, the beautiful is comparatively small, smooth, delicate, clear, and pleasingly variable in shape (Burke, 1757, pp. 191-207)" (p. 248). The tendency to characterize sublime nature according to this pattern may be traced back to early theorists of the sublime. Edmund Burke (1909) described how the sublime response "comes upon us in the gloomy forest, and in the howling wilderness, in the form of the lion, the tiger, the panther, or rhinoceros" (p. 58). Immanuel Kant (1987) also linked the sublime to wild, chaotic depictions of nature: "it is rather in its chaos that nature most arouses our ideas of the sublime, or in its wildest and most ruleless disarray and devastation, provided it displays magnitude and might" (p. 99-100). Cronon (1995) further demonstrates the tendency of the sublime convention to highlight rare and "vast, powerful landscapes" by recounting the "eighteenth-century catalog of [sublime] locations... on the mountaintop, in the chasm, in the waterfall, in the thundercloud, in the rainbow, in the sunset" (p. 73). Although there are variations in the discursive pattern used to present sublime nature, it is easy to see how the convention has historically been equated with the experience of pristine wilderness. The scale and isolation of rugged American wilderness readily lends itself to the visual and linguistic conventions of sublime discourse.

In addition to being a discursive pattern used to depict nature, the sublime is also an affective pattern of response to that depiction. In other words, the discursive conventions used to present nature as sublime provoke a "sequence of emotions one might label the sublime response" (Oravec, 1996, p. 67). This pattern of response includes the sequence of feelings of "awe, despair, and exaltation" (Oravec, 1981, p. 256). First, the feeling of awe

involves the "apprehension of a sublime object" when "the individual subject encounters an object larger and greater than the self" (Oravec, 1981, p. 248; 1996, p. 67). Second, despair provides "a sense of overwhelming personal insignificance" (Oravec, 1981, p. 248). Christopher Hitt (1999) describes this as envelopment or "humility before nature... the realization that we are mortal creatures, 'beings of nature' whose lives are entirely dependent on forces greater than we are" (pp. 606-607). Drawing from Burke, DeLuca and Demo go further to describe this as "an intense passion rooted in horror, fear, or terror in the face of objects that suggest vastness, infinity, power, massiveness, mystery, and death" (p. 246). The feeling of despair may also be understood as the recognition of the limits of human reason and language in response to "the relative greatness of the object and the relative weakness or limits of the self" (Oravec, 1996, p. 67). Exaltation is the last stage in the emotional pattern of the sublime response. Through "spiritual exaltation" or "transcendence," "the individual is conceptually or psychically enlarged as the greatness of the object is realized and the individual identifies with that greatness" (Oravec, 1981, p. 248; Hitt, p. 620, Oravec, 1996, p. 67). While individual emotional responses to sublime discourse may vary, the convention prescribes that awe, despair, and exaltation are felt in response to sublime nature.

To summarize, in the context of environmental discourse, the sublime is a discursive convention for describing the aesthetics of nature that "encourage[s] a specific pattern of responses to nature that influence the ways we look at and alter natural scenery" (Oravec, 1996, p. 58). The use of the sublime convention is potentially significant for environmental reform for a number of reasons. Oravec discusses the "political tendency" of the sublime by considering its capacity to encourage (or discourage) "political involvement in issues concerning the environment" (pp. 69, 71). She also recognizes the sublime's potential "to evoke emotional responses toward

nature, to confirm aesthetic or ethical beliefs about nature, and to call attention to particular landscapes for settlement, tourism, or preservation” (p. 58). For the purpose of this essay, two rhetorical functions of the sublime convention are especially important to consider. First, sublime rhetoric is significant for its capacity to invoke an affective response to nature. Second, sublime rhetoric is significant for its capacity to shape human beliefs about nature.

The sublime is traditionally understood as an affective, emotional response. Burke described sublime objects as “productive of the strongest emotion...[w]hatever is fitted in any sort to excite the ideas of pain and danger” (p. 36). In Nathan Storrer’s (2004) essay on mass representations of the sublime in Ansel Adams photographs, he characterizes sublimity as “an *affective response*” (p. 215). In the context of environmental discourse, Cronon describes the “emotion evoked” as “[a]mong the best proofs that one had entered a sublime landscape” (p. 73). The affective function of the sublime convention is key to its rhetorical significance because it promotes an emotional engagement, response, and recognition of nature that may allow environmental rhetors to “circumvent the rational processes and institute a knowledge more fundamental than rationality could supply” (Oravec, 1981, p. 249). Sublime rhetoric may “convey an intensely personal and immediate psychological and physical sensation” of nature (p. 251). Hitt suggests that “a sublime encounter with nature seems to have the power to jolt us momentarily out of a perspective constructed by reason and language, a perspective that, in modern Western culture, has rendered nature mute” (p. 617). The affective capacity of the sublime convention is thus important because it may activate a felt experience of the relationship between humans and nature.

The second significant function of sublime rhetoric is its capacity to frame this

human-nature relationship. DeLuca and Demo show how “the discourse of the sublime directs and constrains how nature is perceived, pictured, and discussed” (p. 246). Oravec describes the sublime as “a perceptual screen through which we see nature,” and she explains that the sublime convention projects “human expectations and desires upon the landscape” (1996, pp. 58, 61). That is, it shapes human beliefs about nature and sets our environmental values and priorities. Storrer describes how the sublime “maps out a relationship between a cultured humanity, which is constituted by its discourse, and a universe which contains and sustains that humanity from beyond culture” (p. 232). In its current form, the human-nature relationship most often constructed by the sublime shapes our vocabulary for talking about nature in a way that privileges wilderness. By inducing a reverence for nature apart from humans, sublime rhetoric encourages a wilderness view of sublime nature. Although this view helps facilitate the preservation movement within environmentalism and supports the public protection of places like Yosemite National Park, the association between wilderness preservation and the rhetoric of the sublime presents several problems, which will be explored in more detail in the following section.

As a “conventional linguistic device,” the sublime is thus rhetorically significant because it “represents or encodes our understanding of the natural world” and elicits an affective experience of that natural world (Oravec, p. 68). For this reason, Oravec concludes, “the rhetorical convention of the sublime has enormous persuasive force” (p. 73). Despite this persuasive potential, sublime appeals have not been widely used or recognized in environmentalism outside the context of wilderness preservation. After detailing the limitations of the sublime convention in the next section, this essay explores the possibility for an environmental discourse that activates the rhetorical force of the sublime convention for environmentalism beyond wilderness preservation.

## **Limitations of the Sublime Convention**

Although the conventions of sublime discourse make it a powerful rhetorical resource to argue for the preservation of nature, sublime rhetoric also has a number of weaknesses that limit its use as a persuasive tool for environmentalists. First, the articulation of the sublime with a wilderness version of nature imposes constraints on environmental appeals. Because the discursive patterns used to describe sublime nature support a view of nature apart from people, the limits of sublime appeals parallel those associated with the ideal of pristine wilderness. Like the problematic myth of untouched wilderness, the sublime convention may advance an environmentalism that overlooks ordinary, inhabited environments and erases people from the land. In addition to the limits caused by the articulation of sublimity with wilderness, a second major weakness of sublime environmental appeals stems from the mass circulation of representations of sublime environments. Mass representations of sublime nature may block more diverse appropriations of the sublime, present a domesticated and commodified version of the sublime, and foster disappointment with immediate experiences of nature. While representations of the sublime and its articulation with wilderness impose limits on the rhetorical effectiveness of sublime appeals for environmentalism, understanding these limitations may allow us to adopt the sublime convention for more broad appeals.

The articulation of the sublime response with untouched wilderness is problematic because it transfers the problems of the wilderness ideal to the sublime convention. Although vast tracts of uninhabited nature do exist, the wilderness ideal is a socially constructed myth. Nature is not completely pristine, wild, or separate from human influence. As Bill McKibben (2006) documents in his well-known book, *The End of Nature*, humans now impact “every inch of the planet... even those places where we [are] not” (p. xx-xxi).

Nature is not a “separate and wild province” or a “larger force” that rules humans, but instead is an entity always impacted by human force (pp. 48, xx). Because the sublime convention—like the wilderness ideal—may encourage “us to believe we are separate from nature... [it] is likely to reinforce environmentally irresponsible behavior” (Cronon, p. 87). A sublime vision of nature as untouched and untouchable may further suggest that humans cannot inflict irreparable harm to the environment. As Oravec explains, “[t]he sublime, in its emphasis upon the limitless and grand aspects of nature, might also reinforce the impression that the environment cannot be substantially damaged by human efforts” (p. 72). While natural systems are “fragile in reality,” they are “durable in our imaginations” and in the rhetoric of the sublime (McKibben, p. 58).

The connection between sublime appeals and a wilderness-oriented approach toward environmentalism presents additional problems because it overlooks the significance of protecting ordinary environments. Cronon highlights this limitation of the sublime convention, writing: “[m]ost of us, I suspect, still follow the conventions of the romantic sublime in finding the mountaintop more glorious than the plains, the ancient forest nobler than the grasslands, the mighty canyon more inspiring than the humble marsh” (p. 86). He goes on to suggest: “[b]y teaching us to fetishize sublime places and wide open country, these peculiarly American ways of thinking about wilderness encourage us to adopt too high a standard for what counts as ‘natural’” (pp. 86-87). The historical link between the sublime and ancient, noble, and mighty wilderness facilitates a form of environmentalism that overlooks the importance of ordinary and inhabited environments. If the sublime environment worth protecting is the “fresh and untainted [wilderness] elsewhere,” then the environmental degradation in ordinary environments may be ignored (McKibben, p. 58). A sublime rhetoric that concentrates environmental efforts on the protection of

“untainted” nature is further limited because in a world undergoing anthropogenic climate change, not only is there no “untainted” nature to protect, but human actions in home environments have an impact on the nature that is “elsewhere.”

Because sublime appeals have historically privileged a wilderness version of the environment, they have not provided support for increasing environmental responsibility in inhabited environments. DeLuca and Demo demonstrate how the focus on the preservation of pristine wilderness relieves environmental groups “of the responsibility of protecting non-pristine areas and of critiquing the practices of industrialism that degraded the general environment...if the places people live are by definition not nature, environmental groups need not concern themselves with inhabited environments” (p. 257). When articulated with wilderness, sublime rhetoric offers little support for environmentalism in the places where we live, and it acts as a “conceptual blinder” that prevents environmental groups from focusing on environmental issues other than preservation, such as pollution or damage associated with human use of the land. This neglect of people and the places people inhabit also isolates environmentalism from other progressive movements, such as labor and civil rights, and prevents the formation of useful political alliances (DeLuca, 2001).

In addition to failing to support environmentalism at home (and in places other than wilderness), the articulation of untouched wilderness and the sublime is also problematic for its racist and classist implications. DeLuca and Demo demonstrate how, in the case of Yosemite, “[t]he construction of pristine wilderness as nature, largely the product of an urban, upper-class, white, industrialized cultural formation, marginalized other cultures’ visions of nature and human-nature relations, most obviously those of Native Americans” (p. 257). Worse, the myth of pristine sublime nature commits historical violence by erasing the presence of Native

Americans and workers from landscapes such as Yosemite. DeLuca and Demo suggest that “[i]n not taking photos of Native Americans and their traces, Watkins’ contributed to the larger cultural project of effacing Native Americans both literally and figuratively in service to the national myth of pristine nature” (p. 256). The sublime construction of nature as pristine wilderness further marginalizes people on the basis of race and class since the ability to go visit pristine wilderness—and thus have access to the sublime experience—often breaks down along those lines.

While the first series of problems of sublime environmental appeals stems from the articulation of sublimity with wilderness, the second set of problems originates with *representations* of the sublime. In their present form, images and descriptions of sublime nature may close down the potential for other types of access to sublime nature, present a technological and domesticated version of sublime nature, and result in disappointment with real nature encounters. Storrer suggests that by singling out certain types of pristine wilderness scenes as sublime, “large portions of the visual field (other potentially sublime scenes) are deleted from consideration” (p. 219). He explains that all people are expected to access sublime nature in the same way, to value the same representations of sublime nature, “to desire the same limits, to find renewal in the same failures” (p. 233). This is problematic for environmentalism because it excludes the possibility for experiencing a sublime response to nature in different kinds of places, including those where we live.

Additionally, representations of sublime nature present a technological sublime that domesticates and commodifies the emotional experience of the sublime. DeLuca and Demo explain how photographic representations domesticate the sublime by replacing the participant’s feelings of risk and despair with the spectator’s feelings of comfort: “Watkins’ images blaze a trail for the tourist at the expense of the adventurer and hollow out

the sublime, leaving only spectacle" (p. 249). This "reduction" of the sublime to a "domestic spectacle" occurs because the representative distance from the sublime object allows individuals to possess and commodify it rather than experience the affective response of awe, despair, and exaltation (p. 254). Because representations construct sublime nature as "out there," as opposed to "at home," most people are forced into the passive role of observing a domesticated sublime. For most, the sublime experience of nature exists only as mediated by technology (even if people go visit representative sublime sites) because it is removed from the realm of experience. In contrast, representations of a sublime nature discovered at home might jolt people out of the comfort of being spectators and reposition them as participants confronting the risks and emotions associated with sublime nature.

A final limit of the sublime convention is that representations of sublime nature can lead to disappointment over experienced encounters with nature. Because representations of the sublime present us with the "best view" of nature, we often enter into nature seeking these representations. Oravec describes the sense of disappointment created by sublime representations:

Everyone who has been a tourist has experienced this self-reflexive effect of scenic representation. We travel to see the sights that we have become familiar with in pictures or descriptions, and we are less than satisfied if our preconceptions are confirmed. Oddly enough, however, it is often the scenery, not the representation, that dissatisfies us. (p. 59-60)

Sublime representations of nature may surpass actual experiences of sublime nature. This is exacerbated by the fact that as pristine wilderness disappears, nature "scenery" changes, but our fixed representations of sublime nature prevent us from adapting our conception of what nature "is" in a way that facilitates protection

of our changing environment. From overcrowded national parks to inhabited environments, representations of the sublime often fail to correspond to our actual experience of nature, so the environmental protection afforded to sublime nature loses effectiveness.

Although sublime nature is traditionally represented in a way that limits its rhetorical appeal to wilderness preservation, these limits may be addressed by expanding the application of the sublime convention to representations of more diverse environments. By locating the discursive and affective patterns of the sublime in inhabited environments, environmental rhetors may reap the benefits of the sublime's persuasive appeal, while overcoming some the weaknesses outlined above. The next section explores how sublime appeals might be disarticulated from the preservation of pristine wilderness and used more broadly to support environmental protection and restoration at home.

### **Locating a Sublime Environment at Home**

*In south Georgia everything is flat and wide. Not empty. My people live among the mobile homes, junked cars, pine plantations, clearcuts, and fields. They live among the lost forests... I was born from people who were born from people who were born from people who were born here. The Crackers crossed the wide Altamaha into what had been Creek territory and settled the vast, fire-loving uplands of the coastal plains of southeast Georgia, surrounded by a singing forest of tall and widely spaced pines whose history they did not know, whose stories were untold. The memory of what they entered is scrawled on my bones, so that I carry the landscape inside like an ache. The story of who I am cannot be severed from the story of the flatwoods (Ray, pp. 3-4).*

In *Ecology of a Cracker Childhood*, Janisse Ray presents the story of her family history as inseparably interwoven into the history of the longleaf pine forests of south Georgia. In contrast to traditional, pristine wilderness representations of sublime nature, Ray locates the sublime in an unlikely environment—a junkyard. Her use of the sublime convention to argue for conservation and restoration in an inhabited environment demonstrates the possibility for sublime appeals to advance environmentalism beyond wilderness preservation. The sublime nature that Ray discovers in her junkyard home is the possibility of what lies beneath it, behind it, and in it. For Ray, sublime nature is present in the absent longleaf pine forests, its remnant species, and the metaphorical wildness experienced in the junkyard. Even though Ray's home seems to be the opposite of sublime nature, she finds its lingering presence in her home.

Before examining Ray's writing in more depth, it is important to acknowledge other attempts to theorize how the sublime convention may be used for environmental appeals beyond wilderness preservation. In Christopher Hitt's (1999) essay, "Toward an Ecological Sublime," he explores the ecological significance of "the aesthetic of sublimity" and proposes "a reconfigured version of the sublime—an 'ecological sublime'" that activates the affective structure of the "traditional natural sublime" for more ecologically sound ends (pp. 605, 607). Like the conventional sublime response, Hitt's ecological sublime follows the pattern of awe, despair, and exaltation, but it offers "a new kind of transcendence which would resist the traditional reinscription of humankind's supremacy over nature" (p. 609). By focusing on the capacity of the sublime response to present a sense of "humility before nature," Hitt seems to extend the despair of the sublime response into its resolution in exaltation. Unlike Hitt's attempt to substitute the transcendence of human over nature with transcendence of wild nature over human

reason and logic, this essay does not revise the affective structure of the sublime response, but instead attempts to broaden the environmental significance of sublimity by recognizing how it might be evoked in response to different parts of nature (beyond wilderness).<sup>xxiii</sup>

In an article on the "missing sublime" in Latvian landscape aesthetics, Edmunds Bunkše (2001) attempts a similar project as he provides evidence for the presence of the sublime in Latvia. Despite the historical denial of "the existence of the sublime" in Latvian landscapes and cultural narratives, Bunkše suggests "it could be an intrinsic value associated with certain aspects of nature," and he provides examples from Latvian poetry that "evoked sublime images of tall coastal pines in a gale" (pp. 235, 241). Bunkše's effort to encourage Latvians to "discover the sublime in their own homeland" parallels this essay's attempt to expand the applicability of sublime rhetoric (p. 245). Although Bunkše's essay provides further support for the argument outlined here, he focuses narrowly on applying the sublime aesthetic to the Latvian landscape, and does not theorize more broadly about the rhetorical function of the sublime appeal.

A more recent article by Finis Dunaway (2005) also uses the term "ecological sublime" in a way that complements the efforts of this essay. In Dunaway's discussion of the "ecological sublime," he analyzes how photographers Eliot Porter and Charles Pratt expanded the realm of the sublime beyond the "wilderness ideal" by encouraging "viewers to see sublimity in quiet, modest landscapes" (pp. 78, 80). Dunaway defines the "ecological sublime" as "a sense of awe and respect not for the overwhelming and the majestic, but instead for the bonds of exchange that link and sustain communities in nature" (p. 84). He views Porter and Pratt's efforts "to defamiliarize the familiar, to find awe in natural processes and ecological communities," as examples of this ecological sublime (p. 80). Dunaway's attempt to view the ecological connections represented in photographs as sublime

provides one way to conceptualize the sublime response beyond “the distant world of wilderness” (p. 88). However, the capacity to locate the sublime in inhabited environments is not limited to the ecological sublime’s focus on ecosystem interconnectivity. As illustrated below, the sublime response to a home environment may also be activated through a narrative of absence, remnants, and wildness.

As demonstrated by the epigraph at the beginning of this section, one way that Janisse Ray arouses the sublime response to her home environment is to discuss the loss or absence of pristine nature. Her description of south Georgia as “not empty” is the opposite of a representation of Romantic sublime wilderness, yet the response she describes to the inhabited land of “mobile homes, junked cars, pine plantations, clearcuts, and fields” is one that recognizes the historic sublimity of that landscape, with its “vast, fire-loving uplands... tall and widely spaced pines” (pp. 3-4). In a later passage, Ray further contrasts the present state of her home to typical conceptions of sublime nature:

My homeland is about as ugly as a place gets. There’s nothing in south Georgia, people will tell you, except straight, lonely roads, one-horse towns, sprawling farms, and tracts of planted pines. It’s flat, monotonous, used-up, hotter than hell in summer and cold enough in winter that orange trees won’t grow. No mountains, no canyons, no rocky streams, no waterfalls. The rivers are muddy, wide and flat, like somebody’s feet. The coastal plain lacks the stark grace of the desert or the umber panache of the pampas. Unless you look close, there’s little majesty. (p. 13)

In describing her home as “ugly,” “flat,” “monotonous,” “used-up,” and admitting that it lacks the mountains, canyons, and waterfalls usually associated with the sublime convention, at first Ray seems to be using the opposite of a sublime appeal. Yet

she reminds readers to “look close.” She continues:

It wasn’t always this way. Even now in places, in the Red Hills near Thomasville, for example, and on Fort Stewart Military Reservation near Hinesville, you can see how south Georgia used to be, before all the old longleaf pine forests that were our sublimity and our majesty were cut. Nothing is more beautiful, nothing more mysterious, nothing more breathtaking, nothing more surreal. (p. 13-14)

Through the opposition between the former and current state of her home environment, Ray relies on the sublime convention to arouse an emotional response to the sublimity and its loss. Despite the ugliness, Ray sees the sublime through the human inhabitants, through the ecological devastation, and through societal expectations of where sublime nature is found.

Throughout the book Ray discusses the sublimity of the longleaf pine forests that used to occupy her home. She accesses the sublime experience of the lost forests by visiting remnant old-growth stands and by “remembering” the forests in her home. Although now absent from her home environment, she describes the experience of an old-growth longleaf pine forest as sublime, reporting how the “tremendous girth and height of the trees” causes you to “amble, slower and slower” as “[t]he blood begins to languish in your veins” and “[y]ou look up at leaves so high their shapes are beyond focus” and “[e]very limb of your body becomes weighted, and you have to prop yourself up” because “[t]here’s this strange current of energy running skyward, like a thousand tiny bells tied to your capillaries, ringing with your heartbeat” (p. 68). Through such depictions, Ray mourns the loss of the original, sublime longleaf pine flatwoods. She also appeals to the sublimity of the lost forests by looking closely at her home and its history and “remembering.” She suggests that:

Maybe a vision of the original longleaf pine flatwoods has been endowed to me through genes, because I seem to remember their endlessness. I seem to recollect when these coastal plains were one big, brown-and-tan, daybreak-to-dark longleaf forest. (p. 65)

Although the once sublime forests are now absent, Ray still activates sublime appeals to advocate for the restoration of her home environment. She dreams of “restoring the junkyard to the ecosystem it was when Hernando de Soto sauntered into Georgia,” and she closes her book with a vision of “the forest so grand” that her “granddaughter’s granddaughter” will see restored (pp. 268, 273). The absence of the longleaf pine forests does not diminish the connection to the sublime nature experience she implores her readers to feel in the junkyard. Instead, Ray uses this absence as the access point for her activation of a sublime appeal for environmental restoration.

In addition to Ray’s use of the lost or absent forests to make sublime appeals for environmental restoration, she further engages the sublime convention through her discussion of remnants of the sublime longleaf forests. That is, the sublime nature Ray experiences is not only one of absence—of the past sublimity of the pristine longleaf pine forests—but of remnants of the sublime experiences that linger in Ray’s body and the landscape. For example, she explains how:

For me, growing up among piles of scrap iron and glittering landmines of broken glass that scattered ivory scars across my body, among hordes of rubber tires that streaked my legs black, among pokeweed and locust, I attribute the opening of my heart to one clump of pitcher plants that still survives on the backside of my father’s junkyard. I know it now to be the hooded species, *Sarracenia minor*, that sends the red bonnets of its traps knee-high out of soggy ground...The

pitcher plant taught me to love rain, welcoming days of drizzle and sudden thundering downpours, drops trailing down its hoods and leaves, soaking the ground. (pp. 127-128)

In describing “the survival of rare, precious, and endangered biota” such as the pitcher plant, Ray alludes to the larger sublimity of nature beneath the junkyard (p. 128). From this remnant native species, Ray builds an appeal to the sublimity of that lost ecosystem as she recounts the lessons learned about the “sinlessness of predation,” “the glory of purpose,” and “a way of being” in nature (p. 128). This passage suggests that attending closely to the nature that exists in our homes offers the opportunity for accessing the sublime response to inhabited environments, rather than to pristine wilderness. Although Ray’s response to the pitcher plant may not be one of “immediate apprehension,” or “overwhelming personal insignificance,” or even “a kind of spiritual exaltation,” I argue that the discovery of the pitcher plant opens Ray up to experience a kind of sublime response to and in her home (Oravec, 1981, p. 248).

Ray’s depiction of the sublime experience of remnant species further demonstrates the interpenetration of human culture and nature as she finds not only nature, but herself, “among what has been and what remains” (p. 4). She writes:

I go where my grandmother’s name is inscribed on a clay hill beside my grandfather. The cemetery rests in a sparse stand of remnant longleaf pine, where clumps of wiregrass can still be found. From the grave I can see a hardwood drain, hung with Spanish moss, and beyond to a cypress swamp, and almost to the river, but beyond that, there is only sky. (p. 4)

The intermingling of the remnants of sublime nature with her ancestors further demonstrates the capacity for locating the sublime in a home environment. For Ray, the sublime response is in response to the



landscape and the people as they have interacted throughout history.

The final way that Ray locates the sublimity of nature in her home environment is through the use of the metaphor, “a junkyard is a wilderness” (p. 268). She draws three explicit parallels between a junkyard and a wilderness. First, Ray compares the “random order, the odd occurrence and juxtaposition of miscellany, backed by a semblance of method” that can be found in both a junkyard and a wilderness (pp. 268-269). She suggests that in a junkyard “you’ll see some of the schemes a wilderness takes” (p. 269). Although the loose organization of cars by age and model offers a different “logic of ecology,” than the succession of regenerating pine trees, the parallels highlight a connection between humans and nature (p. 269). The second point of comparison is the tendency to “encounter the unexpected” in a junkyard as you would in a wilderness (p. 269). Again, the “bodyless doll’s head” and “thirty feet of copper pipe” differs from the “brown eyes of a barred owl” or “a purple stretch of carnivorous bladderworts in bloom,” but the similarities encourage readers to see the human in nature environments and nature in human environments. The final similarity between a junkyard and a wilderness is that of danger. Like the “rattlesnakes, avalanches, [and] polar bears” of the wilderness, the “shards of glass, leaning jacks, [and] weak chains” of the junkyard threaten to harm those who enter (p. 269).

By blurring the boundaries between a wilderness and a junkyard, Ray is not suggesting that a landscape literally trashed by humans is equivalent to a pristine wilderness. Rather, the ecological order, unexpectedness, and danger of the junkyard wilderness provide Ray with an entrance to the sublime experience of the nature in her home. She mourns the loss of the sublime longleaf pines, showy orchis, pine lilies, and Bachman’s sparrow that no longer inhabit her home environment, but through the metaphoric comparison, Ray is able to see the wildness of the wilderness in

the junkyard (p. 270). A letter from her brother Dell furthers this comparison as he describes the “feeling of dread” and “awe” felt in response to the “dense canopy trees” and “mammoth beasts” in the “magical wilderness” of the junkyard (pp. 269-270). Although Dell’s description is clearly from the imaginary world of a child exploring a junkyard, the junkyard wilderness metaphor encourages readers to see this series of (sublime) emotions as applicable to both the junkyard and the lost wilderness. The junkyard wilderness metaphor provides a vehicle for locating the sublimity of nature through and in an inhabited home environment.

The sublime nature Ray experiences—and encourages her readers to experience—is one of remnants, of absence, and of the past sublimity of the pristine longleaf pine forests, yet the power of the sublime response Ray experiences through her home environment remains. By activating the power of the sublime response to the inhabited nature of her junkyard wilderness, Ray’s writing re-opens the environmentalist potential of sublime representations and demonstrates the possibility for using the sublime convention for environmental appeals beyond wilderness preservation.

### Conclusion

*Sometimes there is no leaving, no looking westward for another promised land. We have to nail our shoes to the kitchen floor and unload the burden of our heart. We have to set to the task of repairing the damage done by us and to us* (Ray, p. 103).

As Ray demonstrates in *Ecology of a Cracker Childhood*, addressing environmental issues sometimes requires working through the damage and ugliness to fix the problems where you are. Just as environmentalists cannot afford to simply abandon damaged environments, this essay suggests we should not abandon “damaged” or limited rhetorical appeals. Although the sublime convention has

historically been used to represent and support the preservation of pristine wilderness, contemporary environmentalists may be able to activate its persuasive power for more broad environmental appeals. In other words, the sublime convention may be productively reinhabited and restored as a persuasive tool for contemporary environmentalism. Ray's ability to locate the sublime response in an inhabited environment provides hope that the affective power of sublime rhetoric is not limited to appeals for the preservation of pristine wilderness.

Learning to adapt the sublime convention to more diverse environmental appeals is important because the affective pattern of response carries a powerful persuasive appeal that may help revive the emotional connection between humans and the environment. Additionally, the problems created by sublime representations of pristine wilderness may best be addressed by appropriating the sublime convention for a home environment. Although mainstream environmental groups are solving some of the problems created by sublime appeals by expanding "their range of issues beyond just wilderness issues," forging alliances with environmental justice, civil rights, and labor groups, and using alternative rhetorical appeals, such solutions fail to equip environmentalists with the necessary resources to resolve all of the limits of sublime representations (DeLuca & Demo, p. 258). Rather than envisioning the sublime convention as one of the tools of environmentalism that can be used or set aside depending on the type of environmental protection being sought, this essay suggests incorporating the appeal of sublime nature into *all* kinds of environmentalism. Infusing a sense of the sublimity of nature into different forms of environmentalism—not just wilderness preservation but environmental justice, conservation, and restoration efforts—may enhance the effectiveness of a variety of environmental appeals. Because the sublime convention continues to shape our perceptions of the environment today,

environmental rhetors should attempt to channel that rhetorical power, not transcend or detach from it.

By examining Ray's writing as an example of how the sublime convention may be used for environmental appeals at home, this essay has tried to show that locating the sublime in home environments does not mean turning solely to human culture as a source for sublimity or looking for representations of pristine wilderness at home (like the Ansel Adams calendars, posters, day planners, etc. that Stormer refers to). Rather, like Cronon's recognition of the wildness of the tree in the garden, locating sublime nature at home means activating an affective sublime response to nature in the places where we live.<sup>xxiii</sup> Ray's writing offers hope that the limits of a sublime environmental appeal may be addressed by bringing it home, by evoking the sublime response in a non-wilderness environment. By locating the sublime in our homes, we can remember the origins of the environment in which we live and discover sublime nature in a way that enables and encourages us to work to protect and restore our inhabited environment.

Oravec suggests that Muir's rhetorical success stemmed from "wedding a primarily aesthetic convention [the sublime] to a motivation for action not only appropriate to his subject, but appropriate to his place and time" (p. 256). What is appropriate to our place and time is to locate the sublimity of our home environments and use the sublime convention to attract support for a variety of environmental projects. Because "the sublime feeling produced by wilderness is not an innate, universal feeling but a culturally conditioned response" (DeLuca, p. 11), I am hopeful that environmental advocates may appropriate and adjust the sublime convention for a variety of environmental appeals, not just for the preservation of distant wilderness. The sublime has been an effective rhetorical trope of the environmental movement, but to continue to be so, we need to resituate it within the places where we live..

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## Notes

<sup>xix</sup> Cronon also emphasizes the influence of the sublime convention on the selection and protection of national parks: "Less sublime landscapes simply did not appear worthy of such protection; not until the 1940s, for instance, would the first swamp be honored, in the Everglades National Park, and to this day there is no national park in the grasslands" (p. 73).

<sup>xx</sup> I do believe that the preservation of wilderness is an important part of American environmentalism, but it becomes problematic if that becomes the only form of environmental concern.

<sup>xxi</sup> Cronon asks: "How can we take the positive values we associate with wilderness and bring them closer to home?" (p. 87). I am asking: how can we take the positive characteristics of the sublime convention and activate them for environmentalism at home?

<sup>xxii</sup> Hitt does recognize the potential for a ruined environment, or "ecological catastrophe" to evoke a sublime response, but he does not dwell on this suggestion (p. 619).

<sup>xxiii</sup> Cronon writes: "The tree in the garden is in reality no less other, no less worthy of our wonder and respect, than the tree in an ancient forest that has never known an ax or a saw—even though the tree in the forest reflects a more intricate web of ecological relationships" (p. 88).

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## **Education in *Second Life***

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### **Abstract**

*Abstracted models and simulated environments have long been used in science education as a learning tool, and in recent years have incorporated more immersively real characteristics as well as the ability to facilitate online human interaction. The multiuser virtual environment Second Life represents a powerful convergence of the affordances of scientific simulation and computer-mediated collaborative spaces that can be used to facilitate environmental awareness. This paper reviews the relevant literature and then describes relevant instructional spaces within Second Life that can serve as sites for environmental communication and education, and concludes by discussing general prospects for the instructional use of immersive learning environments in environmental education.*

*Note: Some of the material from an earlier version of this paper was presented during a panel discussion on “Science in Virtual Worlds” at the 2008 conference of the Association of Internet Researchers, Copenhagen, and certain screenshots were displayed in a poster session at the 2008 annual conference of the National Communication Association, San Diego.*

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Climate change, ecosystem degradation, energy supplies, and other closely related issues are converging as major policymaking challenges for the 21<sup>st</sup> Century. Wise decision-making, at all levels from individual to international, requires a solid grounding in environmental science and its interplay with human cultures. The necessity of educating humans about their effect on the environment in which they live has, perhaps, never been more critical. This is no less true during an economic downturn such as the one that began in 2008.

Science educators and environmental communicators have long used models, simulations, and information/communication technologies to explain concepts, demonstrate relationships, and clarify ideas. They have frequently deployed these instructional materials through curricula that encourage people to interact with both the technology and each other, building skills in critical thinking,

collaborative decision-making, and problem solving.

In recent years, educators have been exploring the use of virtual reality (VR) environments to teach about the real environment. *Second Life*, one of many multi-user virtual environments (MUVES) available to educators today, is already serving as medium for, and immersive site of, instructional simulations and interactions. This paper addresses environmental education within *Second Life*, as both medium of communication and as discursively constructed space for interaction. The paper begins by reviewing previous research on the use of computer-mediated instruction in environmental education, and on the application of collaborative and constructivist learning to this field. It then describes relevant instructional spaces within *Second Life* that are serving (or may serve) as sites for environmental communication and education, and concludes by discussing general prospects for the instructional use

of immersive learning environments in environmental education.

Note: Of necessity, this paper uses the word “environment” both in its everyday use as a reference to the natural systems that surround human cultures, and to refer to virtual-reality systems that depict the natural and built world in realistic ways.

### **Representing the Environment in Education**

Science has always used models to isolate and present essential components of complex systems (Archer, 2007, p. 19). Sometimes these models are largely conceptual and/or visual, presented in narrative or graphical form; in other cases they are physical models, as when a wave tank or an orrery is used to present, respectively, oceanographic or astronomical principles.

As modern personal computers have gained processing and graphical-display power, more science educators have been able to create ever more realistic interactive models and simulations that can help convey complex relationships more effectively. In some cases these simulations and activities “allow students to observe phenomena and do activities, albeit vicariously, that they could hitherto only do in the real world” (Winn, et al, 2006, p. 26) and can thus reduce the need field trips or physical models with their associated costs and potentials for injury or environmental hazards (Tuthill & Klemm, 2002). With an eye toward future developments in instructional technology, Taylor & Disinger (1997) predicted that computers would permit students to:

explore existing places and things to which students would not otherwise have access. (For example, take virtual reality field trips to remote natural environments, such as rainforests or ocean reefs.) [and] explore real objects that without alterations of scale in size and/or time could not otherwise be effectively examined. (For example, in a

virtual learning environment, speed up geological processes and watch mountain ranges form and erode again, or enter and explore the cells of a leaf.) (pp. 3-4).

The use of computer-based representations overcomes traditional barriers to instruction. As Ruben (1994) observed, “There are really very few activities you can do with kids that you can get them to really understand the devastation of the rainforest, say. With computers you can break into another level of learning.” Computer-aided communication can also broaden appeal. Morgil, et al (2001) note that “With the Internet, in contrast to some fixed tools such as course textbooks, multimedia contents can reach larger audiences” (p. 99).

Human-computer interaction can evoke an image of solitary behavior, but Rickinson (2001) connects the technical component of computer-mediated instruction with a social dimension, recommending additional research into students’ experiences of “environmental education using ICT [information and communication technologies] and virtual learning environments” and into “learners’ interactions and influences among their peers, as well as with their teachers/educators, and parents/family” (p. 307)

Furthermore, human interaction becomes not only a *method* for the facilitation of environmental teaching and learning, but a desired learning *outcome*: as Grimson (2002) observes, in reference to civil engineering projects, “solutions [are] becoming less and less technical and more and more societal, regulatory and human” (p. 33). For one thing, current society tends to be less apt to respond uncritically to technocratic proposals than it was in the past. In addition, community-conscious approaches can help enhance engagement with proposed policies. Simpson (2001) asserts that “Making complex alternative

scenarios accessible improves the planning process by increasing the potential citizen participation” (p. 362).

The potential affordances of technically comprehensive, socially engaging media for public policymaking regarding climatological change are thus worth examining. One of the most familiar social simulations used in environmental awareness is role-playing, which can help model real-life networks of mutually dependent stakeholders:

Roleplay situated in a simulation or gaming framework provides an opportunity for participants to adopt roles that encompass sets of interests, values and knowledge bases. These necessarily represent the diversity of positions and opinions present in any complex system, creating a learning environment that is authentic and situated (McLaughlan & Kirkpatrick, 2004, p. 478).

Another approach involves Problem-Based Learning, the potential of which arises from its placement of the learner “at the heart of the educational process, and [it] also offers the possibility of addressing real-life complex engineering problems” (Grimson, 2002, p. 33).

Initial application of computer-mediated role-plays tended toward reliance on text messaging systems, which were often unsatisfactory. McLaughlin & Kirkpatrick (2004) found text-based systems to be “less suited for communicating agreement and disagreement and for social-emotional tasks involving conflict and negotiation” (p. 484). However, virtual-reality methods may help surmount the limitations of earlier approaches. By merging realistic depictions of natural processes with realistic social interaction that takes place within an engagingly

realistic virtual setting, MUVes can almost literally put students inside the model.

Initial examples of computer-generated virtual reality involved complex headsets and high-end computing systems, but more recent developments are accessible to a growing number of users. As early as 1997, Taylor & Disinger noted that VR “offers environmental educators a unique tool to expose students to many environments that are inaccessible in the real world” via a more intuitive control interface. They predicted its implementation “will force educators to reevaluate traditional teaching and learning methods in light of the new technology” (Taylor & Disinger, 1997, p.5). VR environments can provide “complete interactive model-based environments, comprising both static and dynamic phenomena” (Winn, et al, 2006, p.26) and “provide students with the opportunity to ‘live’ in the learning events rather than simply attend them” (McLaughlan & Kirkpatrick, 2004, p.481).

Current consumer-level VR technology like *Second Life* only occasionally approaches photorealism and cannot model complex environmental systems. However, Winn, et al (2006) argue that VR environments need not (and should not) attempt complete verisimilitude, but should approach the concepts in the same way science communicators have always used modeling:

Although a simulation may not provide an authentic field experience, it may still provide an authentic model-based experience as scientific visualizations typically do, in which patterns can be observed because of the simplification of data, compression of time and space, and making visible what cannot be seen even during an authentic field experience. . . . A good simulation may therefore teach abstract concepts better than direct experience. This is

particularly true when the simulation successfully uses metaphors to show phenomena that have no perceptible presence in the real world (Winn, et al, 2006, p.39).

The simplification required by current VR technology can thus aid, rather than impede, understanding of environmental systems. (In fact, Simpson (2001, p. 361) reverses the contrast by noting that plans, drawings, illustrations, and models can be thought of as “virtual reality” as well.)

Thus virtual environments can promote real-life environmental awareness and at the same time foster collaborative behavior. It thus enhances active and experiential learning processes, which stimulate higher-order thinking and which require reflection, discussion, and “debriefing” (McLaughlan & Kirkpatrick, 2004, p.481) to complete the instructional experience.

As an example, Winn et al's (2006) *Virtual Puget Sound* activity combined desktop VR simulations with direct field experiences. The authors found no significant difference in overall student learning between field and simulated experiences, though the VR students seemed to get a better “big picture” (p.38).

In another application, McLaughlin & Kirkpatrick (2004) developed the *Mekong E-Sim* (a largely text-based simulation) specifically to promote collaborative work that would help students “develop mastery of fundamental discipline-based knowledge, while developing transferable skills such as negotiation, decision-making and an understanding of the range of perspectives that could be taken with regard to complex situations” (p. 479)

. The authors concluded that the simulation was

successful in developing students' understanding of complex issues and multiple perspectives and resulted in higher order learning outcomes. These results indicate that that well-structured learning activities using online roleplay-simulations can produce high levels of interaction and peer learning in distributed student groups (McLaughlan & Kirkpatrick, 2004, p. 488).

As noted earlier, the authors felt that electronic communications limited the effectiveness of their simulation; similarly, Smith & Bell (1992) had mixed success simulating a commons-behavior scenario with a points-based gaming scenario. They recommended striving for greater immersivity through more realistic depictions of the components of a real-life commons dilemma (p.467).

Promisingly, Okada, et al (2001) created a robust learning activity that melded virtual and real-world activities in an original manner. Their simulation modeled a real-world locale currently being studied by on-site students and scientists. Students acting as “virtual tourists” could interact with each other in the simulation, while at the same time communicating with representations (“avatars”) of persons on location, whose presence was obtained via GPS coordinates. Such “mashups” of real-world and virtual-world interactions may become more common in the future, as in a scenario proposed by Roush (2007) whereby an environment such as *Second Life* might interact with real-world geographic data from *Google Earth*, and combine this with real-time weather and traffic conditions (Roush,



2007). Such combinations may continue to blur the educational affordances and limitations of both real and virtual sites of environmental communication and instruction.

### **Virtual Tourism**

In addition to their applications in environmental education, immersive computer games and virtual worlds have a recreational appeal that can add to student engagement and public awareness. There is a tendency to label the use of this kind of virtual reality as merely escapist. Stewart & Nicholls (2002, p.85) address this criticism—especially the notion that VR spaces are false and misleading (a “shabby facsimile of reality”). Echoing the work of Turkle (1995) on Internet identities, they argue that a virtual experience can “facilitate an improvement in the way one actually experiences the world” (p.85) as well as potentially “transform the ‘reality’ in which we presently live for the better” (p.96). Thus a virtual environment may—even outside formal educational contexts—be a vehicle for education and social change. Stewart & Nichols argue that virtual experiences can in fact “facilitate an enhanced and more authentic relationship with actuality” (p. 84). Book (2003) adds that VR spaces “encourage movement, exploration, and engagement even as they promote escape.”

Ontological and epistemological uncertainty is especially poignant in environmental communication, which challenges constructivism with the constant interjection of perplexing events that cannot be accounted for entirely as discursive products (see Latour (2004) for an extensive treatment of this conundrum). Whatever one's orientation towards the ontological status of the real world, however, it is clear that our experience of the world is always mediated to varying degrees. Even such seemingly direct and

authentic experiences as visiting a national park can be “virtual” because they “employ many of the techniques of display, exhibition, and presentation that have been used by museums to organize and regulate the vision of visitors” (Patin, 1999, p.41).

The same might be said of field trips and other highly structured field experiences, further muddying the relative advantages of real and virtual education. Indeed, the theoretical constructs of science itself, though developed from direct observation, are themselves a kind of virtual reality in that they are values and labels, not the external reality being thereby described—a point that would hardly be argued by positivists, much less constructivists.

Thus it is that “mere” virtual reality constructions—including those not explicitly designed for educational purposes—can still provide pragmatically realistic experiences that both inform and persuade.

### **Second Life's Virtual Environment(s)**

While many publicly accessible multi-user 3-D virtual environments are becoming available in the 21<sup>st</sup> Century, *Second Life* ([www.secondlife.com](http://www.secondlife.com)) has received a great deal of attention, in part due to phenomenal growth after 2005 (Jana & McCannon, 2006, October 31). February 24, 2008 usage statistics from the *Second Life* (SL) website are as follows:

|                                         |           |
|-----------------------------------------|-----------|
| Residents Logged-In During Last 7 Days  | 554,769   |
| Residents Logged-In During Last 14 Days | 722,792   |
| Residents Logged-In During Last 30 Days | 1,012,284 |
| Residents Logged-In During Last 60 Days | 1,402,342 |

(source: [http://secondlife.com/whatis/economy\\_stats.php](http://secondlife.com/whatis/economy_stats.php))

Jones (2006, p.27) described the growth curve beginning in late 2005 as “closer to that of the adoption of a communication technology rather than that of a game,” though it's important to note that *SL* is not

itself a game. There are no levels, points, health, quests, or any of the traditional elements of a computer game. It is a virtual space for creation and interaction.

Based on a concept articulated in Neal Stephenson's novel *Snow Crash*, SL's representations and "builds" can be cartoonish and fanciful, or can more closely adhere to real-life models. The SL world comprises networked "islands" (also called simulations or "sims") that cover virtual square miles of territory, and reflect limitless themes. Basic accounts and access tools are free, though they require plentiful bandwidth and gaming-level computer hardware. Users are represented as more or less human-looking avatars that can move, walk, gesture, and speak with each other via stereo audio channels that render voices spatially, indicating both direction and distance. Avatar appearance is fully customizable, allowing users to express themselves somewhat realistically or as creatures from the wildest flights of fancy, and avatars have the ability to fly and "teleport" across distances.

Nearly all of the content in SL (e.g., buildings, zoos, nature parks, vehicles, entire realms devoted to Star Wars or social activism) is user-built, and the resultant buying and selling of user-created materials has received much attention. For example, SL real-estate mogul Anshe Chung is estimated by Linden Lab to have pulled in \$150,000 per year from sales and rentals of virtual space (Rymaszewski, et al, 2006, p.253). The high level of user involvement is doubtless generated by a combination of immersivity, ability for creative expression, and potential for profit.

The physics of this virtual environment are worth noting from the standpoint of scientific simulation. Gravity and solidity are present: objects and avatars fall, bounce, or collide in realistic ways, but these actions can be modified in order to "pin" objects so that they seem to float in the air, or to make objects "phantom" so

that avatars can move through them (Rymaszewski, et al, 2006, p.187). A simulated sun and moon "rise" and "set" at regular (though short) intervals, which can be overridden by individual users to make a scene sun- or moonlit at whim. Clouds and simulated rain and snow can be added, though the precipitation has no physical effect. The virtual world includes fairly realistic wind effects (able to drive scripted wind turbines and sailboats) that are affected by day/night rhythms, and the latter can be detected by scripts in order to simulate such things as nocturnal insect sounds in a virtual forest.

Curiously, although the wind has effects and can be heard and seen, adding to the virtual world's immersivity, there is no comparable "current" in aquatic simulations, even those with flowing water. Even the tidal wave in the NOAA simulation discussed below crashes over avatars' heads with no direct impact, though the buildings are programmed to collapse when the wave reaches them. SL is very much an anthropocentric world; since we don't usually see what's below the surface, it's not often modeled with the care given to terrestrial builds. Most of the submarine landscapes are, in the words of one marine-science blogger, "stark abyssal plains" (Robertshaw, 2006) with no aquatic plants or animals, even when they are adjacent to lush terrestrial jungles.

Regions of *Second Life*—plots from 512m<sup>2</sup> up to entire "islands" of 6.5ha (Rymaszewski, et al, 2006, p.37)—are owned by individuals or organizations who set local atmospheric conditions, land elevations, and water levels—though an SL-wide "ocean" has a constant level (*Second Life*, 2007b, item 054). Soil, rocks, and plants are then added, followed by various structures built using simplified 3-D modeling tools. Structures and objects are composed of primitive shapes or "prims," and there is a limit to the number that can occupy a given space.

Despite the anthropocentric bias, it's notable that the developers of *SL* were aware enough of at least the visual aesthetics of the natural world to encourage "plantings" by using special techniques to reduce the "prim count" of certain plants and trees. They also provide every user with a free store of default vegetation (Rymaszewski, et al, 2006, pp.11, 135). For most plants, *SL* uses a method that provides the most visual realism for the least computing cost; this is the same method of intersecting planes used by Okada, et al (2001, p.21) in their groundbreaking simulation described earlier, which those authors attribute to Honjo, Lim & Meruta (1999).

The anthropocentric bias towards terrestrial environments may be changing. Many users have built themselves a reputation and garnered income from the production of realistic marine plants and static representations of vertebrate and invertebrate life forms, and these are used liberally in marine and freshwater simulations, as will be seen in the section below.

### Environmental Education in *Second Life*

Despite the unreality of this virtual space from a strictly biophysical point of view, many educational, scientific, and governmental organizations have created presences in *Second Life*, for a number of ends. Several consortia are specific to *SL*, such as the Library Alliance "lands" and the "SciLands" devoted to education in the STEM (science, technology, engineering, and mathematics) disciplines. Others are specifically designed around environmental education and focus on climate change and sustainability. This section describes several of the more prominent examples that existed in early 2009.

Note: Locations in *SL* are referenced by their coordinates on a given "island," much as one specifies a domain name and path for a web page. Thus the location "Better World, 29, 64, 36" refers to a spot at

X,Y,Z coordinates 29m, 64m, and 36m (scaled) from a reference point on the 6.5ha scale simulation known as "Better World" island. This paper includes locations for each simulation, in the hope that those with an interest in exploring further will tour them directly—though the reader should bear in mind that builds and locations frequently change in *SL*. All locations are current as of February, 2009, and are illustrated by screenshots taken by the author.

**NOAA Science on a Sphere** (Meteroa, 145, 131, 28) has two of the most dramatic—if still rather crude—simulations of climate-change related phenomena: aforementioned tsunami and a melting glacier with corresponding sea-level rise:

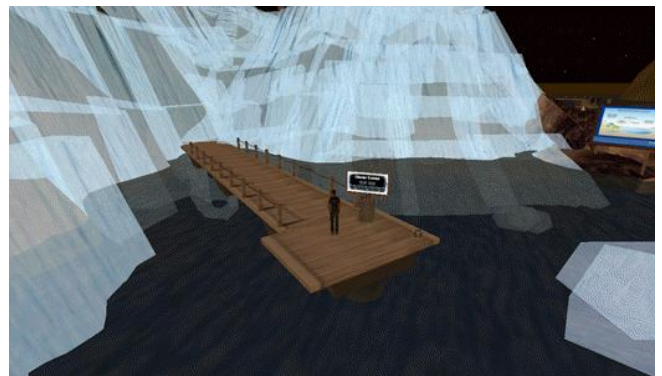


Figure 1: Glaciers melt and sea levels rise with the click of a button.

The island also contains an enormous weather map containing real-time



representations of current conditions around the United States:

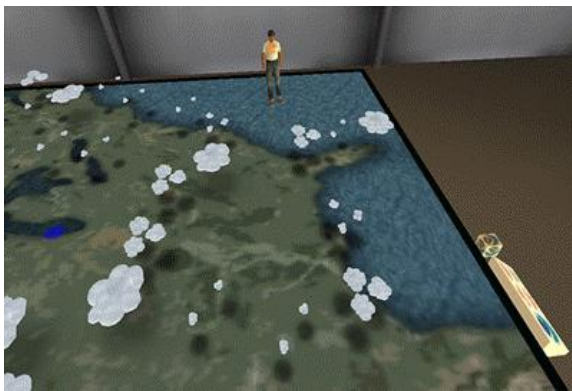


Figure 2: Hangar-sized Weathermap.

Visitors can also ride a research submarine to tour underwater landscapes, view a variety of detailed 3-D topographic globes, or take a trip on a “hurricane hunter” aircraft through a virtual hurricane.



Figure 3: Preparing to board a Hurricane Hunter before dawn at the Meterooa Airport.

NOAA has also opened a second sim called **Okeanos**, providing visitors with the ability to map the ocean floor from a survey

vessel, assist with an oil-spill cleanup, and view the effects of algal blooms (Pasteur, 2007).

**The Weather Channel's islands** (Weather, 116, 1, 26) are more entertainment-oriented, with an “epic conditions” theme (e.g., snowstorms and giant waves) that appeals to the extreme-sports crowd while providing climatological education on the sly. Large display screens display full-motion real-world video clips, and a surfing beach features huge animated waves.



Figure 4: Surf's up while giant screen video plays at Weather Channel's island.

**OneClimate Island** (OneClimate 136, 85, 27) is more directly focused on climate change. The island itself is sparsely “landscaped” with a collection of kiosks, small amphitheatres for lectures and video presentations, and simulated green technology that the visitor can operate.





Figure 5: Carbon calculator booth and wind turbine testing console

The carbon calculation kiosk demonstrates SL's ability to link directly to existing web resources from in-world; essentially anything that can be presented via the 2-D Web can be directly represented in SL or linked from it. The wind energy control panel at right in Figure 5 lets the visitor try several real-life wind turbines to see their output at various settings, with the brightness of nearby "electric lights" serving as visual indication of relative output.

Neighboring **OneWorld Meetings** (OneWorld Meetings 135, 135, 26), owned by the same organization, provided a live link to the UN climate summit in Bali, Indonesia in 2007. This demonstrates another affordance of SL: interconnection with real-life events, whereby avatars can (through one of several interfaces) watch live video and even ask questions of presenters at real-life events.



Figure 6: Information kiosk and meeting space for "Second Bali"

As reported in a OneWorld press release (OneWorld US, 2007), U.S. Congressman Edward Markey (D-Mass.), Chairman of the Select Committee on Energy Independence and Global Warming, avoided the carbon cost of a trip to Bali by addressing the conference in avatar form, through SL. Thus one more SL affordance: the possibility of virtual meetings and conferences that obviate the need for carbon-costly travel.

**Commonspace for Progressive Organizations** (Commonwealth Island 97, 60, 42), sponsored by the Envirolink clearinghouse, grew from one to four sims or islands during 2007. The original sim provides an effective example of the way a 3-D virtual space can offer an alternative to flat collections of resource hyperlinks: a series of open kiosks surrounds a central meeting space in a woodsy setting, which has in the past included such features as an



erupting geyser, tumbling waterfalls, and a drum circle.



Figure 7: Commonsplace Kiosks for The Habitat Trust and Greenpeace

Figure 7 shows two of these kiosks, each containing displays, note cards, web links, video clips, and free objects such as t-shirts that users can obtain for their avatars to sport while moving about in *SL*. Figures 8 and 9 are more detailed views of the kinds of information and resources that can be found in kiosks and signboards.

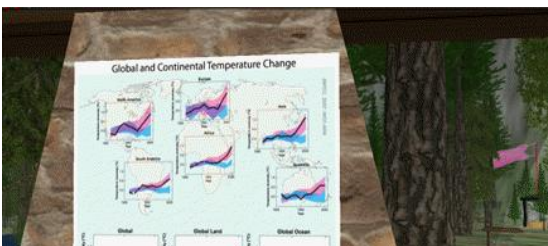


Figure 8: Posters and Globe

Recent expansion of the Commonwealth Islands includes a large “natural” area, with mountains and flowing streams, as well as a set of structures with a photovoltaic grid and an enormous windmill, and an open-air meeting space, as shown in Figure 10. The Energy Futures build floats high above Commonwealth and offers realistic depictions of energy options and

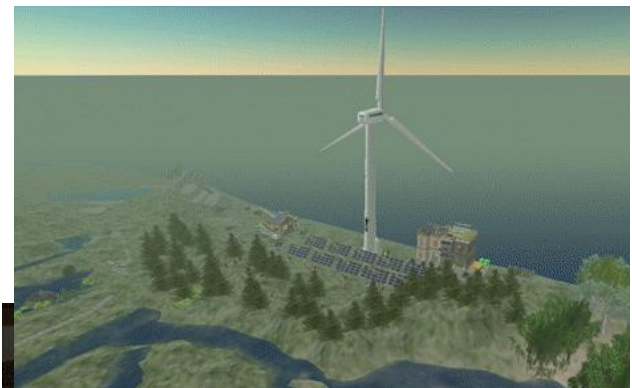


Figure 11: Overviews of Etopia Island



Figure 10: Windmills, Grids, and Meeting Spaces  
their relative environmental costs.

### Etopia Eco-Village (Etopia Island)

175,  
72, 22)  
goes





beyond display and becomes a virtual “living space” modeled on cohousing and related dwelling concepts. Users can rent personal spaces to use as *SL* starting points, meet in virtual coffeehouses, and tour the island via futuristic (and eco-friendly) public transportation, including aerial tramways and light rail, as shown in Figure 11.



Shops on Etopia Island have included virtual organic food stores and coffeehouses, as well as displays of efficient home-based systems for heat recovery and graywater recovery (Figure 12).

Figure 12: Shop for energy savers or just visit with like-minded friends.



The avatars visible in the image at right in Figure 12 represent four individuals who were engaged in text-based chat when the screenshot was made. The persons represented were “residents” of Eco-Topia Village, in that they rented out personal spaces on the island, and used it as both home base and social meeting space. Their conversation at the time the shot was taken was a mixture of witty repartee and discussion of sustainability options, mixing social interaction with intellectual pursuits. Such interactions can last for hours. One user commented that her experiences in the simulation inspired her to move into a comparable real-life co-housing community.

**The Center for Water Studies** on Better World Island (Better World, 48, 28, 21) contains simulated ecosystems representing a coral reef, mangrove swamp, and freshwater pond, complete with animated sea creatures and a floating amphitheatre that hosts regular meetings of the “Planet Thoughts” environmental group. The simulation packs a number of ecosystem examples into a very compact space.



**Abyss Museum of Ocean Science** (Gun 47, 45, 99) is a museum of the ocean depths, with full scale models of William Beebe's bathysphere and the bathyscaph *Trieste*, informational displays on abyssal physics, and animated deep-sea life. Before traveling down a steadily darkening series of "air tunnels" to the bottom of the sea, visitors can peruse large maps showing the potential effects of sea-level rise, and visit a polluted beach.

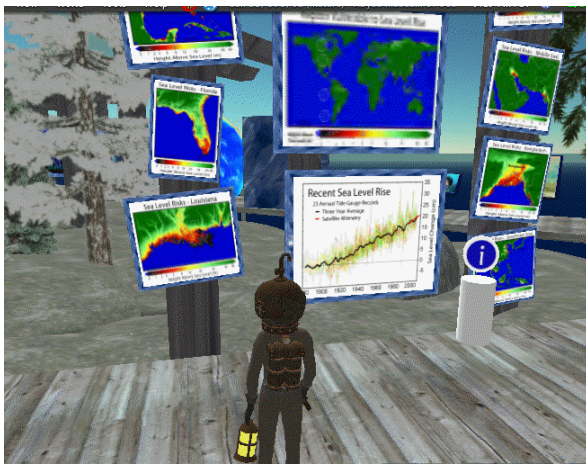


Figure 14: Posters display sea-level rise; a polluted beach (note avatar in deep-sea diver's suit at left).minded friends.

The polluted beach display is not original to *Second Life* (this author has seen similar exhibits at the Monterey Aquarium in real life) but it suggests another kind of scene with educational potential: the dystopian vistas often marginalized and backgrounded in real-world culture. Given the fact that everything in *SL* can be the

result of the most impractical wish-fulfillment, from Arcadian fantasies to idealized pristine natural environments, the presence of ugliness there can be particularly effective in raising environmental consciousness. An offshore oil rig—created as something of an inside joke by the *Second Life* developers themselves—is open to public inspection on the **ANWR** sim (ANWR 102, 138, 30), the name of which presumably refers to the Alaskan wildlife refuge regularly at the center of ongoing “energy vs. environment” controversy. Curiously, the simulated rig is offered without commentary, simply resting enigmatically along a ferry route between two islands. Even more striking is the dilapidated harbor in **Calleta** (Calleta 119, 227, 26), with a waterfront landfill, floating barrels of oil, and an open drainpipe spewing glowing green effluent (Figure 15, next page).

Neither ANWR nor Calleta are explicitly didactic, which may make them even more effective in that they do not activate attitudinal defenses prior to exposure; the user stumbles across them. These direct representations of degraded or threatened environments can function as commentary on anthropogenic degradation of the environment. They are potentially “image rhetorics” in a manner similar to the televised “stunts” of Greenpeace, Earth First!, and other radical environmental groups in the 1990s, in that they draw attention by their deviance from the norm and their problematization of practices in ways that verbal arguments cannot so easily accomplish (DeLuca, 1999). In fact, in an event right out of the radical environmentalist’s playbook, on April 4, 2007, *National Geographic’s* website reported that the streets of London, Amsterdam, and Tokyo had been flooded by rising seas—in *Second Life*. Staged to raise awareness of global warming among thousands of *SL* users, the virtual flood (which caused no “damage”) was deemed a success by its organizers because people using the medium for entertainment and



social interaction unexpectedly found themselves discussing climate change (Roach, 2007).

Figure 15: No Virtual Utopia Here

### Discussion

The virtual settings described in this paper have been spoken of as if they were real places that the reader might physically visit and examine. And in a sense they are, as described earlier—though it is not easy to convey this realism in a paper. A series of screenshots cannot capture the immediacy and immersivity of an “in-world” view. Even full-motion video cannot replace the experience of becoming sufficiently engaged with the technology to feel embodied within the space, which prior scholarship demonstrates is a possibility. The experience of feeling “pulled into” a story, a film, or a novel is a nearly universal one, and the images appearing in this paper can be thought of as excerpts, snapshots, or “production stills” from an infinitely variable unscripted movie that *Second Life* users can find themselves drawn into. This is the other side of the term “virtual reality”, where the word *virtual* refers not to its shortcomings but to its verisimilitude; its “as good as” or “near enough” characteristics, as when one says something is “virtually complete.” It is not complete, but has an adequate number of completeness’s virtues. The screenshots in this paper are at best poor representations of *SL*’s often phenomenally real immersivity.

It is also important to bear in mind that most of the images depicted here were deliberately obtained during quiet times, to

reduce distractions and focus attention on the built virtual environments themselves. As a side effect, this conceals the fact that all of them are full of possibilities for instantaneous social interaction that is at least as connective as telephone or email exchanges, with the added visual presentation of an immediately present “Other” (or others) that can convey a large number of nonverbal cues. The virtual space is not simply an object, but contains subjects, volitional actors with their own agency, who are again “near enough” to a direct encounter with others for discussion and even social bonding to occur. This affords the possibility of processing scenes and displays in a group setting—which contradicts any initial impressions that “touring” *SL* is no different than sitting at home alone playing a computer game.

This is not to say that such things don’t happen. *SL* has no shortage of commercial trivia, unconvincing or pathetic fantasies, and worthless diversions. Many people do move through it on their own private agendas, heeding others little if at all (or even exploiting others). For some it is not particularly engaging.

This, some might argue, does not distinguish it greatly from what we think of as real life.

Conversely, however, the simulations, settings, interactions that one encounters in *Second Life* can be “real enough” to create experiences that both instruct and persuade, in a manner similar to experiences lived more directly in the real world. They can be as authentic as field trips or museum visits, with a number of advantages over either. If integrated into an instructional design or a persuasive campaign, these experiences can facilitate understanding and social change.

The key to using *Second Life* or comparable tools for promoting environmental awareness and, particularly, in producing effective environmental education is to structure students’

experiences, not simply turn them loose in a virtual world (or lab, museum, textbook, or field location) and expect desirable learning outcomes to happen. A certain amount of serendipity, discovery learning, and learner-constructed activity is to be desired, but this should be accompanied by linkages to curricular goals and the development of knowledge, skills, and abilities appropriate to the student's goals.

Educators are already beginning to explore SL as both a medium of instruction and a place in which to learn. The high-traffic *Second Life* Education listserv (<http://www.simteach.com/wiki>) and the Educators' Coop (<http://educatorscoop.org/>) are two of the more prominent forums for discussion of "Second Learning," while Calongne & Hiles (2007) describe a number of educational activities in a variety of disciplines and Conklin (2007) lists *100 uses for Second Life in the College Classroom*.

Interest in *Second Life* itself may wane over time, or Linden Labs may go out of business, but the multi-user virtual environment or immersive learning environment is likely here to stay, and it is hoped that this paper has demonstrated the potentials of such a medium for enriching environmental awareness in ways not previously possible. Perhaps as a result, the real environments necessary for human survival will more likely be restored, protected, and sustained for future generations.

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## (Re)Framing Environmental News: A Case Study of the Gas-Drilling Controversy in The Catskills Delaware River Watershed

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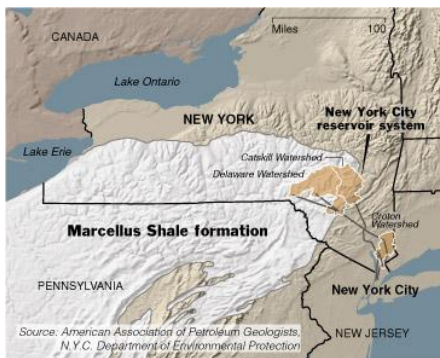
*The Delaware ...is a stream beloved of the trout. Nearly all its remote branches head in mountain springs, and its collected waters, even when warmed by the summer sun, are as sweet and wholesome as dew swept from the grass.*

John Burroughs, 1870

### Introduction

The Marcellus Shale is a huge Devonian Black Shale formation stretching from West Virginia through Ohio and Pennsylvania and into Western and Southern New York, and holding as much as 500 trillion cubic feet of gas (Conway, 2008, p. N.3). New York's Southern Catskills are situated geographically atop the northeastern reaches of the Marcellus along the Delaware River (Figure 1). The convergence of fresh water and natural gas reserves in rural Catskill counties in the Delaware River watershed has generated a conflict of major significance for the state, and for environmental policy nationwide

Fig. 1: Southern New York State & the Marcellus Shale.



(Baskin, 2008). That conflict was represented in competing news frames about the consequences of drilling for gas in the Marcellus.

News media stories about gas-drilling in the Marcellus shale began to emerge in

national and regional press reports in early spring of 2008. Early reports framed the story as an economic bonanza, a boon for poor local residents and a rich resource of "clean" energy for eastern metropolises (Gold, 2008). Quoting sources from industry representatives and government agencies, the stories focused essentially on the valued end products of gas production: energy and profit. But in the space of a few months, as drilling plans for New York State were publicized, a changing story evolved in news reports, editorials, transcripts of town meetings, websites, and statements circulated by environmental groups. Reframed, the story was about depleted and contaminated drinking water, spoiled land, and the industrialization of a beloved region of the state.

Citizen groups from New York and Pennsylvania challenged official dogma by focusing on the process of gas extraction, a water-intensive drilling technology named *hydraulic fracturing* that transformed many millions of gallons of fresh water into a bi-product of hazardous waste; toxic wastewater that needs to be contained, transported, and stored forever. They argued that watersheds and quality of life in the Catskill region were at risk. Soon, voices raised questions about drilling in New York City reservoir watersheds, and the risk to New York City drinking water became a prominent theme in the discourse. Advocates, rural and urban, pressed successfully for revision of water and mineral policies in New York State; a final draft of new policies was expected by the summer of 2009 but has been delayed until at least September (Wilber).

There is little doubt that reframing the gas-drilling story successfully influenced New York State's decision to revise public policy, yet the extent to which revised

policies will *in fact* adequately protect the environment of the region is yet to be seen. As of this writing, the quality of life and water in the Upper Delaware Scenic and Recreational River Basin are endangered by extensive proposals to drill; permits for gas wells near Hancock NY on the Delaware are progressing through the state system, awaiting finalization of the new regulations (Mineral Resources Environmental Notice Bulletin, NYSDEC, 2009).

### **(Re)Framing as Rhetorical Action**

This essay explores *reframing* as a rhetorical strategy for practices in environmental communication. Because news framing “determines what the subject is about” (Griffin and Dunwoody, 1997, p.363), by changing the subject of the story, reframing can be used strategically by environmental communication scholars to inform and advocate for environmental protections (Aday, 2006). Conceptualized as a rhetorical action, reframing is the intentional and contingent use of symbols to influence others. News reports that ignore or diminish environmental consequences of events help shape uninformed attitudes and misguided ecological practices. Reframed, news reports that include environmental impacts of specific events or focus on environmental risks can increase public awareness and encourage actions to protect specific ecologies (Cox, 2006, p.163-204). News stories alone are not sufficient actions for environmental protections, yet reframing news to reflect accurately environmental impacts is often the first step towards avoiding irreparable harm and encouraging community participation in environmental health.

Competing news frames about the same story reflect differences in perceived value of the subject, in both biophysical and symbolic terms (Chong & Druckman, 2007; Gilbert, 1998). In the case of the Marcellus shale a *frame contest* (Lawrence, 2004) developed between the environmental value of the Catskill region’s Delaware River Watershed and the troubled economies of

rural counties and New York State. Over a relatively short period of time the frame of an economic bonanza was challenged and reframed to one of a unique watershed at risk. The new frame influenced the decision to revise state policy regarding gas drilling in New York State’s Delaware River water basin and the southern Catskills.

The changing story of gas drilling in the Marcellus Shale indicates that reframing environmental news is possible; that “voices of common people” who face environmental risk, and “voices of groups organized to save the environment from industrialism,” are not always “drowned out” by elites (Pompper, 2004, p.128). This study suggests that on a case-by-case basis, analysis of the evolution of news frames may reveal ethical strategies that scholars of environmental communication can promote and teach to others. Reframing the news of the Marcellus Shale was found to include three basic rhetorical practices: (1) *informed naming and defining*; (2) *dissemination of witness and expert testimony*; and (3) *recognition of common interests*.

(1) Environmental news frames are dependent on terms that name ecologies and resource values, and define accurately environmental risk. Ultimately such terms establish control over environmental perceptions and the ways we “know our natural world” (Oravec & Clarke, 2004, p. 3). Successful reframing emphasizes and reveals the rhetorical power of naming in environmental controversies. Reframing the Marcellus Shale news story centered on accurately defining *hydraulic fracturing* and naming the attendant ecological risks to human health, water resources, and ecological communities.

(2) Although research has demonstrated that journalists who frame environmental risk stories are frequently dependent on industry and governmental sources (Pompper, 2004), in this case, advocates co-opted media dependence on elites by enlisting and disseminating testimony from witnesses, scientists, and

state and city officials to reframe the story and focus on environmental risk.

(3) Additionally, examination of the evolving frames indicates that advocates publicized the common interest of residents of the rural Catskills and those of New York City to call for revisions of existent water and mineral policies. Although historically the two populations were perceived as distinct, and often opposed, publicity of risk to the watershed and Catskill region revealed a common interest in protecting the region's rural character and clean water. In addition to print and broadcast media, the Internet was an important tool for activists who disseminated the reframed story to a wide audience. The following sections of this paper trace briefly the evolution of the Marcellus shale story in the Delaware River watershed as a case study of successful reframing.

### **Background and Context**

The geology of New York State is everywhere marked by fresh water. Comprised of approximately 7,600 freshwater lakes, ponds, and reservoirs, and more than 70,000 miles of rivers and streams, fresh water is a ubiquitous natural resource in the state. From the Great Lakes Erie and Ontario to the St Lawrence and Hudson Rivers, New York's abundant fresh water resources generate economies of industry, energy, and transportation, and support diverse ecologies of outdoor life, natural beauty, and species habitat (Watersheds, Lakes & Rivers, NYSDEC, 2008). Yet despite the abundance, and perhaps because of it, much of this water has been critically compromised by industrial discharge, sewage and farm run-off, and multiple urban contaminants (Carr, 1966; EPA, 2008; Glennon, 2002; Wood, 2008, p. 109-133). Expensive clean-up and long-term maintenance efforts are manifest throughout the state but some damage is irreparable (Cox, 1982).

One exception to the severe degradation of New York's fresh water lies in the Catskill region of the state. Although pollutants from mid-west coal burning plants

contaminate surface waters in the region (DePalma, 2008), the quality of water in the Catskill region has been designated "good to excellent" by the New York Department of Environmental Conservation (Water Quality, NYSDEC, 2008). The excellent quality of the water enables New York City to deliver *unfiltered* water to over 9 million residents—one of only four major cities exempted from filtration mandates established by the Environmental Protection Agency (Applebome, 2008-c). Two reservoirs in Delaware county, the Cannonsville and the Pepacton, impound respectively the West Branch and East Branch of the Delaware River and supply 50% of all New York City drinking water before joining the Delaware to flow south (New York City Watershed Program, NYDEC, 2008).

The longest river east of the Mississippi to remain undammed, the Delaware flows for 330 miles from the New York Catskills to Delaware Bay. About five percent of the nation's population is dependant on the Delaware for fresh water. In southern New York, the Delaware floods periodically, but from 2004-2007 the river and streams in the area flooded often; the 2006 flood took lives, homes, bridges, and roads down the river and was designated a National Disaster (Applebome, 2006).

The Catskills have high environmental value throughout the state as a place to live and visit. Residents of the area enjoy the streams, woods, and hills of the region and the peaceful nature of small towns. The Catskills attract naturalists, environmentalists, anglers, hunters, hikers, birdwatchers, campers, canoeists, artists, photographers and all those seeking natural waters "sweet and wholesome" (Burroughs, 1870/1910, p.195). Part of the Appalachian Mountain Chain, the region is home to Catskill Park and to the Catskill Forest Preserve within the park, a state-owned and protected area of 287,500 acres of deciduous forests (Catskill Forest, NYSDEC, 2008). Four New York counties, Green, Ulster, Delaware and Sullivan, comprise the Catskill region. Bald eagles, black bear, deer, mink, mountain cats,

beaver, and a wide variety of songbirds maintain vigorous populations. Well known for its challenging trout streams, the area is especially popular for fly-fishing; in season, anglers dot the protected streams.

Symbolically, too, the Catskill region has a long tradition in early American history and in New York State culture. The birthplace and haunt of John Burroughs, and the setting for Washington Irving's tales of early American life, the Catskill Mountains were the subject *sublime* of the Hudson River school painters. In the 19<sup>th</sup> and early 20<sup>th</sup> centuries, middle class and upper class Americans citizens vacationed in the area; in 1894 a story in the *New York Times* reported, "A four-in-hand drive from Stamford down the picturesque valley of the Delaware made a day's pleasure for a merry party of people" and listed hundreds of visiting socialites, including business tycoons, government officials and military officers from around the country (Crowded Catskill Resorts, 1894, p. 12).

Just after the turn of the 20<sup>th</sup> century, middle class Jewish families escaped the tenement conditions of New York City to farm in Sullivan County and started what became known as the 'borscht belt' (Rozhon, 1999). By the middle of that century, the area attracted New Yorkers to resorts in Monticello and Liberty where famous performers entertained, and Latin dance festivals lured the young (Hughes, 2006). In 1969 the soon-to-be-iconic Woodstock Festival was held in Bethel, NY. Eventually a cultural center for performance, concert, and art was built on the site, including a museum remembering the "the story of the sixties and Woodstock" (Applebome, 2008-a; Bethel Woods Center, 2008. para 1).

In contemporary times, small dairy farms, once thriving in the region, struggle to stay profitable, and many Catskill residents rely on logging and bluestone quarrying to earn a living in dangerous jobs demanding skilled and difficult labor. Local residents are increasingly dependant on tourism, fishing, hunting, and on part-time residents for economic stability, much of it

originating in New York City. Small farmers grow organic produce for New York City restaurants, and the area is dotted with artist colonies, studios and spiritual retreats (Neilan, 2001;Vora, 2008). A significant number of second homes—from log cabins to Victorian estates—are maintained by part-time seasonal residents who contribute to the region's economy (Hughes, 2006; 2009; Navarro, 2008).

### **Early media frames**

When the media began reporting that extensive natural gas deposits in the Marcellus shale might soon be tapped, gas prices were averaging \$3.50 per gallon; relations with oil-producing countries had increased calls for less dependence on foreign oil; and discussions of alternative energy were prominent in the media. Early news stories about deposits of natural gas in the Marcellus Shale focused on Pennsylvania where the shale was thickest and covered much of the state, and where state and local governments encouraged drilling as a way to relieve severe economic problems (Belco, 2008; Bertola, 2008; Brown, 2008; Conway, 2008). In April of 2008 the Wall Street Journal reported,

Natural-gas producers are swarming into Pennsylvania to chase what many are betting could be the next big thing: a thick wedge of gas-bearing rock called the Marcellus Shale.... The result is a land rush unmatched anywhere else in North America as companies try to snap up drilling acreage on a giant swath of rock stretching from West Virginia across Pennsylvania to the northeast corner of the state, 90 miles from New York City (Gold, 2008, p.A.2).

Citing Range Resource's intentions to spend \$426 million in 2008 alone, the article also referenced EOG Resources Incorporated, Chesapeake Energy Corporation and Anadarko Petroleum Corporation as companies planning to drill "in Appalachia" (Gold, 2008, p.A.2). By July of 2008, deep well permits had been issued



“so fast” in Pennsylvania, it was reported “difficult to get an accurate account from state agencies” of the total; however, between 590 and 720 permits were estimated to have been given out (Hopey, 2008-b, p. B1). In December, 2008, *Barons* reported, “Pennsylvania has hit upon a novel way to help close its \$1.6 billion deficit for the fiscal year ending June 30.... The state raised \$190 million in September by granting licenses to drill on 74,000 acres. If the legislature approves, this will plug about 11% of the 2009 deficit” (Blumenthal, 2008, p.11).

A story in the *New York Times* exemplified the frames that would dominate the media for the next few months; the subject was natural gas and the themes were clear: the urgent need for domestic energy sources, the economic benefits for depressed Appalachian counties in Pennsylvania and New York, and the potential profit for individual landowners. “If all goes well, the Marcellus could help moderate the steep climb in natural gas prices and reduce possible future dependence on natural gas from the Middle East ” (Krauss, 2008, p. C1). Such stories established a rhetorical structure that was repeated in similar stories in national, regional and local media. Economic benefit to the area was dollar-quantified, then reinforced and personalized by interviews with rural families whose lives would be changed by the gas lease windfalls. Landowners were reported to be leasing their mineral rights to gas companies in spite of initial misgivings; according to the reports, severe economic need changed their minds.

For example, Krauss’s (2008) story opened with a quotation from Raymond Gregoire, a farmer at first “reluctant” to lease – “It’s a modern-day gold rush in our own backyard”– and ends with another landowner’s personal confession: “‘Now I can retire,’ said Robert Deiseroth, a 63-year-old farmer ...who recently received a \$16,000 royalty check from Range Resources that he hopes will be repeated month after month. ‘This was a godsend for

me. If it weren’t for this I would have to sell off some of my land to get some money for retirement” (Krauss, 2008, C.1). Similar accounts began to appear almost daily in the regional press. Media reported individual stories of sudden wealth, albeit tinged with some concern for the environment. Tom Wilber, writing for Binghamton’s *Press & Sun Bulletin*, the largest daily in the area, stressed the potential boon for the southern tier of New York in terms of “hundreds” of new jobs to be created (Wilber, 2008-a); “millions” of dollars worth of land lease deals between energy companies and Delaware county landowners (Wilber, 2008-c A.1); and cash details of leasing terms: “The deal will pay landowners \$2,410 per acre, plus 15 percent royalties from productive wells. For some with large tracts, that means checks with five or six figures” (Wilber, 2008-c A.1).

Although such reports described landowner ambivalence even as they spoke about individual leasing deals, the stories stressed that uncertainty about environmental issues was offset by personal need for money: “The tone of several families interviewed Friday morning reflected more resignation than celebration over the prospect of gas wells springing up throughout the towns of Sanford and Deposit,” wrote Wilber. “How did the Perciballi family feel after signing away mineral rights to 75 acres? ‘I don’t know,’ said Mike Perciballi. ...He is worried that the solitude and peace of the countryside might be spoiled” (Wilber, 2008-c, A.1). Each family interviewed shared personal anxiety about leasing along with their need for extra money: “I’m afraid it’s going to change the whole character of the place,” said Sylvia Theis. But Theis had developed breast cancer, and “the money will help the family deal with medical expenses” (Wilber, 2008-c, A1). In addition to private landowners, whole towns and counties were eager to sign lease agreements. “Broome County officials are bullish on natural gas,” reported Wilber in October. “The faltering economy, plummeting energy prices and unresolved regulatory questions have not

soured expectations that natural gas deposits under county property will produce \$5 million next year” (Wilber, 2008-f).

Texas Range Resources, Cambridge Energy Research Associates, and the New York State Energy Research and Development Authority were primary sources used to name the potential drilling as a windfall for the region, akin to the boomtown of Fort Worth, and journalists pointed admiringly to the Texas experience: “By using horizontal drilling techniques, oil and gas companies have been able to draw natural gas from underneath the city of Fort Worth, even from below schools, churches and airports” (Krauss, 2008, p.C.1). The Fort Worth example would become a significant issue in the controversy. Environmental advocates used examples of drilling mishaps in the Texas Barnett shale to refocus the story on unacceptable risk.

### **Names and Definitions: “Hydrofracking”**

At the center of the framing conflict was *hydraulic fracturing*, a water-intensive gas-drilling technology used extensively in the West. Initial news stories gave scant attention to what was involved in extracting gas from the Marcellus Shale. Naming *hydrofracking*<sup>xxiv</sup> an “improved recovery technology,” the process was loosely described: “The companies have perfected hydraulic fracturing techniques, pumping water and sand into well bores to fracture shale and release gas from its pores” (Krauss, 2008, p. C.1). As industry representatives defined the process for the press, hydrofracking was an advanced technology, enabling deep horizontal gas drilling in shale previously inaccessible to vertical drilling, and therefore making a new source of clean energy available for domestic use. “The water, pumped under high pressure, carries the sand grains into those fractures. In a matter of days, the water is pumped back out of the hole and the sand is left behind to hold the fractures open, allowing the natural gas to move through them to the well where it is collected and moved to the surface” (Hopey, 2008-a, p. B.4).

Sometimes praise for hydrofracking was boundless. For example, in October of 2008, Roger Lowenstein published a piece for the *New York Times Magazine* about the history of oil economics and lauded natural gas as “cleaner” than oil. Lowenstein described hydrofracking briefly without naming it: “The drilling uses a new technology to inject water deep below the surface to split apart the shale, then underground drilling continues horizontally for hundreds of feet” (p.51). Going even further in his support for the technology, Lowenstein referenced Robert Barbera, chief economist with the Wall Street firm Investment Technology Group, who hypothesized that horizontal drilling “proves that technology will frustrate Thomas Malthus, the classical economist who forecast catastrophic, population-induced food shortages” (p.51). No reference to environmental or water problems appeared in the story. Lowenstein concluded, “The only risk in the Marcellus is that falling prices will sabotage the entire enterprise” (p.51). Occasionally, early stories raised the question of wastewater but underplayed potential problems: “Where the water goes after it’s used may be more of a problem. Water used to fracture underground rock and pulled back to the surface can be contaminated with brine and salt, and even pick up some radioactivity, and must be treated before it can be released into state waterways” (Hopey, 2008-b, B.1). The misinformed naming of the toxic waste as “brine” that could be “released into waterways” was soon to change as real information about the process circulated in the media.

Environmental groups, local citizens, and investigative journalists began to explore the details of hydrofracking technology as practiced in Texas by the same corporations proposing to drill in New York. Focusing on the hydrofracking process, reports circulated that fully defined the technology as a process that uses and renders toxic vast quantities of fresh water (Report on Marcellus Shale drilling, 2008). Websites and press releases reported the

details: For *each* well drilled, hydrofracking technology requires three to nine million gallons of fresh water, a volume that can be repeated up to six times over the life of the well (Public health and toxics, Earthworks, 2008; SRBC June 12, 2008). Fresh water is mixed with sand and chemicals and blasted under high pressure into the shale to force gas up for extraction (SRBC June 12, 2008). After the hydrofracking is completed the now-toxic fluid must be extracted, contained, and transported to non-permeable permanent storage. The Susquehanna River Basin Commission computed estimates of water and trucking needs: for an average well using five million gallons of water, approximately 800 truckloads, each carrying a gross weight of 40 tons is necessary (SRBC June 12, 2008). During operations, rigs are pumping 24 hours a day, seven days a week, and well pads are brightly lit at all times, night and day.

Websites and news reports explained that the Federal Energy Policy Act amended the Underground Injection Control provisions of the Safe Drinking Water Act in 2005 to exclude hydraulic fracturing from the definition of "underground injection." However, according to New York State's Department of Environmental Conservation, New York State maintains the power to regulate the process (Effect of Federal Safe Drinking Water Act, NYSDEC, 2008).

Developed by Halliburton Corporation, the chemical compounds used in hydrofracking are held as proprietary secrets (Kane, 2008). But by December of 2008, a list of chemicals discovered by analysis of "waste pits and ground water" in Western wells was made public by the Pennsylvania Department of Environmental Protection and circulated on the web: The list included "highly toxic and carcinogenic compounds like benzene and formaldehyde, and ethylene glycol, as well as hydrochloric acid, N,N-dimethyl formamide, Gluteraldehyde and bleach" making the containment, transportation and storage of the toxic waste water a serious concern

(Miles, 2008). Definitions of hydrofracking as a dangerous process were reinforced by witness testimony and scientific research, and supported the emerging frame of environmental risk.

### **Sources for Reframing: Witnesses and Scientists**

In the summer of 2008, a number of stories began to appear reporting drilling problems in Texas and other Western states and in Pennsylvania; collectively the stories warned that hydrofracking technology was a risk to the Catskill region's water supply, that it was dangerously toxic, necessitated extremely high withdrawals of fresh water, and that transporting the water to and from well pads generated heavy trucking needs on infrastructures already stressed by the disastrous regional flooding of 2006 and construction of the Millennium Pipeline.<sup>xxv</sup>

Fort Worth was an important on-going example for environmental activists in the Upper Delaware region. Range Resources, Chesapeake Energy, and Devon Energy, among other companies intending to drill in New York, had years of experience using hydrofracking to drill the Barnett Shale in Texas; company officials were frequently cited in pro-drilling stories. But increasingly Texas residents reported problems: removal of toxic wastewaters, gas explosions in area pipelines, and ill health from air and noise levels were included. Don Young, a Texas resident activist, was interviewed on National Public Radio: "Now we're having all the problems associated with gas-drilling; compressor stations, pipelines, drill pads. They're taking away our green space. They're bringing in pollution. They're bringing in truck traffic - affecting our neighborhoods in a very negative way" (Burnett, 2008, B.4). The broadcast reported that a gas well explosion resulting in one death and the evacuation of 500 people from their homes was alleged by OSHA to be due to "contractors at the XTO Energy well [who] did not follow safe work practices" (Burnett, 2008). Another story summarized research findings of Dr. Roxana Witter, lead author on two public

health studies: “Neighborhoods, schools, and workers in close proximity to oil and gas activities may be at increased risk for cancer, cardiovascular disease, asthma, and other disorders,” due to industry pollutants (Gorman, 2008).

Terry Tempest Williams, nationally known naturalist and author, blasted the intentions of former President George W. Bush’s administration to drill in and near national park lands as “shameless profiteering.”<sup>xxvi</sup> She cited “gas development in southwestern Wyoming where, in 2008, the town of Pinedale experienced its first ozone alert and where water wells have been found to be contaminated, some with benzene” (Williams, 2008). In a story broadcast on WNYC public radio and widely published throughout New York State, Dr. Theo Colborn, a scientist who specialized in the “health effects of low-dose chemical exposure,” substantiated Williams’s claim and asserted that Benzene was one of 200 chemical compounds found in the ground water where hydrofracking had been used (Lustgarten & ProPublica, 2008). An expanded report in *Scientific American*, titled “Drill for Gas, Pollute Water,” challenged the 2004 EPA study that concluded hydrofracking “posed no risk to drinking water” and denounced policies that enabled the chemical components to remain secret (Lustgarten & ProPublica, 2008).

Of immediate import to New York residents were reports from nearby Pennsylvania where drilling had been so welcome; a steady stream of news stories began to report problems with gas leaks, water pollution, spoiled streams, land destruction and procedural mishaps (Hurdle, 2009). “Drill operators working for Range Resources and Chief Oil & Gas last month illegally diverted tens of thousands of gallons of water a day from rural streams to large-scale drilling operations. ...And in Susquehanna County [PA], about 800 gallons of diesel fuel — dyed bright red to help track it in the event of a spill — leaked from a storage tank at a Cabot Oil drilling site, threatening a nearby stream,” reported a story in the *Sun & Press* (Wilber, 2008-b,

p. 1A). “Horizontal well leak leads to evacuation,” headlined one story about a Pennsylvania well in the *River Reporter* (2008); another reported a well-water explosion linked to a nearby gas well (Search for cause, 2008). *Trout Unlimited*, the national organization devoted to “conserving, protecting and restoring North America’s coldwater fisheries and their watersheds,” cited the Water Resources Council at Cornell University: “Due to the likelihood that many of the wells will be located in the upper reaches of watersheds..., there is legitimate concern regarding the over exploitation of water” (Morgan, 2009, p.40).

Reinforcing reports from witnesses and scientists was a warning for New York State circulated by The Atlantic Chapter of the Sierra Club, Natural Resources Defense Council, and Catskill Mountainkeeper: “Many citizens who entered into these [leasing] agreements are unprepared for the five-acre staging areas, drilling fluid-collection ponds, reduced air quality, noise pollution, traffic, temporary road networks, and the pipelines that come with a hydraulic fracturing operation” (Wilber, 2008-b, p. A1). Circulation of scientific information supported witness testimony and began to weaken the frames of news stories that presented gas-drilling in the Marcellus Shale as a safe and welcome industry for the Catskills.

### **Publicizing Common Interests: The Catskills and New York City**

Especially significant in the evolution of the gas-drilling news frames were stories that publicized the common interests of Catskill residents and New York City to protect the Delaware watershed. Tensions between the two populations had a long history. In the 1950s through 1960s New York City expanded its upstate aqueduct reservoir system by building new reservoirs in the Catskills. Seizing land, villages, and farms through the state-approved policy of eminent domain, valleys were dammed to build the Cannonsville and Pepacton Reservoirs. Close to 2000 people in nine

flooded hamlets were displaced, and the remains of 2,371 people were removed from cemeteries to be re-interred elsewhere (Lost Towns Memorial, 2008).

Although the 1997 Watershed Memorandum of Agreement between New York City, New York State, United States Environmental Protection Agency, regional communities, and environmental organizations was a major historic effort to protect the unfiltered drinking water supply, tensions between “upstate” and “downstate” continued. Some Catskill residents believed that water levels in the reservoirs were kept too high and had contributed to the area’s disastrous flood of 2006; others thought that controlled releases were damaging trout populations in the streams and rivers (Watershed Report Card, 2008). Additionally, while affluent New Yorkers enjoyed the Catskills for vacations and escape, permanent residents saw a steady decline in their local economies. The rumors and realities of profitable leasing agreements were an appealing option for many landholders in the region whose acreage returned little income (High Stakes, 2008).

New York City’s WNYC and ProPublica’s<sup>xxvii</sup> investigative report emphasized the common risk to the watershed for the diverse populations in New York. The report was circulated in many venues and websites including, for instance, *The Oil Drum*, a site devoted to “discussions about energy and our future” (Plan for hydro-fracturing, 2008). The *Albany Times Union* published the story a few days before New York Governor Paterson signed a bill easing the permit process for gas drilling in the state as “a special report” with the headline “Toxic gas-drilling technique” and subhead, “‘Hydrofracking’ plan raises questions about water safety in state” (Lustgarten & ProPublica, 2008, np). The WNYC website posted the story with slides depicting well sites and holding ponds, including descriptions of questionable practices: “The Zunno family in Oxford, New York, recently found a truck had been taking water from a

wetland on their property. The driver told them the water would be used for gas drilling” (Natural gas drilling, 2008). Risk to New York City’s drinking water supply was highlighted, but the story stressed that the risk was common to everyone in the region as well. Structured as a challenge to New York State’s Department of Environmental Conservation, the report opened with a review of New York State’s early official position that drilling posed little danger to the watershed. ProPublica’s investigation contradicted the official position and described New York State officials as ignorant of the potential problems of excessive water withdrawals and water contamination by toxins.

Water questions became the basis for the rhetorical reframing of the gas-drilling story for both rural and urban residents: “Where will water for gas drilling come from, and who will dispose of it?” headlined a story published in the *Norwich Evening Sun* (deCordova, 2008); the *Elmira Star Gazette* published a report of a day-long symposium on gas-drilling organized through the New York Conference of Mayors, in Binghamton: “Water regulators expect energy companies tapping the Marcellus Shale to drill more than 1,500 wells per year throughout the region, ...raising questions about where [the water] will come from and how it will be transported” (Wilber, 2008). Local Catskill citizen groups organized to agitate specifically against unregulated drilling in the region. One of the groups featured in a series published by the *Sullivan County Democrat* was the Catskill Citizens for Safe Energy (Hust, 2008). A grassroots organization of 750 members formed “to protect what for them is nothing short of paradise,” the group focused on pressuring the state to design protective restrictions for drilling. Laury Sejen, a Jeffersonville resident, explained:

“I was scared, I was frightened, I was alarmed, and completely fearful of the pollution, contaminating the aquifer, the 24/7 trucks, the 24/7 noise, open waste pits with toxic water in them, ...And where

is the water coming from in the first place? ... You're talking about billions upon billions of gallons of water.... Are there going to be issues in terms of the groundwater? Are they pulling it out of the Delaware River, are they pulling it out of peoples' lakes and ponds?" (Hust, 2008, para 4).

Founded by two Pennsylvania residents, Barbara Arrindell of Damascus, and Pat Carullo, of Lackawaxen, Damascus Citizens for Sustainability grew to 4,000 members from Pennsylvania and New York on both sides of the Delaware River (Hust, 2009, para 3). Their passion for protecting the region was based on their "love of the river" and "a deep connection to our place here," Currello was quoted as saying, "I'm always in the river" (Hust, 2009, para 4). Opinion leaders quickly picked up the questions about water and reinforced concerns. Peter Applebome, of the New York Times, succinctly joined the two areas of immediate concern to diverse populations, the natural environment of the Catskills and New York City's water supply:

Either way, the quandary was the same: the economic rewards from thousands of new gas wells, or the risk that they could be drilled in some of the most scenic parts of the state and at the doorstep of New York City's water supply...For now, drilling applications will be required to undergo an ad hoc review reflecting broader environmental concerns, particularly those posed by the enormous water needs of the extraction process — including where to get the water; how to treat it; how to store, handle and dispose of it; and how to be sure water supplies are not tainted (C1).

In this case at least, the artificial boundaries that often divided "upstate" and "downstate" New York State residents were seen to be permeable. In fact, many people who considered themselves to be residents of both the city and the country expressed their concern from both vantage points. For instance, a *NYT* story referenced one New York City family who maintained a second home in the Catskills for over thirty years, "to enjoy the forests, the wildlife, the peace," for a few times each month:

And for the last several months, they have attended meetings with scores of other upstate residents who fear that those attractions will be marred by pollution, new roads and plummeting property values if ambitious plans to expand drilling for natural gas proceed. "We effectively risk ruining our drinking water and turning a pristine area into an industrial landscape," Mr. Moorhead,... said of the effect both upstate and downstate. "The whole thing is like a nightmare." (Navarro, 2008, p. A38)

NYC water officials began to call for a ban on drilling in the reservoir watersheds. The biggest factor cited was loss of the city's exemption from water filtration and the costs to build filtration plants. City Councilmember Jim Gennaro, a former state geologist, chaired the Environmental Protection Committee for the city and characterized filtration as a "\$20 billion consequence" of drilling (Miles, 2009). Although state environment commissioner "Pete" Grannis gave assurance that no permits would be granted for wells that would endanger the city's water supply (Miles, 2009), and that the Catskill environment would be protected (Grannis, 2008), legislators were not convinced.

Fig. 2 New York City's Cannonsville Reservoir, Delaware County. Photo: Diane Hope



A bill to ban drilling in the NYC watershed areas was introduced by New York State Senator Frank Padavan from Queens and Assembly member James F. Brennan of Brooklyn (Padavan/Brennan Bill, 2008). US representative Maurice Hinchey, alert to the toxic chemicals used in hydrofracking, recommended that “non-toxic fracturing fluids, such as those used in offshore locations and other environmentally sensitive locations” should be mandated in the watershed (High Stakes, 2008).

Under pressure from citizens, environmental organizations, and legislators, the New York State Department of Environmental Protection recognized that regulations for horizontal drilling and hydraulic fracturing “require[d] further review” and on October 6, 2008 issued a “Draft Scope for the Supplemental Generic Environmental Impact Statement on the Oil, Gas and Solution Mining Regulatory Program” (dSGEIS). From November 6 through December 4, 2008, six public hearings for comment were held across the Catskill area, although to the frustration of City officials, none were held in New York City.

The final “scope” document was posted on the NYSDEC website and made available for public comment on February 6, 2009. The document is an outline and summation of those issues to be covered in the “Draft SGEIS,” which will also be made available for additional public review and comment upon its completion during spring 2009. The document covers significant issues regarding hydraulic fracturing to

emerge in the reframing of the Marcellus gas-drilling story:

(1) water withdrawals, (2) transportation of water to the site, (3) the use of additives in the water to enhance the hydraulic fracturing process, (4) space

and facilities required at the well site to ensure proper handling of water and additives, (5) removal of spent fracturing fluid from the well site and its ultimate disposition and (6) potential impacts at well sites where multiple wells will be drilled during a three-year period. Noise, visual and air quality considerations are noted, along with the potential for cumulative and community impacts (DEC Final Scope, 2009).

A separate section was devoted to impacts on New York City drinking water and “regulatory coordination” with New York City to protect the filtering exemption was included (Final Scope, DEC, 2009). Yet Manhattan borough president, Scott Stringer, was not satisfied. His staff released a report that documented “dozens of incidents” in nine states where hydraulic fracturing has caused serious environmental problems: “From a water well in Wyoming with a concentration of benzene 1,500 times the level safe for human consumption, to a house in Bainbridge, OH that exploded in a fiery ball, to contaminated wells discovered just two months ago across the New York State line in Dimock, PA, the report presents a substantial catalogue of activity from around the United States that demands a pause and careful review before New York State embraces this method of drilling for natural gas” (Mayer, 2009, para 3). While the final set of regulations is still to be published, it is clear that the reframing of the Marcellus Shale story has had an impact on policy makers.

Yet serious questions remain, including demands on DEC staff necessary to implement environmental protections and the rush to complete regulations by summer of 2009: “If they do that in that time period, I find it impossible to believe that they will be doing an adequate environmental review,”

said Deborah Goldberg, managing attorney of Earthjustice, a non-profit environmental law firm (Mayer, 2009, para 6). Because other states have extensive experience with hydraulic fracturing, calls for the use of successful models to formulate gas regulations are increasing in New York and Pennsylvania (Use models, 2009). Future research is indicated to monitor any drilling that occurs and it is probable that additional news frames will evolve.

In the past few months, organized protest against loopholes in the Safe Drinking Water Act have been publicized in major news outlets as well as on the web. EPA Administrator Lisa Jackson, remarked in committee hearings that the exemptions for hydraulic fracturing would be revisited (Hinchey Gets EPA, 2009). "Democratic leaders in Congress are circulating legislation that would repeal the extraordinary exemption and for the first time require companies to disclose all chemicals used in hydraulic fracturing. In addition to Congressman Hinchey, Rep. Diana DeGette (D-CO), aims to attach a bill to a larger piece of legislation with broad support -- possibly a bill on climate change or a new energy policy measure -- where it would be shielded from industry resistance. On the Senate side, according to congressional staff close to the effort, Sen. Bob Casey (D-PA) has a companion bill ready to follow" (Lustgarten, Natural Gas Politics, 2009). The twin congressional bills, labeled the FRAC Act (The Fracking Responsibility and Awareness of Chemicals Act) are making their way through committee.

In addition, The Delaware River Basin Commission, a four-state regulatory agency, issued a "determination" that natural gas impacts on the river basin "to be substantial and in need of regulation" ([www.delawareriverkeeper.org.remember](http://www.delawareriverkeeper.org.remember)). "The nonprofit group NYH2O has begun organizing in New York City, calling for a statewide ban on natural gas drilling to protect not only the city's fresh water drinking supply, but everyone else's" (Hedges, 2009). In June, 2009, New York's

Department of Environmental Conservation revised the timeline for a final draft of new regulations-projecting September, 2009 as the earliest, and anticipating additional public hearings to be held across the state.

### **Conclusions and Disclosure**

The rhetoric of reframing reveals that news frames of environmental risk are not static, but dynamic and evolving social constructs that can be altered over time by informed citizens and community organizations who recognize shared interests, and whose voices are amplified and articulated by diverse media. Environmental communication scholars have multiple roles in analyzing, assessing, and teaching the practice of ethical reframing to students and citizens through basic rhetorical skills.

Reframing environmental news stories is a necessary and offensive stance against future misguided policy and a first step towards protecting living ecologies and physical spaces. By this, I mean that although news frame conflicts are understood by revealing the rhetorical actions used by those attempting to influence policy, it is important to remember that symbolic actions are rooted in the living world. Oravec and Clarke (2004) wisely reminded scholars of rhetoric and environmental communication of the ongoing challenge: "The challenge is representing the relationship between the material world and the language we use for identifying, making sense, administering and imagining it" (p. 13). Their essay concludes that in the face of the ongoing environmental crises we witness and describe, "the need to reveal our intimacy with the world" is paramount if we are to sustain the vitality of the discipline of environmental communication. In that spirit, I offer the following disclosure in an attempt to "bridge the gap between experience and research" (Oravec & Clarke, p.13).

I have been a seasonal resident of Delaware County for over 40 years. A creek that begins in the high hills and meanders down to the Delaware River



dominates the valley where I live part time. It is a wet place, alive with life. Black bears, deer, a variety of birds, mink, beavers, mountain cats and weasel come to drink from the creek, sharing their habitat with my family and me. I have fished, swam and hiked the creek. I have photographed and painted it, sat on the banks and listened to it, and watched the water reflect the light as it cascades the rocks. A few years ago our very young suburban-bred granddaughter stood on the footbridge, looked down at the creek, at the forest behind the cabin, at the distant hills and near meadows, and asked her grandfather, "Is this your backyard?"

The answer to her innocent question is "yes," and one reading of this study is that mere self-interest generates concern, scholarship, and action. Yet another conclusion resonating powerfully at this time in Earth's history is that depletion and pollution of the planet's supply of fresh water is at a crisis level, and headed towards catastrophe. Ongoing and growing research documents that misguided water policies and practices have allowed the damming, dredging and drying up of once vibrant rivers, wetlands, and aquifers; overdevelopment of drought-prone metropolises like Los Angeles and Las Vegas in deserts where water must be diverted (and often stolen) from remote locations; the destruction of wildlife habitats; increased desertification and ill-health world wide; the near eradication of the Florida Everglades; and human warfare over water-rights (Glennon, 2002; Grunwald, 2006; Lohan, 2008; Shiva, 2002; Wood, 2008).

Robert Glennon (2002) asks, "Is Gold or Water More Precious?" as a title to a chapter about mining in Nevada (p.169-181), and the question holds for drilling gas in the Marcellus shale as well. As the Texas

slogan put it: *We Can't Drink Natural Gas!* No backyard should be subject to toxic pollution and depletion of potable water. Sometimes it's helpful to state the obvious: "Water is the essence of life ....Without it, life ceases. With it, life can flourish" (Glennon, 2002, p. 13). Those citizens who have reframed the Marcellus gas-drilling story provided an essential step towards new policy necessary to protect the watershed and the region's beauty. I thank them for their work.\*

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### Notes

The technology is variously spelled but most commonly abbreviated as *hydrofracking* (Mayer, 2008).

<sup>xxiv</sup> The Millennium Pipeline is a 182-mile natural gas pipeline completed in December, 2008 that runs from Corning to Ramapo. Heavy road damage is reported with compensation for damages in debate between towns and Millennium Pipeline Company. (Whitman, 2009)

<sup>xxiv</sup> In February 2009, the plans to sell the lands for gas leasing near the national parks were cancelled by the Obama administration.

<sup>xxiv</sup> ProPublica <<http://www.propublica.org/>> is an independent, nonprofit newsroom that produces investigative journalism. ProPublica is led by Paul Steiger, the former managing editor of *The Wall Street Journal*, with key funding provided by the Sandler Foundation.

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## **Influencing Decision Makers: Applying Psychology and Communication Research for Upstream Environmental Behavior Change**

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### **Abstract**

*Environmental practitioners have traditionally struggled with promoting long-term and large-scale pro-environmental behaviors. An alternative approach to behavior change, coming from the social marketing literature, is to target decision makers. The goal of this upstream approach to behavior change is to influence decision makers in implementing environmentally oriented policies that would then influence the general population. However, there is limited evidence in the literature or in practice suggesting its applicability. In this respect, the main objective of this study is to present a roadmap connecting the scattered literature, providing an initial formal step towards the organization and establishment of a body of literature that could be useful for both academics and practitioners of the upstream approach to behavior change. I explore a diverse body of literature, focusing primarily on the areas of social marketing, political science, and communication studies. The review suggests that there is very limited evidence about the applicability of the approach; but nevertheless, there exist a small number of studies that provide guidance towards a more robust body of literature.*

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### **Introduction**

Environmental and social change practitioners have been formally applying psychological and communication techniques to encourage environmental behaviors for at least the last 40 years. The field of environmental psychology first developed as a response to more traditional approaches to behavior change, such as policies and direct regulations, technology, economic incentives, and information. From this perspective, environmental psychologists have ventured into understanding the motivators and predictors of behaviors as an alternative method to environmental conservation. However, despite the encouraging arguments developed by its proponents, the field has failed to deliver its promise (Tanner, 1999). Geller (2001) argues that part of the problem responds to the fact that most studies are confined to the academic world where only other researchers and their students read them, providing limited access to theoretical information to those practitioners designing behavior change

interventions. Additionally, most studies have focused on the study of the behaviors of the general population, mostly in developed countries. This inclination points towards the acknowledgment of the general population as the wrongdoers, which is not an entirely accurate representation of the broader problem. Most of the behaviors being targeted can be traced back to contextual factors affecting them, which includes existing policies.

Considering this history of limited successes, and the resource constraints that most practitioners have to face when designing their campaigns, what path should environmental communicators take to promote environmental behavior more effectively? One suggestion comes from the social marketing literature, which suggests that practitioners should target those individuals with the ability to promote large-scale and long-term behavior changes.

The core idea of this proposal is that decision makers can promote pro-environmental behaviors by enacting specific policies. Therefore, the goal for

practitioners is to make sure that the most appropriate policies are designed and implemented. Within the current climate and energy crises, bold policy changes are required, and the potential of this approach might prove to be useful.

If we are to influence the behaviors of these individuals with communications and marketing tools, we need to understand the contextual and cognitive factors influencing their decisions. The audacity and novelty of this proposal calls for a required review of the literature that can provide the foundation to an empirical undertaking. This study seeks to provide such a review by drawing sources from different disciplines such as social marketing, political science, and communication studies. The main objective is to present a roadmap connecting the scattered literature, providing an initial formal step towards the organization and establishment of a body of literature that could be useful for both academics and practitioners of the upstream approach to behavior change.

### **The psychology of policymakers: Implications for behavior change studies The social marketing perspective**

Social marketing is defined by Andreasen as:

“... the adaptation of commercial marketing technologies to programs designed to influence the voluntary behavior of target audiences to improve their personal welfare and that of the society of which they are a part.” (1994, p. 110)

Since its formal inclusion in the academic realm in the early 1970s, social marketing has been applied and perceived as a downstream approach to behavior change (Brenkert, 2002; Goldberg, 1995; Middlestadt, Schechter, Peyton, & Tjugum, 1997). This means that it focuses on influencing and changing inadequate behaviors, and promoting positive ones at the level of the general population. While this application has been successful in a wide diversity of arenas (including environmental conservation, but most

notably in public health), it still overlooks the structural and root problems that in the first place promoted those harmful behaviors (O'Shaughnessy, 1996; Peattie & Peattie, 2003). These structural problems include, among others, inadequate policies that drive peoples' behaviors. In view of this limitation, some academics have presented arguments in favor of an upstream application of social marketing (Andreasen, 1997, 2006; Bloom & Novelli, 1981; Goldberg, 1995; Hastings, 2003; Hastings & Donovan, 2006). Moreover, Goldberg (1995) argues that both downstream and upstream research and interventions are meaningful depending on the behavior that is targeted and the context in which it occurs.

The upstream approach suggests that to influence behaviors, social marketing programs/campaigns should target the policymaking level. This means that social marketers should target policymakers as their primary audience with the goal of changing their behaviors (i.e. policy decisions). The rationale behind the upstream proposal is that influencing the individuals who have the power and ability to affect social change through their personal means, can be more effective at the large-scale and long-term, while at the same time being a more cost-effective target for social marketers' limited resources (Andreasen, 1997).

Andreasen (2001) presents a good example of this application in the problem of overweight kids. Traditionally, social marketing and educational interventions have directly targeted the overweight kids, trying to change their eating habits or get them to exercise more frequently. However, these interventions have not been very successful, especially when they were short term and the incentives were withdrawn at the end of the intervention. The upstream approach would instead target individuals that could have a more direct and significant influence on the kids. In this case, schoolteachers or fast food menu designers would be the primary target audience. Schoolteachers could monitor the eating

habits of the kids, working directly with them to design weight goals. Additionally, they could promote physical activities that they usually do not perform out of school. On the other hand, fast food menu designers could design healthier menus with incentives for the kids, in order to promote them and make them more attractive for them. In both cases, the intention is that either target audience in the upstream approach would influence directly the 'final consumer' (overweight kids) (Andreasen, 2001 p.116).

Similar applications could also be designed for environmental problems. For example, in the case of energy conservation, a different approach to the traditional focus on residential homeowners might be to target the energy companies. The intervention could be directed towards a change in the pricing mechanism that would encourage homeowners to conserve energy during peak energy consumption periods.

In the academic literature, the first approximation to the use of social marketing as an upstream approach in the environmental arena is found in an article by Altman & Petkus (1994). They propose the use of social marketing tools to increase the participation of stakeholders in the development of environmental policies. They argue that through this framework, it is possible to develop more adequate policies through highly deliberative and participatory processes. Maibach (2003) also discusses the need for social marketers to target policy makers and developers in public health responsible of taking decisions that could affect a large target audience. Similarly, Polonsky, Binney, & Hall (2004) studied the managers' attitudes and perceptions within the social marketing framework towards the control of introduced species in Australia. They used the Motivation, Opportunity, and Ability (MOA) framework to determine the likeability to engage in responsible environmental behaviors. The results of these studies provide important insights into the understanding of decision makers' attitudes and behaviors at the individual level, which

could be used to design an upstream strategy.

Wymer Jr. (2004) provides an interesting historical example to social marketers of the use of core social values to promote a social cause. Wymer Jr. reviews the British Mines and Colliery Act of 1842 (which dealt with women and child labor in mines) to exemplify the historical challenges and relevance of changing core social values within policy makers and the general public. He argues that social marketers still face those same challenges, and that changing those values should be an incremental endeavor.

Finally, it is worth mentioning that within the environmental arena, the community based social marketing approach (Doug McKenzie-Mohr, 2000; D. McKenzie-Mohr & Smith 1999) has achieved widespread recognition and popularity among practitioners.<sup>17</sup> This model involves the application of psychological tools (e.g. social norms, incentives, prompts) to promote environmental behaviors using a social marketing framework, and targeting specific segments of the general population. The evidence presented in the literature and the case studies does not demonstrate the applicability of the model on decision makers.

Through this brief review of the social marketing literature, it becomes clear that although it does not provide solid theoretical or empirical evidence of its application, some studies provide an indication of the possibilities and potential of the upstream approach. More specifically, the social marketing literature provides the framework that now needs to incorporate insights from pioneering practitioners and other academic fields.

### **The political science perspective**

Influencing the beliefs, attitudes, or behaviors of elites stands as a paramount task. But even before any kind of

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<sup>17</sup> See: [www.cbsm.com/](http://www.cbsm.com/) and <http://www.toolsofchange.com/> for a list of case studies.



communication, marketing, or behavioral strategy is designed, we need to look into the existent evidence about the factors influencing elites. Traditionally, studies on policymaking have focused on the process, with limited focus at the individual level of decision-making (Reeher, 1996). Studies and reviews of contextual factors and structural influence in the policymaking process are plentiful; therefore, in this review I only describe the literature pertinent to elites' socio-psychological factors.

One of the first frameworks incorporating individual level factors in policymaking is the Advocacy Coalition Framework (ACF). This framework, developed by Sabatier (Sabatier & Jenkins-Smith, 1993) as an alternative to the stages heuristic model of policy change (i.e. problem identification, agenda setting, policy formulation, implementation, and evaluation), was one of the first to incorporate policy beliefs of stakeholders in the policy process. The ACF suggests that core belief systems of stakeholders are more influential factors in policymaking than their actual policy interests. Policy interests are driven by factors such as political party affiliation, institutional goals, and external pressure. On the other hand, the core belief systems are motivated by individual level cognitive factors such as attitudes, worldviews, and perceptions.

Nevertheless, Sabatier's framework does not inform us how these policy beliefs are formed. Grant Reeher finds surprising the limited number of studies centering on the individuals that are part of the policy processes that political scientists so intensely study. In his work, Reeher (1996; Reeher, 2006) set to study policy makers at the state level, providing some understanding of how these elites operate and what influences them in their political lives. He argues, against conventional wisdom, that politicians mostly enter politics with a sincere interest in the common good, and that their political behaviors are even influenced by their personal lives. In social marketing interventions, formative research requires the in-depth understanding of the

target audience. In this respect, Reeher's work provides important insights to a target audience that is presumably difficult to access.

Chittick, Billingsley, & Travis (1990) undertook another study that presents similarities to Reeher's work, fitting within the ACF. Coming from a political psychology perspective, Chittick et al. (1990) discuss the difference between the way elites and the public think and structure their beliefs about foreign policy. Their main findings suggest that there are no significant changes in elites' belief structures over time. Mass attitudes had a somewhat different structure, showing more cyclical changes. However, both groups hold similar belief systems and attitudes. These findings challenge those reported by Wittkopf (1987) and Wittkopf & Maggiotto (1983). These studies focus on the attitudes of elites and masses towards the role of the US in international affairs. The results of all these studies point out towards the complex challenges of influencing elites' beliefs and/or behaviors, and that elite's belief structure might diverge from other groups' structures.

The difficulties of studying elite groups is also demonstrated by the differing and somewhat contradicting results of Rothman & Lichter (1987) and Maney & Plutzer (1996). The former found that policymakers' attitudes about nuclear energy fell between those of scientists and the media (the latter being more suspicious). On the other hand, Maney & Plutzer (1996) found no significant difference between the attitudes of policymakers, scientists, and the media towards food safety. Moreover, attitudes of policymakers were closely aligned with those of scientists. Generalization from either result is problematic, which suggests that the particularities of each issue play a role in the formation of such attitudes and beliefs.

Other studies have also focused on the differences in values and beliefs of policymakers and other groups. Shama & Jacobs (1982) pointed out the differences in

values between policy makers and solar advocates associated with solar energy. The researchers found that both groups use significantly different scenarios upon which they perceive and evaluate the adoption of solar technologies. The differences can be attributed to the different hierarchies of values relating to solar energy policy. While policy-makers emphasize the economic and national security values of solar energy, solar energy advocates stress environmental, ethical and social values.

Similarly, in a recent study, Wilson (2006) focused on the ways in which communication scientists and policymakers affect how scientific knowledge and guidance is incorporated into ocean policy decisions. A key factor in this relationship is the influence of the values - reflected in the perceptions - of policy makers about scientific and political facts and processes. Wilson argues that her study is one of the first to "...concentrate on the nexus of theoretical and practical research on intergroup cultural communications and specifically between occupational groups like scientists and policymakers" (Wilson, 2006, p. 249). She further suggests that the results of her research could provide evidence for a better participatory process that could yield more appropriate ocean policies.

But, what evidence can social marketing practitioners, environmental communicators, and social change agents use to plan their strategies? Zimmerman, Mattessich, & Leik (1979) conducted a study about family policies that could represent a rubric for similar studies in the environmental field. They attempted to measure the attitudes of legislators in Minnesota in regards to family policies, and how those attitudes were formed and/or influenced. Their findings suggest that legislators do not form their attitudes based solely on the merits of a particular policy proposal, but they also rely on their political, familial, social, and personal contexts. The independent variables that were more significant in this case were: family stage of development, use of services, party

affiliation, education, income, marital status, and age. These results show that both political interests and beliefs play a role in policy decisions.

More specifically, Schafer (1997) studied the ways in which images affected policymakers' attitudes (towards an opposing country and towards strategy), and behaviors (in the form of foreign policy choices). The results show that images do have an effect on both attitudes and behaviors. However, the author recognizes the influence of other independent variables that are interrelated with the images. Furthermore, this experimental study was conducted with a sample of college students instead of actual policymakers. This methodological constraint could have affected the results, and again shows that researchers' access to elites is sometimes a challenging task.

Similarly, from a communications perspective, Swaffield (Swaffield, 1998a; 1998b) conducted a study focusing on the use of language and frames by policy makers in New Zealand in regards to the role that trees play in high country land use. The study included interviews with land managers, public administrators/policy planners, consultants, scientists, politicians (local and central), and advocates. Swaffield discusses the relevance of the use of metaphors or frames of reference in environmental policy making. The complexity of environmental issues calls for the use of simplifying mechanisms (such as metaphors) to grasp the essence of the problems. Even though the study did not focus on cognitive factors or behaviors, it provides an example of the kind of research necessary to better understand the way policymakers operate and use their perceptions and values to design policies.

### **Agenda setting and mass media effects**

The literature I've reviewed so far mostly deals with the differences between values and beliefs of elites and other groups. From the perspective of a practitioner it's reasonable to ask, what resources are available to influence the decision makers'

behaviors? Possibly, the resource that is most accessible and familiar to them is the mass media.

The mass communication and political science literature on agenda setting provide a wide variety of examples about media effects (McCombs & Shaw, 1972; Tewksbury & Scheufele, 2007). Studies about framing (Druckman, 2001) and priming (Druckman, 2004) are common, but similarly as the social marketing literature, most of them focus on effects on the general population. In this respect, some researchers argue about the pending necessity of studying mass media effects (which has traditionally been concentrated on effects on public opinion) on decision makers (Hans Mathias Kepplinger, 2007; Hans Mathias Kepplinger & Glaab, 2007). The rationalization behind this proposal responds to the same argument presented in the social marketing literature, that the impact on these individuals can have widespread consequences through their policy decisions on large populations. However, I would expect highly complex methodological limitations to this academic endeavor, taking in consideration the existent discussions in the public opinion literature (Tewksbury & Scheufele, 2007).

Protess and colleagues present one of the few examples illustrating this approach and its limitations (Cook et al., 1983; Leff, Protess, & Brooks, 1986; Protess et al., 1987; Protess, Leff, Brooks, & Gordon, 1985). The objective of this series of four case studies was to understand the influence of media investigative reports on policymakers' attitudes and subsequent policy decisions. They utilized a pre and post-test methodology, which included interviews with local policymakers. The studies covered different topics, which included fraud and abuse in the federally funded home health care program, government improprieties in the reporting and handling of rape, brutality among police officers, and toxic waste. The researchers found that in two cases, the news reports had an effect on policy makers' attitudes, and in all cases there was

an effect on policy decisions. They suggest that investigative reporting might have a more influential role in policymaking than initially estimated, but they also recognize that other factors might also be influencing the outputs. More specifically, they suggest that "These factors include the timing of the publication in relation to political exigencies, the extent of journalistic collaboration with policymakers, the level of general public and interest group pressures, and the availability of cost-effective solutions to the problems disclosed" (Cook et al., 1983, p.33).

Linsky (1986) and his colleagues at Harvard conducted a similar in depth analysis about mass media effects on decision-makers, but with a focus at the Federal level. They utilized a different approach, focusing on a broader spectrum of issues on a longer period of time. The results of this study suggest that the press has significant impacts on both policies and policymaking. Although their interest was on press-government relations, their results are still relevant to behavior change practitioners. More specifically, it suggests the importance of partnering with the press to promote change, instead of relying exclusively on advertising as the vehicle to entice it.

### **Learning from other fields**

With the limited evidence in the social marketing and political science literature, what other evidence is available to support the upstream proposal? Unfortunately, throughout this review, the evidence found in other related fields is not very encouraging. Next I present the few studies on environmental management that have also attempted to present an upstream perspective.

Focusing on industry regulation, Cordano, Frieze, & Ellis (2004) conducted a study measuring the correlation between environmental attitudes and behaviors of three main stakeholders: businesses, regulators, and environmentalist groups. They found that environmental behavior intentions differed within the three groups,

attributing this to the ongoing conflict over environmental policy issues, their environmental attitudes, and in less degree to their group affiliation. Their study has its theoretical foundation on organizational behavior literature, specifically stakeholder theory. They suggest that there is a need for studies at the individual level of stakeholder behavior to better understand how individuals come to devote themselves to specific issues or to engage in a particular conflict.

Cordano et al. (2004) believe it is necessary to include the individual level to fully understand stakeholder member behavior. They argue that "...only recently have researchers begun to directly confront a living, dynamic model of stakeholders that recognizes individual behavior" (Mark Cordano et al., 2004, p. 37). They conclude that "...individual level variables may be important antecedents of the processes that drive stakeholder action" (Mark Cordano et al., 2004, p. 37). In this respect, Hovardas & Poirazidis (2007) also argue about the importance of understanding stakeholders' beliefs about environmental policy, suggesting that research on that area is still scarce.

In another study, Cordano & Frieze (2000) applied a psychological theory of behavior in their research. They used a modified version of Ajzen's theory of planned behavior to analyze the behavioral preferences of environmental managers. The authors focus on attitudes as an antecedent to source reduction preferences to pollution. Over time, the researchers found that managers' attitudes significantly influence the adoption of pollution prevention activities. However, they also found communication barriers within the organizations, which prevented and inhibited the adoption of environmental measures, even when those managers had positive attitudes towards the environment or the adoption of such measures.

It is very likely that other similar studies in this and other related areas of study have been conducted. However, based on the review I undertook for this

study, and because of space limitations, I have only presented those that I believe exemplify the kinds of studies that are relevant to the upstream proposal.

## **Discussion**

In this review, I have attempted to provide an initial theoretical background to the proposal suggested in the social marketing field to apply behavior change techniques to influence decision makers' behaviors. Although this review is still far from being comprehensive, it provides a first approximation to this novel and under-researched area of study. The review has succinctly covered a variety of academic fields and some of the main concepts that are relevant to the upstream approach, with each one providing a different but complimentary perspective.

The social marketing literature provides no empirical evidence suggesting the most appropriate ways to target policymakers' behaviors. This includes the public health area of study, which comes as a surprise, considering the extended literature in this area. Only Andreasen in his book *Social Marketing in the 21<sup>st</sup> Century* (2006) provides a specific outline of the upstream application.

In the political science literature, the most relevant research focuses on the differences between political attitudes, core beliefs, and behaviors of elites and the public. Nevertheless, most of the studies reviewed in this area lack an application of psychological theories that could be useful to understand these cognitive factors at the individual level. Moreover, the studies reviewed present somewhat contradictory results about the nature of elite's core beliefs.

Probably the most surprising and disappointing finding is the lack of studies coming from the environmental psychology field. Nevertheless, as argued by Vlek (2000), environmental psychologists should work directly with policymakers. Vlek (2000) outlines the main problems in past and current environmental psychology research. He argues that environmental psychology

has been traditionally anthropocentric and functionalistic, focusing exclusively on human behavior and well-being. He suggests that psychologists should work with policy makers – as well as other scientists – in the definition and analysis of environmental problems. Furthermore he calls for environmental psychologists to explicate to policy makers the conceptual flaws of the current free-market based world economy that he argues is the driving factor in the present environmental crisis.

The task proposed by social marketing academics is surely an ambitious one. Therefore, it should be discussed in an unequivocal way. In all the fields I have reviewed, there is a call for further studies on elites' cognitions and behaviors. However, that call has been largely ignored. The scant evidence suggests that in-depth analysis of the target population (decision makers) is necessary for practitioners to successfully utilize this approach. Although it is evident that applicable and useful studies are available, more specific studies like the ones conducted by Reeher (1996, 2006) and Linsky (1986) are needed.

In conclusion, both the environmental psychology and social marketing fields should attempt to incorporate the lessons and approaches found in other disciplines in order for them to build a more thoughtful, concise, and robust body of literature. Although this upstream approach to behavior change is relatively new, previous studies are still useful to understand the limitations and potential of this proposal. Similarly, some of the other fields reviewed in this paper – especially the political science field – could incorporate psychological models to improve and extend their study of policy elites.

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**Vegan Soul Food:  
African-American Vegetarianism in Media**

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**Abstract**

*In this study, a qualitative content analysis was conducted to explore media portrayals of vegetarians within the African-American community, an ethnic group that is disproportionately impacted by illnesses associated with meat and dairy consumption. Texts for the analysis were gathered from several outlets, including mainstream media, African-American/ethnic media, and vegetarian/environmental media, as well as a message board on an African-American vegetarian online social network. The results suggest that conflict was the primary theme that typified the presentation of African-American vegetarianism in the media texts. Instances of conflict were present in the relationship between African-American vegetarians and the broader African-American community, between African-American vegetarians and members of the traditional vegetarian movement, and between African-American vegetarians and prevailing forces in the Western health and medical establishment. Three sub-themes – holistic health and wellness, connections to tradition and ancestry, and African-American vegetarianism as a growing movement – were also identified and further explicate the central role of conflict in the media narratives. The study closes with a discussion of the findings' implications for environmental communication scholarship, as well as the prospects for vegetarian-related community-based health communication campaigns.*

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**Introduction**

The large-scale production and widespread consumption of meat and dairy products in the United States contributes to interlocking crises that threaten the health of the nation's natural and social environments. Industrialized animal production is one of the greatest sources of environmental pollution and resource depletion (Ehrlich & Ehrlich, 2008), while it is responsible for countless acts of inhumane treatment towards sentient creatures (D'Silva, 2006). Meat and dairy consumption has been connected to a wide range of infectious diseases and chronic health conditions (Gold, 2004).

Cox (2007) described the field of environmental communication as a "crisis discipline" with an ethical obligation to improve society's ability to respond to environmental dilemmas that threaten both human communities and natural biological systems. A shift in the nation's agricultural

and cultural practices related to meat production and consumption could significantly improve the prospects for long-term ecological sustainability. It is therefore incumbent upon environmental communication scholars to engage in work that addresses these pressing problems of human and environmental health. One of the entry points for communication researchers to pursue this task is to document the communicative actions that help define vegetarianism in the United States.

This study focuses on media discussions related to vegetarianism within the African-American community, an ethnic group that suffers disproportionately from illnesses that have been linked to meat-eating, including diabetes, heart disease, and hypertension (Walker et al., 2005; Office of Minority Health, 2005). After briefly tracing the history of African-American foodways and "soul food" in contemporary America, including a discussion of the role

of vegetarianism in African-American culture, the methodology and resultant findings of an interpretive qualitative content analysis that investigated media portrayals of the African-American vegetarian movement will be presented. Texts for the study were gathered from mainstream, ethnic, and vegetarian-interest media sources, as well as from an online message board devoted to issues of the African-American vegetarian community. The topic has little precedent in the communication research literature, and this study aims to serve as a starting point to build a broader understanding of the essential foundations and communicative processes related to African-American vegetarianism.

### **Meat Production and the Vegetarian Diet**

The environmental impacts of modern industrial meat production, particularly the raising of livestock for meat and dairy products, are staggering. In a report from the United Nations' Food and Agriculture Organization (2007), the livestock sector was cited as the single largest anthropogenic user of land, a contributor of 18% of the world's global warming gases, and the leading cause of global water pollution, among other ecological infractions. The US food system is heavily dependent upon fossil fuels, and a meat-based diet requires significantly more energy, land, and water resources than a vegetarian diet (Pimentel & Pimentel, 2003). Further, industrial meat and dairy production raise serious concerns for animal welfare and the inequitable distribution of global food, both of which are critical problems that have been well documented (D'Silva, 2006; Gold, 2004). While localized, sustainable and relatively humane meat production processes do exist, these remain a small minority within the vast industrialized food system and do not negate the positive potential offered by the widespread adoption of plant-based diets.

In contrast to the standard American diet (characterized by high levels of processed meat, dairy, sugar and refined foods), a vegetarian or a plant-based diet

(characterized by an abundance of fruits and vegetables, whole grains, legumes, and small amounts of animal products, if any) has been shown to help prevent coronary artery disease and stroke (Hu, 2003). Research has consistently shown a positive relationship between red and processed meat consumption with a variety of chronic ailments (Walker et al., 2005), including obesity (Snowdon & Philips, 1985), hypertension (Appleby et al., 2006; Wang et al., 2008), and diabetes (Schulze et al., 2003).

### **Food and African-American Culture**

A full treatment of African-American food history goes well beyond the scope of this paper. It is important to note that African-American foodways are not a monolithic entity, but rather part of a dynamic and ever-evolving system. The food culture has deep roots that trace back to Africa, where countless indigenous crops were gathered to serve as provisions during the trans-Atlantic Slave Trade and subsequently brought into America. African cuisine was incorporated with the food culture of the American south, while innumerable other environmental, cultural, and social influences interacted with African-American gastronomy through the time of slavery and up through the present day (Hall, 2007). The creation of what is commonly referred to today as "soul food" is inextricably linked to this history and to the institution of slavery – slaves from disparate African tribes found themselves working and cooking together, bringing with them their own traditional styles and tastes. These resourceful communities made do with allotments of fresh vegetables, which were either rationed by the slavemaster or, quite often, grown in personal gardens during slaves' scant extra time. In addition, slaves were sometimes given the scraps of meats after the slaveholding families had taken the prime cuts, forcing the slaves to be creative with items like chitterlings (pig intestines), which were often used to flavor stews and featured in other mixed dishes (Gregory, 1973; Whit, 2007).

In the 1960s and 1970s, an emerging soul food diet and a growing number of urban soul food restaurants drew inspiration from these historical culinary roots. However, by the late 20<sup>th</sup> century, several integral changes to the cuisine had occurred, with generally negative implications for health. Meat moved from a side dish to the main course, organic vegetables were replaced by chemically treated produce, the overall salt content rose significantly, and the high fat content of meals was not counteracted by the levels of physical activity required for manual work in an agrarian society (Whit, 2007).

Recognizing the growing health problems that went along with the soul food diet, several influential African-Americans of the 1960s and 1970s wrote about the benefits of vegetarianism and natural health (Opie, 2008). One prominent voice was Elijah Muhammad, the leader of the Nation of Islam. Traditionally, Muslims abstain from pig products, but in *How To Eat to Live* (1972), Elijah Muhammad advocated for a diet free from refined and processed foods and urged his followers to pursue a vegetarian diet for optimal health. In 1973, popular comedian and social activist Dick Gregory published *Dick Gregory's Natural Diet for Folks Who Eat*. This work railed against the negative health impacts of soul food, as Gregory detailed his own journey to a vegan raw food diet after he came under the tutelage of natural health expert Alvenia Fulton.

Opie (2008) argued that these so-called “food rebels” within the African-American community did not have a widespread impact on the culture. As Witt (1999) showed, however, there is reason to believe that the entrepreneurs who founded vegetarian soul food restaurants in the late 20<sup>th</sup> century were indeed influenced by the teachings of Muhammad, Gregory and other prominent African-Americans. So too, I would add, were those who more recently have formed African-American vegetarian community organizations and online social networks. The fact that vegetarianism is not “widespread” within the African-American

community must be taken in context as well. Contrary to what may be conventional wisdom, polls conducted by the Vegetarian Resource Group and the Harris Interactive poll have found that African-Americans are just as likely as whites and other races to practice a vegetarian diet (Vegetarian Resource Group, 2003).

Still, various cultural and social structural factors appear to contribute to higher incidences of meat consumption and related health problems among African-Americans in general. One major stumbling block is a matter of access. Larsen et al.'s (2009) review of the literature on this topic affirmed that there is a direct relationship between access to grocery stores and healthier diets, as well as an inverse relationship between healthier diets and access to fast-food restaurants. This “grocery-gap” has been documented in several cities across the nation – African-Americans and other minorities are most likely to find themselves lacking access to fresh produce and other healthy options within these food deserts (Shaffer, 2002; Sloane et al., 2003; Zenk et al., 2005).

Davis & Lin (2005) reported that, in comparison to other races, African-Americans have the highest consumption of pork, processed pork, and beef. Meanwhile, statistics show that African-Americans are significantly more likely than non-Hispanic whites to have high blood pressure, to be obese, and to die of heart disease (US Department of Health & Human Services). The American Diabetes Association also reports that African-Americans are disproportionately affected by diabetes. Further, up to eighty percent of African-Americans are lactose intolerant – a fact that has not been reflected in national dietary guidelines which encourage universal dairy consumption as part of a healthy diet (NDDIC). While these correlative studies do not provide definitive proof of causation, there is ample evidence to suggest a connection between certain African-American health disparities and dietary habits that feature significant levels of meat and dairy intake.

## **Vegetarianism and Food Studies**

Much of the academic work on vegetarianism and meat consumption has examined the motivations and personal values of research participants. MacNair (1998) found that the most common reasons for adopting a vegetarian diet included concerns about cruelty to animals, health, the environment and world hunger. After further research, MacNair (2001) added spiritual, aesthetic, and even anti-big-business concerns to the list. Several other researchers have analyzed the rhetoric of the vegetarian movement, and recently, much of that work has focused on discussions of health on vegetarian online forums (Wilson, Weatherall & Butler, 2004; Sneijder & Molder, 2004). Maurer (2002) offered the most complete sociological analysis of the vegetarian movement to date. She argued that the limited success of the vegetarian movement can be attributed to the failure of vegetarian organizations to convince the public that eating meat is immoral or dangerous. Maurer also confirmed the commonly held perceptions that vegetarians are most likely to be white, middle class women. As will be discussed in this essay, the observation that people of color are unlikely to be vegetarians may be more reflective of minorities' lack of participation in mainstream vegetarian organizations than of their actual prevalence in society.

The interdisciplinary field of food studies has witnessed an upswing in scholarly interest over the last several decades (see Mintz & DuBois, 2002, for an overview of anthropological work in this area; Avakian & Haber, 2005, for recent work in feminist food studies). The socio-cultural aspects of vegetarianism have been investigated by a number of researchers. Several critical theorists have argued that vegetarianism represents a challenge to Western ideas of dominance over nature (Fiddes, 1994), masculinity (Twigg, 1983) and patriarchy (Adams, 1990). The work focusing on vegetarianism in the African-American community, however, is extremely

limited. Witt (1999) provided a critical reading of Elijah Muhammad and Dick Gregory's motivations as part of a larger work examining African-American culinary history through visual culture. Harper (in press) prepared a collection of critical works, all written by African-American female vegans, on issues of identity. Clearly, this area of inquiry offers opportunities for further exploration, and this study is meant to be an early step towards better understanding the communicative processes integral to vegetarianism in the African-American community.

## **Methodology**

The methodology used in this study was qualitative content analysis, a procedure used to classify and describe central themes and tendencies in a set of analyzed material. In addition to observing manifest content, qualitative content analysis allows researchers to account for latent elements, which are often difficult or impossible to quantify but are undoubtedly an important part of a text's overall meaning (Kracauer, 1952). According to Morgan (1993), qualitative content analysis is most appropriate when the data and goals of a researcher call for the advantages of content analysis in describing what patterns are in the data as well as the advantages of grounded theory in interpreting why these patterns are there. Category development occurs inductively, with codes developed during the early stages of analysis and refined throughout the process until they are reduced to a few main thematic categories (Mayring, 2000). Qualitative content analysis also lends well to the comparison between various cases and different media outlets (Wester, Pleijter & Renckstorf, 2004).

### *Selection of Texts*

Texts for this study were gathered from several online sources, including LexisNexis Academic, Google Book Search, links from an index of African-American media websites (found at <http://www.unc.edu/~haman/media.htm>), the online archives of *Satya Magazine* and

Blackvegetarians.org, and an online forum of an African-American vegetarian social networking website. Search terms included combinations and grammatical variations of the following terms: “African-American”, “Black”, “Vegetarian”, “Vegan”, “Food”, “Cuisine”, and “Soul Food”.

In order for an article to be included in the content analysis it had to feature a discussion of vegetarianism that pertained to a specific African-American individual, restaurant or organization, or to the broader African-American community. Since searches of the various databases yielded a relatively small number of relevant pieces, no guidelines were set as to the years for inclusion. Most of the pieces were from the 1990s and 2000s, but several did stretch back into the 1980s and late-1970s. The total number of articles analyzed was 71. Thirty-one articles were considered “mainstream/non-ethnic” – these articles came from either national or local newspapers or magazines that were not targeted to a particular ethnicity or to the vegetarian community (e.g., *The Washington Post*, *Atlanta Journal-Constitution*). 24 articles were considered “ethnic” media – these articles came from either national or local newspapers, magazines, or online publications devoted to African-American issues (e.g. *LA Watts Times*, *Jet*, *Blackvegetarians.org*). The final 16 articles were considered “vegetarian-interest” – these came from either national or online publications devoted to issues of vegetarianism, environmentalism, and/or animal rights (e.g. *Vegetarian Times*, *Satya Magazine*). While ethnic and vegetarian-interest media sources are quite distinct from one another, during this analysis the combination of these outlets will at times be collectively referred to as “special-interest” media.

Discussion threads posted on a publicly available online African-American vegetarian forum between September 1 and December 31 of 2008 were also analyzed. Discussion threads that had zero replies from members other than the thread originator were discarded, which left 126

threads with a varying number of replies. The online social network featured several other communication outlets – including chats, blogs, videos, and photos – but this analysis was restricted to the forums. Taken together, the breadth of textual sources allowed for the comparison of themes surrounding the common topic of vegetarianism in the African-American community. After inductive code development and refinement, a central theme and three significant sub-themes were identified, as presented below. This essay will close with recommendations for further research, as well as an agenda for community-based health communication interventions.

## **Results**

After analysis of the materials, *conflict* emerged as the primary salient theme that characterized the presentation of African-American vegetarianism in the media texts. At times this conflict was introduced explicitly, as in the case of members of the online forum who discussed family difficulties that stemmed from their switch to a vegetarian lifestyle. At other times, the conflict was more ambiguous and subtle. This was the case, for instance, when writers and forum participants offered opposing conceptions of “traditional African-American foods”, as will be discussed further below. The following analysis begins with a general discussion of the ways in which the topic of conflict was presented throughout the media materials. From there, three particular focus areas – holistic health and wellness, connections to traditions and ancestry, and African-American vegetarianism as a growing movement – are explicated as significant sub-themes of the content analysis that further illustrate the role that conflict played in the media discussions.

### *The “Anti-Stereotype” – Assumed Incompatibility and Conflict with Communities*

Several separate but overlapping notions of conflict were clearly identifiable

throughout the media materials. One primary conflict placed African-American vegetarians in opposition to the rest of the mainstream African-American community. This conflict was often manifested through the discussion of family disagreements with respect to an individual's vegetarian lifestyle choice. These tensions were not always negative, however, as was the case with those African-American vegetarians who conceptualized their dietary choice as an outlet to break free from the detrimental dietary habits that they saw as the root of African-American health disparities. A second conflict contrasted African-American vegetarians with individuals in the mainstream vegetarian and environmental movements. This conflict seemed to stem from a variety of racial and cultural factors, as well as philosophical differences in vegetarian motivations and practices. A third significant conflict that emerged was driven by many African-American vegetarians' opposition to standard practices and conventions in Western society and medicine. These practices were often cited as harmful to the health and well-being of the broader African-American community. In addition, the discussions of these three types of conflict often took different forms depending upon the media outlet in which the story was featured.

Notably, the headlines and lead paragraphs of many of the mainstream media reports portrayed those being profiled – namely African-American vegetarians and vegetarian soul food restaurants – as surprising anomalies who contrasted the commonly held stereotypes that surrounded both the African-American and vegetarian communities. A sarcastic but illustrative excerpt from the *Atlanta-Journal Constitution* is worth quoting at length:

"These creatures live amongst us, their complexions dewy and spirit aloft. Like the culinary Joan of Arc, they dare defy Southern cookin'. Ribs? Crawfish? Anything fried? Gimme death, they'd say. These African-Americans refuse to consume meat. And milk, cheese

and other dairy products, for that matter. Ever. That reason alone makes them mythical in an area where diabetes and congestive heart failure are ravaging the lives of black men and women" (Yoo, 2006).

Mainstream reports of black vegetarianism were repeatedly framed with a sense of skeptical confusion. Headlines and lead sentences often included question marks and a denying retort, as in: "Vegetarian soul food?...It can't be." (Kantor, 1993). Descriptions like "mythical" were supplemented by phrases like "intriguing", "alternative", "unlikely", and "believe it or not". Individual newspapers seemed to lack an institutional memory, as well, as was the case with the *Washington Post* – a feature written on Washington, D.C.'s growing movement of African-American owned natural food stores and vegetarian restaurants (Sugarman, 1994) was followed 13-years later by a feature on the proprietor of a local vegetarian eatery (Benwick, 2007). The latter report described Levita Mondie-Sapp's efforts to promote vegetarianism to African-Americans as a "one-woman campaign". The author was apparently unaware of the other African-Americans who worked on the same task and had been featured in that newspaper years before. The narrative generally constructed by the authors of these mainstream newspaper reports was one of a disparate group of African-American vegetarians who defied common eating practices and set out on individualized efforts to practice their lifestyle of holistic health. Whereas the stereotypical vegetarian was often characterized as a young, white hippie with recreational drug habits, the black vegetarians profiled, "...wrecked all remnants of that visual" (Moore, 2002).

The depiction of rifts between some African-American vegetarians and the broader African-American community was present in each type of analyzed media material. On the online forum, participants detailed the negative reactions that they

often received from family and friends, and offered one another advice on ways to deal with denigrating comments. Some were more successful than others in overcoming this adversity. One participant recounted his story:

"I became vegetarian and it cost me dearly! My family had a fit. I was shunned. I wanted to teach them a better way. I was and remain passionate about my lifestyle, but gentle in the ways I promote it. I married a woman who shared my convictions. We became vegan. We had children and homeschooled them thru 12th grade. We were blacklisted...Those of our family who remained have slowly come around. We are accepted or at least tolerated. Our health is pristine, our vegan children were never sick enough to need medical intervention. Our way of living has brought us grudging respect. I feel vindicated."

The contrast between the philosophies of African-American vegetarians as opposed to members of traditional vegetarian organizations was also present in each type of media material. A number of participants on the online forum described mainstream animal rights and vegetarian groups as overly judgmental and inflexible. While the feeling on the online forum was that individuals should follow a comfortable and personal path into a vegetarian lifestyle, participants argued that traditional organizations did not show sufficient acceptance towards those individuals who opted for a gradual approach. Many African-American vegetarians talked about not feeling welcome or understood within these traditional organizations, which prompted some to form or join vegetarian organizations that were specifically suited to the concerns of the African-American community.

Much of this discomfort might be attributed to the historical absence of a

large and active population of African-Americans within these mainstream vegetarian organizations. In addition, animal rights and environmental concerns did not seem to be a primary reason for a transition to vegetarianism in the African-American community. This is not to say that these issues were wholly absent from the movement, but rather that the improvement of personal health was clearly the driving force. This distinction between vegetarian motivations may be at the root of some of the conflict with traditional vegetarian organizations. In an interview with Satya, African-American vegetarian scholar Amie Breeze Harper aptly summed up the tension:

"Many of us first saw our health has been compromised because of racism and classism, and then started connecting that with the mistreatment of nonhuman animals...This is something mainstream animal groups that are largely white and middle class should take note of if they want to enter communities of color. They should start with the health aspects first." (Iyer, 2007)

Further, there was a strong sense in some of the mainstream reports, but most clearly in the ethnic media, vegetarian-interest media, and on the online forum, that a decision to follow a vegetarian diet was an active statement of personal and community empowerment. In this sense, African-American vegetarians saw themselves in conflict with the prevailing trends of Western dietary practices, health maintenance and health care. This is not necessarily unique to African-Americans – vegetarians of all races may see their food choice as an act of political self-assertion through the control of what goes into one's own body. For African-Americans, however, this empowerment clearly had links to the legacies of slavery, racial segregation and discrimination, and the civil rights and Black Power movements of American history. The overarching philosophy of African-American vegetarian



health and wellness, as well as the connections to individual and collective empowerment, will be discussed further in the following section.

Three types of conflict – some within the African-American community, some between African-American vegetarians and traditional vegetarian organizations, and some between African-American vegetarians and the broader Western health establishment – emerged as the primary theme in the analysis of African-American vegetarianism in the media texts. In general, mainstream media reports were highly skeptical of African-American vegetarians, and emphasized the contrast between the lifestyles of those individuals as opposed to stereotypical notions of African-American dietary habits and stereotypical conceptions of traditional vegetarians. The online forum, ethnic media, and vegetarian-interest media engaged these topics as well, but did so without depicting African-American vegetarians as surprising aberrations. In addition, these latter media outlets granted greater attention to the idea of vegetarianism in the African-American community as a method of empowerment, and were more frank than mainstream reports with respect to the perceived detrimental impact of conventional Western dietary and health practices on African-American well-being.

#### *Holistic Health & Wellness*

The health of the African-American community and of individual African-American vegetarians was the most common explicit subject in all of the analyzed media materials. Vegetarianism was discussed as a natural method to both prevent and alleviate a variety of acute and chronic maladies, especially those that disproportionately impact the African-American community. Dietary habits were conceived of as a fundamental part of a larger consumption philosophy that promoted the use of natural products and herbal remedies for the purposes of improving health, beauty and medical care. Many African-American vegetarians

recognized that these consumption habits placed a tension between them and segments of the broader African-American community. However, they hoped that their example and improved health outcomes would alleviate this conflict and convince others to adopt a similar lifestyle, or at the very least, convince others to accept the decisions that they had made. Further, discussions on the online forum and in ethnic and vegetarian-interest media outlets saw the practice of a holistic lifestyle as an act of empowerment. Several African-American contributors and writers advocated resistance to the logic of the dominant Western paradigm that they perceived as corrupt and often detrimental to their well-being.

In the accounts of mainstream and special-interest media, those African-American vegetarians who were featured almost universally cited health concerns as the motivating factor for their dietary choice. In a few instances, a gradual recognition of broader African-American health disparities spurred change, but most often this change was initiated by the death or illness of a close friend or family member. They saw a switch to a vegetarian diet as a way to improve their health and long-term quality of life, as well as the health of their children. For example, Sabrina Hocker, co-founder of African-Americans for Balanced Health, was quoted in *The News & Observer*:

“Doctors take our family history, and they say, ‘High blood pressure runs in the family. Diabetes runs in the family. You’re probably going to have it.’ People need to see it’s the pork chop that runs in the family. Where the pork chop stops, the disease stops.” (Bellamy, 2004)

Similarly, nearly one-third of the discussion threads on the online forum surrounded the topic of the transition to or maintenance of a vegetarian diet and holistic lifestyle for the purposes of improving health. Participants emphasized the need for the transition to be a personal journey, one that was open to gradual

changes and flexibility, as per the comfort level of the individual. Beyond dietary advice and support, the discussion forum also featured a number of conversations on homeopathic, alternative and herbal medical remedies, fasting regimens and natural beauty tips. The ideal end-point for many on the forum was a lifestyle free of pesticides, chemical additives, pharmaceuticals and Western medical practices. Still, the online social environment was consciously non-judgmental, as members encouraged others to pursue the dietary path and timeline that best fit their personal journey and health needs.

A significant recurring theme in the rhetoric of African-American vegetarians, particularly in the ethnic media, vegetarian-interest media, and on the online forum, was a distrust of government, the media, and the mainstream medical community. An excerpt from an essay posted on a Blackvegetarians.org, which discussed African-American dairy consumption in the face of widespread African-American lactose intolerance, serves as an example:

"We are conditioned by the federal government's Dietary Guidelines and milk advertisers to think this custom is normal and essential for our health. In reality, our cow's milk and dairy consumption is a source of profit for U.S. agribusiness, which is subsidized by the government." (Not Milk)

The online forum was rife with criticisms of the food and medical industries, as well as the governmental and media powers that participants saw as responsible for the continued dominance of these vested interests. Users often linked to news articles that described the ways in which large agribusiness conglomerates and governmental organizations marginalized and co-opted organic, sustainable, and food justice movements. Other articles discussed the failures of western medical practices to adequately deal with human health problems and disparities in health care. One linked article that led to a wide discussion,

for instance, drew parallels between the global financial crisis of 2008 and a possible fall of the dominant form of Western practiced medicine. Users also linked to mainstream news reports that they believed failed to grasp the value of vegetarianism and exaggerated the possible risks of, for instance, raising vegan children. There seemed to be a consensus, on both the online forum and in the vegetarian-interest media, that inherent faults within the dominant forces of health care, the government, and the media needed to be resisted by personal and collective action. This sense of empowerment was a guiding force for their dedication to holistic health and vegetarianism.

#### *Connection to Traditions and Ancestry*

The subjects of food and cooking are at once subjects of family and cultural history, with African-American foodways a prime example. The concept of "soul food", which came to prominence in the 1960s, was about claiming a distinct cultural food identity for African-Americans that had previously been lumped into the southern cooking tradition (Hall, 2007). What became clear in this content analysis, in each type of analyzed material, is not only how important this theme of tradition was to the identity of African-American vegetarians, but also the discord that existed between two contrasting versions of this tradition.

To some, tradition meant a connection to the soul food that was popularized in the 1960s, when meats took on a more central role in the African-American diet, and to the memories of family and community that were connected to this era. That conception of African-American food history, however, was contrasted by a perspective that looked to reclaim the diet of early African-Americans, or to go back even further, to the diet of the pre-slave trade Africans. In this version of tradition, a vegetarian diet was conceived of as aligned with the natural lifestyle of their African ancestors. Tied into these conflicting views of tradition were spiritual and religious concerns. Many African-Americans

encountered in the content analysis opted for a vegetarian lifestyle in light of the teachings of the Nation of Islam, Judaism, Seventh Day Adventism, Christianity, the Rastafari or African spiritual movements, but still others connected their religious upbringing with the omnivorous soul food diet of the 1960s. Indeed, these opposing perspectives were not mutually exclusive, as many individuals attempted to reconcile their personal and ancestral food histories.

In an editorial in *The Washington Post*, Parker (1994) described her reluctance toward a switch to vegetarianism, and provided an example of what was repeatedly observed when media reports and participants in the online forum connected the idea of tradition to their personal family experience:

“What holds me captive and stays my palate is the greater fear of losing that indelible cultural connectedness that cooking rituals represent for me. Talking with the sisters, extolling the addition of fatback to collard greens, is a rejoicing in shared history.”

The emergence of vegetarian soul food restaurants and cookbooks was often portrayed as a way to preserve the smells, tastes, textures and cultural memory of recent history while modifying the ingredients for better health. Dairy and meats were replaced by soy or wheat products, collard greens were flavored by oil instead of ham hocks, and vegan macaroni and cheese or a gluten roaster were born. In this conception of cultural preservation, the food of the past was given a healthy overhaul, but the spirit of 1960s soul food remained the same.

Those who took a longer view of African-American dietary habits often invoked their African ancestry and saw vegetarianism as a way to revert back to a natural lifestyle better suited to the physiology of the African-American community. Dr. William Richardson, a member of the Black Vegetarian Society of Georgia, was quoted on this topic: “It was

definitely the original diet of mankind” (Rollins, 2000). There was often a strong spiritual connection to this perspective, as a variety of religious teachings were cited to support a vegetarian diet. One thread on the online forum, for instance, discussed whether Jesus was a vegetarian, and the general consensus among participants was that he was, with vegetarianism seen as a logical extension of his philosophy of non-violence. The online forum also featured a number of members of the Islamic faith, while articles written in the ethnic press by members of the Nation of Islam quoted Elijah Muhammad’s stance against eating meat.

Another religious faith that received a good deal of attention in the mainstream media reports on African-American vegetarians was the African Hebrew Israelites, a relatively small sect of Black Hebrews who run a chain of “Soul Vegetarian Restaurants” in more than seven U.S. cities, as well as in Israel, Ghana, and the U.S. Virgin Islands. Members of the African Hebrew Israelites stated that a vegetarian diet is a Biblically commanded, natural and healthy diet that promotes peaceful interaction (Sugarman, 1994). Ben Israel of the African Hebrew Israelites was quoted: “Our forefathers’ original diet was vegetarian, and since then we have come to believe that a vegetarian diet coincides with the highest form of spirituality” (Cope Straus, 1996). This idea that a vegetarian diet was necessary on the path to spiritual enlightenment was echoed on the forum and in the press in interviews with devout members from a variety of religious paths. Religion was one of the main ways that tradition was brought into the conversation of African-American vegetarianism, but this historical connection was open to multiple, conflicting interpretations within the African-American community.

#### *A Growing Movement - Education & Organization*

While the tenor of many of the mainstream media reports was skeptical and sometimes patronizing, interviews with

leaders of Black Vegetarian Societies and owners of vegetarian restaurants, articles in vegetarian and ethnic publications, and the writings from members on the online forum told a different tale. These accounts suggested that, despite tension within segments of the black community and with some traditional vegetarian organizations, the movement of African-American vegetarianism was growing. This effort was supported by new communication technologies, dedicated members of community organizations, a proliferation of vegetarian soul food restaurants, and a philosophy of open engagement to spread the word about the many positive aspects of a move toward vegetarianism. It is clear that proponents of the vegetarian diet saw education as a central part of this movement – the advice and countless recipes shared on the online forum and in many of the newspaper reports, the event listings and profiles of vegetarian cookouts, and celebrity involvement in the vegetarian cause were all methods of disseminating information within the community in order to change the way the story of African-American vegetarianism was told.

Community organizations appeared to be a driving force in this area, and a significant portion of the mainstream media reports relied on interviews with individuals like Traci Thomas, the founder and director of the Black Vegetarian Society of Georgia (BVSG), one of the largest African-American vegetarian community organizations in the nation. It is no surprise that the *Atlanta Journal-Constitution* was the most represented mainstream newspaper in this content analysis. Their coverage of the BVSG dates back to 1997, when the newly launched organization had a few dozen members, and spanned the next decade, as the BVSG membership topped several hundred. The group hosted a variety of events, while their example was said to have helped form new Black Vegetarian Societies in New York, Washington, D.C., Texas, Ohio and Florida.

The many restaurants profiled in the mainstream and special-interest press, as

well as reviewed in the online forum, were described as an important part of this movement as well. Not only did these restaurants respond to demand from consumers, but they created new demand as more people were exposed to the possibilities of a tasty vegetarian diet. Increased business at their establishments – as well as the appearance of vegetarian dishes on the menus of non-vegetarian soul food restaurants – was pointed to as evidence that segments of the African-American community were embracing the lifestyle. Another strategy to raise vegetarianism's relevance was to share cooking tips and recipes – nearly half of the analyzed articles in the mainstream and special-interest press and dozens of threads on the online forum detailed a vegetarian recipe or recommended a cookbook.

Celebrity vegetarians were well represented in the articles gathered for the analysis. In several mainstream pieces, a list of these celebrities served as an opening paragraph before it broached the broader topic of vegetarianism in the community. In a *Seattle Times* story, for instance, local vegetarian soul food restaurant owners offered up the names of several well-known hip-hop musicians who were frequent customers. The story noted the potential influence of the hip-hop community: "Vegans like Common, Outkast's Andre 3000 and (Erykah) Badu are spotlighting what could become a movement for young people" (Fulbright, 2004). *Ebony* and *Jet*, two historically African-American magazines, discussed vegetarian motivations and practices during interviews with several prominent African-American celebrities, including Badu, Prince, Janet Jackson, and Russell Simmons. In other stories, restaurant owners and customers pointed to these contemporary celebrities, as well as people like Dick Gregory, as important influences for raising their awareness about African-American health and the importance of diet.

The online forum, meanwhile, was the sight of countless exchanges and discussions regarding celebrities and other

aspects of popular culture, including literature, media, and music. Some participants included their own writings and musical creations, while others linked to online music videos or radio shows that engaged the topic of vegetarianism and the African-American community. These online interactions – along with the work of community organizations, restaurants, and celebrity examples – served as a support system for current African-American vegetarians, but also as an outlet for educating non-vegetarians about the benefits of the vegetarian lifestyle. In effect, these were all methods of reducing or eliminating the central conflicts that typified the portrayal of African-American vegetarianism. This content analysis showed that, far from a “one-person revolution”, a number of resourceful groups were dedicated to the goal of making vegetarianism mainstream in the African-American community.

## **Discussion**

Together, the primary emergent theme of conflict and the three identified sub-themes shed light onto the central topics that help define the discussion of vegetarianism both within and outside of the African-American community. Further, the analysis shows how the framing of mainstream media reports on this topic differed from the framing of reports in ethnic and vegetarian-interest media, as well as in the discussions on the online forum. Notably, mainstream media had the tendency to portray African-American vegetarians as anomalous, while institutions like vegetarian soul food restaurants and African-American vegetarian community organizations were introduced as paradoxical and nearly unbelievable. This stands in contrast to the few national surveys on the prevalence of vegetarianism in America, which show that African-Americans may be equally likely to be vegetarians as are white Americans (Vegetarian Resource Group, 2003). This analysis also suggests that one of the reasons that African-Americans may be

perceived as “unlikely vegetarians” is that many have chosen not to engage with traditional vegetarian organizations, and have opted instead to create organizations that are better suited to their own cultural history, philosophy, and motivations.

On the other hand, the words of African-American vegetarians themselves, as they are voiced in the online forum, in vegetarian and ethnic media, and to a lesser extent in some mainstream media reports, show that the vegetarian movement in the African-American community has deep roots in tradition and religious conviction and extends into contemporary popular culture. Although ethical, religious, environmental and animal rights concerns do play a role in African-American vegetarianism, for the majority, human health is the primary concern and initial motivator. This fact appears to be a source of conflict between African-American vegetarians and traditional vegetarian organizations. A dedication to holistic health also causes tension between African-American vegetarians and broader Western society. In special-interest media and on the online forum, the conflict between African-American vegetarians and Western standards of dietary practices and medical care was highlighted, as many individuals saw their lifestyle choice as a conscious act of empowerment in the face of overt and covert oppression.

The growth of African-American vegetarian community organizations, online communities, and restaurants speaks to the gains that have already been made in order to diffuse the tension that exists between African-Americans with respect to vegetarianism. With continued success, this communication infrastructure could help reconcile the differences between African-American vegetarians and traditional organizations, as well as support individuals and communities to build the efficacy necessary to become empowered to embrace a plant-based diet. These developments show the potential for the African-American vegetarian movement to grow in the coming decades, with broad

prospective benefits for human and environmental health.

The relatively small set of media publications used in the data set – 71 articles from mainstream, ethnic, and vegetarian-interest combined – is indicative of the sheer lack of coverage that this issue has had in the press. It should be noted that a number of publications, particularly archives from small, local or ethnic media outlets, were not available in the searchable databases. Nevertheless, this sample does indicate that coverage of black vegetarianism is not challenging the prevailing stereotypes about African-American foodways in the news sources that inform mainstream social discourse. On the other hand, the significant levels of conversation on the online forum – which accounts for just a portion of the activity on one of several online social networks related to African-American vegetarianism – is indicative of the desire for participants to seek out advice and share experiences with like-minded individuals. Together with community organizations, restaurants, and celebrity advocates, these online social networks represent an opportunity to raise awareness among African-Americans regarding the health benefits of a vegetarian lifestyle, as well as to impact how mainstream media frame their coverage of African-American vegetarianism.

### **Implications**

The field of environmental communication, which Cox (2007) dubbed a “crisis discipline”, has a responsibility to assist in the construction of a sustainable food system and to help ameliorate the negative environmental and human health impacts for which the status quo in the food, agriculture and meat industries bear significant responsibility. Such a task requires academics to heed the challenge of Depoe (2007) – environmental communication could be the nexus that brings together knowledgeable scholars from the social, behavioral, cultural and scientific fields, while the discipline could

further engage the public through health communication interventions.

With this in mind, the findings reported in this study, however preliminary, have potentially fruitful links to academic developments in theoretical and applied work on health promotion campaigns that address health disparities within African-American communities. Several of the themes discussed here could be connected to commonly used theories of individual and community behavioral change. For instance, celebrity vegetarian advocates could be employed as social models, as described in the work of Bandura’s social cognitive theory (2002), in order to increase the self-efficacy of individuals who are considering adopting a vegetarian diet.

Community-based participatory research offers another promising avenue for health communication campaigns in this area. By working with community members, researchers can gain local legitimacy and empower research participants with the tools to improve their own health and the health of their community. Communication Infrastructure Theory (CIT), developed within the Metamorphosis Project at the University of Southern California’s Annenberg School for Communication, could be used to guide this type of community-based intervention. In brief, CIT works from the notion that an area’s communication infrastructure consists of the neighborhood storytelling network (STN), which is embedded within a communication action context (CAC). The STN is created when residents, community organizations, and local or ethnic media participate in communicative actions about the local community, while the CAC is considered any piece of the built and social environments that enables or constrains the STN. Previous research has found connections between strong STNs and higher levels of neighborhood belonging (Ball-Rokeach et al., 2001) civic engagement (Kim & Ball-Rokeach, 2006), and a measure of prevention-related health literacy (Matsaganis, 2008).

Current work by members of the Metamorphosis Project has begun to use the theory as a framework for participatory research. Researchers work to engage residents and connect community organizations with local and ethnic media in order to improve a variety of social and health measures through local communication. As the content analysis in this study showed, the most consistent coverage from a mainstream newspaper on this issue came in an area where a well organized community organization was working to promote the goals of vegetarianism. This outcome would be predicted by CIT, and future research could look to improve the links between similar organizations and media outlets, as well as online social networks, vegetarian soul food restaurants, and other community establishments.

Bandura's social cognitive theory (2002) and Ball-Rokeach and colleagues' Communication Infrastructure Theory (2001) are just a few of the possible frameworks that could be applied to health communication interventions to promote a plant-based or vegetarian diet in the African-American community. Future

research should build from this content analysis by granting further investigation into the dynamics of the African-American vegetarian community as well as the barriers that exist to inhibit more widespread adoption of plant-based diets. Community-based intervention efforts could enrich the vegetarian dialogue within and around the African-American community and empower community members to tackle the social and structural barriers that contribute to African American dietary health disparities. Progress in this area could help alleviate the dual crises, exacerbated by current practices of meat and dairy consumption and production, which simultaneously endanger the health of African Americans' social environment as well as the planet's natural environment. Such efforts would require substantial coordination amongst a variety of academic disciplines, as well as with leaders and ordinary citizens in the community. The field of environmental communication is as well-positioned as any to function as the nexus for the administration of this challenging and important work.

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## **Communicative skills development of administrators – a necessary step for implementing participatory policies in natural resource management**

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### **Abstract**

*The European Union (EU) and several member nations have expanded public participation requirements for Natural Resource Management (NRM) in the 21<sup>st</sup> Century. Swedish NRM administrators have some form of natural science education, but lack communicative competences to constructively lead the democratic dialogue and processes that are required for the implementation of new participatory NRM policies. In 2007, the Swedish EPA (SEPA) asked us to design and run a program for communicative skills development of NRM administrators and managers at SEPA and county administrative boards (CABs). This essay is based on our experiences with and reflections of the program. We first discuss basic assumptions about the situation of the administrators and their need for communicative skills development that guided us when designing the program. Second, we provide a brief description of program implementation. Finally we use our experiences to explore implications for a wider context of NRM. We conclude that initiating and supporting bottom-up processes within top-down structures is a delicate task that demands continuous training. An important step needed for successful implementation of participatory NRM policies is to stimulate the establishment of professional learning teams at the administrators' places of work to facilitate continuous reflection and communicative competence development.*

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### **Background**

The European Union (EU) and several member nations have expanded public participation requirements for Natural Resource Management (NRM) in the 21<sup>st</sup> Century. In Sweden, as in other European countries, NRM policies characterized by participation and involvement of stakeholders, are gradually replacing more authoritarian and expert driven policies (Government bill 2000; Swedish Government doc. 2001; SEPA & SFA 2005). The policy shift is part of a change toward expectations for more democratic management of natural resources. Sustainable development also has gained prominence over environmental protection. Swedish nature conservation objectives, for example, have shifted from a focus on

protection of valuable areas and threatened species to a focus on long term productive capacity of ecosystems, ecosystem services and the conservation of genetic resources. Participatory processes are intended to encourage development of common interests regarding nature conservation and rural development, with natural resources providing a base for socio economic development. Greater inclusion of and opportunities for participation by local communities and groups is intended to facilitate legitimacy for government decisions and measures taken within the area of nature conservation. (Government bill 2000; Swedish government doc. 2001).

Although most administrators within Swedish NRM have some form of natural science education, they seldom have

systematic training in communication which is regarded as important by the Swedish government for the implementation of new participatory NRM policies. To this point, the only concrete step taken by the government to realize participation goals of the new policy is the mission given to the Swedish Environmental Protection Agency (SEPA) to ensure that relevant persons receive appropriate education and training for their new tasks, to constructively lead and conduct democratic dialogue and processes in NRM.

In January 2007, SEPA asked the Environmental Communication Unit at the Swedish University of Agricultural Sciences to cooperate in designing and delivering a programme for communicative skills development of administrators and managers involved in Swedish NRM. The programme was launched in November 2007 under the title: *Dialogue for Nature Conservation. A programme for skills development in dialogue, local participation and management, together with conflict management within nature conservation and the management of natural resources*. The target groups of the programme are administrators working within fields of conservation, urban and peri-urban nature, outdoor recreation, wildlife management and/or predators at the SEPA and the Swedish county administrative boards (CAB). The CABs are responsible for implementation of nationally established environmental policy. Consequently they have an overarching operational responsibility for the protection of land and water with high nature conservation values as well as for the wildlife management in their respective regions.

In this essay, we first discuss important assumptions about the situation of the administrators and their need for communicative skills development that guided us when developing the pedagogic design of the courses. Second, we describe some concepts and skills basic to implementation of the courses. Finally, we draw from our experiences of running the courses for SEPA to suggest implications of

the program for the generalized shift toward increased public participation in NRM policy throughout the EU.

### **Assumptions underlying the new task of environmental administrators**

Our understanding of the overall situation and new task of the environmental administrators in light of the policy shift within Swedish NRM is based on: i) some twenty courses, workshops and seminars we delivered for Swedish NRM administrators prior to developing the current programme ii) individual and group interviews with administrators and stakeholders that touch on communicative aspects of NRM; iii) consulting experiences to facilitate conflicts concerning the establishment of nature reserves and the pursuance of predator policies.

### **Present competence of NRM administrators**

Administrators within Swedish NRM generally lack education and training in communication. Until recently the communicative part of their task has been taken for granted. The administrators have focused on fulfilling their role of *experts on factual matters*. They are working within traditional structures where results from biological data, such as species-inventories form the basis for decisions about how best to conserve a certain area/habitat or to protect wildlife. With the new policy, they are also expected to design inclusive processes that take local interests and tacit knowledge into account. Administrators express insecurity about their new roles, and state that they do not have appropriate competence and lack necessary experience to fulfil their new public function. Some develop and test new communicative strategies by themselves, but without being able to discuss and relate the results and their opinion to reliable experiences (Eksvärd et al. 2005; Zhao 2009).

### **Tensions and conflicts in Swedish nature conservation and wildlife policy**

During the last 50 years the protected area in Sweden, mainly in the form of nature reserves and national parks, has increased from around 50,000 to 4,000,000 hectares. This corresponds to roughly 10% of the total land area (SFA 2009). The current natural resource restrictions and regulations are sometimes met with resistance from those that feel themselves being negatively affected. In several cases, new reserves have led to protests from landowners who see their control and economic opportunities being restricted. The forest industry has also criticized what they claim are excessive areas taken out of production (Swedish Forest Industries Federation 2009).

Other people living and working in regions where the protected land area is growing most markedly also have protested. They feel pushed aside and see the increased areas under protection as a way of restricting their space of action. Some have described establishment of traditional nature reserves as placing a “dead hand” over natural resources, limiting careful utilization and thus the development (survival) of rural areas (Eksvärd et al. 2005; Sandström 2008). Current predator policy has given rise to additional conflicts. During recent decades, NRM policies have contributed to an increase in the number of predators such as wolverine, lynx, wolves and bears (Cinque 2008; SEPA 2009), leading to protests and poaching among animal (sheep) breeders, reindeer owners and hunting organisations in affected areas. Introducing dialogue and increased public involvement into these situations, is intended to mitigate resistance and conflicts.

### **Complex and unequal power relations**

Administrators and citizens/stakeholders have different degrees and forms of authority and freedom regarding NRM. As representatives of society, administrators have authority, but as civil servants their manoeuvrability is limited. Citizens may seem small and powerless relative to civil

servants, but have much greater freedom to act at will within the limits of the law. For example, by making her/himself unavailable to information from the authorities, a landowner whose property provides critical habitat for species under threat of extinction, may obstruct the conservation process. Or, by starting a mass media campaign in opposition to a timber felling operation, an environmental group may acquire sufficient power to change the direction of an entire NRM process. The administrator has responsibility for changing destructive communication to constructive even when (s)he is met by criticism, threat and violation.

There are also other aspects of unequal power relations. Citizens that are concerned by measures taken within NRM, include both members of organized groups and individual stakeholders. Those who belong to recognized groups (such as landowners, forestry companies, hunters, fishermen, environmentalists) often have better support, and are accustomed to public argumentation, whereas others (such as berry/mushroom pickers, people practising individual outdoor activities) often have less experience dealing with policy and negotiation processes, and cannot rely on an organisation for support. The latter group tends to be less familiar with participatory policies, and is less comfortable with requested input to NRM processes. Hence, inviting and encountering stakeholders and offering them insights into ongoing work and decisions within NRM, may arouse different expectations and activities among different (groups of) people. Stakeholder expectations, in turn, are crucial for the success or failure in developing and implementing NRM processes (Westberg 2005).

### **Ambiguity related to the complexity of public participation**

Recommendations concerning public participation are sufficiently ambiguous to be interpreted differently by different administrators. Most decisions

concerning goals and means of NRM are still made at national and international level. Thus, on one hand administrators are expected to follow acts and directives governing nature conservation and environmental goals. On the other they are expected to create the prerequisites for democratic dialogue, support and lead processes based on participation where local interests are met with respect. Though new policy documents guiding the work of Swedish NRM administrators prescribe inclusive participation, they lack clear operationalisation of the new approach. There is no general description of what is meant by participation, and authorities at the CABs lack guidance concerning which directives, laws and regulations can be “stretched” in favour of public participation or how much input they can allow the public to have into NRM processes.

Due to the lack of clear direction, recommendations to include those affected by NRM processes are interpreted differently at different CABs (and sometimes even by individual administrators working at the same CAB). Some CABs (or individual administrators) consider that international conventions ratified by Sweden, as well as national goals and decisions regarding the protection of biological and ecological values, are conclusive and not negotiable. They see no space to involve the public because the decision about how nature is to be managed has already been taken on higher levels.

According to other CABs, opening NRM processes to a higher degree of participation among stakeholders does not necessarily mean that stakeholders have influence over decisions taken. It may simply mean that people who are likely to be affected by decisions regarding nature conservation and wildlife protection receive comprehensive information and clear insight into decision making processes at an early stage.

A few CABs see sufficient scope to include the public in most NRM processes. They state, for example, that nature reserves are not the only way of protecting

areas or habitats that have been classified as valuable. They point to a variety of conservation measures that can be taken in order to guarantee sufficient protection for these habitats. In any given case however, the degree of stakeholder participation is seldom possible to predict in advance. It depends on the issue at hand, the values and interests at stake, the number, resources and attitudes of stakeholders, as well as on the historical relations between stakeholders and authorities.

The difference between approaches to public participation have led to questions and accusations of the arbitrary working style of CABs as authorities that fail to treat all people equally in the eyes of the law (Cinque 2008). Thus, the situation for NRM administrators is indeed complex. One could easily claim that their double mission, to foster nature conservation on one hand and to initiate, support and lead participatory processes on the other, is in itself contradictory and patently absurd. The first mission is directed by laws that have been developed over time, and through institutions of representative democracy. The second is directed by the prerequisites for direct democracy, and may be more directly linked to local processes/decisions that in one way or another conflict with national and international goals for nature conservation. Sweden's NRM administrators are faced with attempting to support bottom-up processes within top-down structures.

### **The design and performance of the program**

We designed a national training program based on the above described understanding of the present competencies and challenges faced by NRM administrators. The most important objectives of the programme are to provide administrators with tools for facilitating dialogue, for creating democratic processes, and for acquiring basic knowledge about conflict management. They also need conceptual understanding and

communication skills to negotiate multiple perspectives and interests; manage issues related to trust and institutional mandate; maintain credibility at local, national, and international levels; and critically analyse participatory processes they are involved in. Further they need to handle objections to the aims and activities of the agency. Rather than stifle criticism of NRM processes, they must use it to clarify both NRM processes and the aims of their respective agencies, thereby ensuring a learning process. This means in short that the administrators need both appropriate conceptual background and practical skills for dealing with their new tasks. Below we give further details of some general design and performance of the courses including both theoretical and practical training.

The programme consists of 10 different courses (see figure 1). It starts with a basic course and, for those interested, offers possibilities to continue with several advanced courses. One course is specifically designed for nature conservation managers to prepare them for supporting the work of their employees.

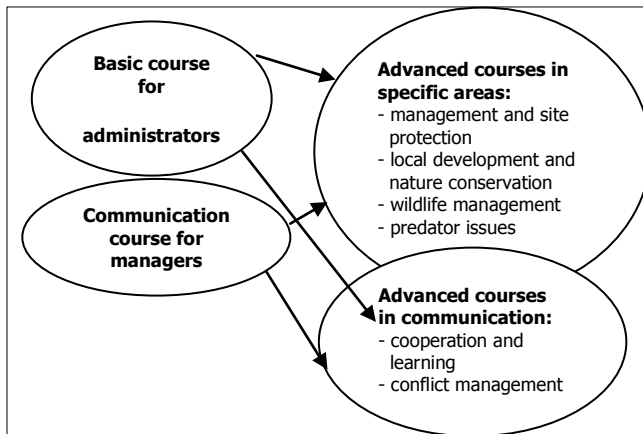


Figure 1: Courses included in the programme *Dialogue for Nature Conservation* during 2008-2009.

When the programme was launched, the aim was to run the basic course eight times, each advanced course twice and the manager's course four times during a two year period (2008 - 2009). Given that approximately 500 people work with

relevant issues at SEPA and CABSS, we expected around 300 people to take part in the courses. Due to great interest in the programme, however, the plan has been revised. As of February 2009, the basic course has already been held nine times, with four additional basic courses scheduled for 2009, all fully booked. Supporting courses have been held more or less according to the original plan.

The courses are included in the regular in-service training within the authorities in question, which means that personnel may attend the courses during their working hours (with full salary), and that expenses for travel and accommodation are paid by their employers. The Basic course is equivalent to 4-5 working days, and the each of the other courses take approximately 2-3 working days. A rough estimation of SEPA's and CAB's total investment for accomplishing the entire two year program is 700,000 EUR.

### Conceptual models

In order to be able to design and initiate appropriate participatory processes, discuss and deliberate implications of different lines of action and reflect upon results, as well as understand and analyse the participatory processes, NRM administrators need words, concepts and frames for communication. The programme therefore includes presentations of theoretical models that the administrators can use to relate and critically reflect upon their task and daily work. We now list the commonly used theoretical models.

*A model of communication and knowledge building* (Säljö 1988; Markova et al. 1995). The model describes communication as a mutual process where those involved construct a shared meaning of the phenomena at hand. "Good" communication is described as a process where those involved strive to maintain the communication (not necessarily striving for agreement). Connected to this social constructionist model is the idea of

perspectivity, or that some aspects of a phenomenon become more salient while others may become invisible, depending on the perspective from which they are perceived. The model is introduced to challenge the currently deep-rooted conceptions of communication that reduce human intersubjectivity and joint communicative concerns in social interaction to a transfer of neutral decontextualised pieces of information from sender to receiver. It is also used as a base for introducing the view that people with different positions, interests and experiences perceive the world differently, and they develop different ways of knowing. We use this to lead into a discussion encouraging participants to question their assumptions that knowledge and learning are neutral.

*A model of democracy* (Dahl 1991). The model, which is grounded in a Habermasian view of the public sphere, defines 5 criteria necessary to take into account in a democratic process: membership, agenda, participation, decision making and comprehension. The model describes an ideal, and naturally none of the NRM processes the administrators are handling can be fully democratic in the way the model advocates. Still it is valuable, as it can be used as an indicator, providing information about whether a process is heading towards or away from democracy, depending on how the criteria are developed (possibilities for stakeholders to obtain information, express their views, take part in decisions, understanding means and goals of the process etc.).

*A model of participation* (Arnstein 1969; Ison & Blackmore 1997). The model is used to clarify different degrees of participation. It specifies ranges from “passive participation” (stakeholders are informed about decisions taken by experts), through “participation by consultation” (stakeholders are consulted, but external agents decide if and to what degree to include their experiences and knowledge in decision processes) to “self mobilisation” (stakeholders are taking initiatives

independent of external institutions). This model is used to stimulate discussions and reflections about what degree of stakeholder participation is desirable and feasible in different NRM processes that the administrators deal with. It also raises questions about what consequences, positive as well as negative, different degrees of participation imply and the risks of losing control over NRM processes that they take by initiating participation. Discussion about these aspects may give the administrators important insights and better understanding about their own fears and expectations related to their new tasks.

*A model of conflict and conflict escalation* (Glasl 1999; Hallgren 2003; Hallgren & Ljung 2005). The model distinguishes “clash of interest” from “conflict”. The former refers to contradicting interests among the parties that cannot be totally fulfilled at the same time. This model proposes that as long as the parties are willing to communicate and listen to each other, there is no conflict. The mutual existence of different interests and perspectives are instead described as a potential to learn. But if, or when, the parties begin to believe they cannot look after their own interests by continuing the communication, conflict erupts. Thus, the model highlights the communication process, and presents careful attention to it as a reliable means for avoiding conflict, which is a deeply established preference among Swedish NRM administrators. As part of this model, we describe conflict escalation; from the first steps of debates and polarisation; through phases where parties start perceiving others as increasingly inhuman; to the final phase where the parties are prepared to harm others even if it means potential harm to themselves. The model can be used as a diagnostic instrument to understand how stakeholders perceive a process, other stakeholders or the authorities and thus, why they act as they do.

Taking into account that the administrators are not accustomed to consciously framing concepts and models of



communication, dialogue and participation, these models are presented very simply. They are always related to Swedish NRM situations and experiences of the administrators themselves. The courses also provide the administrators with participatory models through use of basic pedagogic techniques (chairs always placed in a circle, the use of talking sticks and other tools to facilitate communication) and design (flexibility, creating space for questions, objections and discussions, sandwiching small team works with whole group presentations). We intend the courses to provide NRM administrators with inspiration and ideas about how to use the methods when arranging stakeholder meetings and workshops.

### **Skills training**

Transforming the insights provided by these conceptual models into actions is complicated by the fact that course participants will return to their working places and established working routines. Responding to old challenges in new ways is always difficult. We therefore emphasise providing opportunities to practice applying the new concepts when dealing with regular tasks. This is done in two ways, through role plays and homework.

*Role plays.* The role plays used in most of the courses are inspired by Boal's "Theatre of the oppressed" (Boal 1993; Byréus 2001; Boal 2004). The course members create short plays illustrating problematic communicative situations, similar to those that they experience in their working life. They then perform the play, ending with the difficulties at a climax. Other course members are then encouraged to try to work out and change the story by replacing the actors and acting out alternative attitudes and ways of handling the situation. Besides the opportunities to watch, act and test alternative solutions to problems the administrators recognize from their professional experiences, the role plays stimulate wider discussions and reflections about how to deal with problems

and opportunities that arise as part of their working situations.

*Homework.* Most courses also include individual homework. The participants select a task that allows them to apply their new insights. The task may vary from observing and analysing a NRM process or single communicative situation through the glasses offered by one of the conceptual models, to trying out new ways of dealing with their tasks. They write a short description of the results and receive feedback and support from other course members as well as from course leaders.

### **Implications for public participation in NRM**

In this section we describe responses of the courses and explore implications of this program for the implementation of new participatory NRM policies.

#### **Course evaluations**

Generally the courses have been highly appreciated which is confirmed also by the individual evaluations. Course members write that they have received ideas, tips, tools and methods to help them deal with contradictive interests and conflicts, arrange meetings and create more inclusive ways of working with stakeholders. They say that they feel less afraid of trying to work more inclusively, and have greater faith in their ability to fulfil their new roles as facilitators of public processes.

Participants also note the value of meeting and engaging with other administrators faced with the same challenges. They state that these discussions enable them to "translate" solutions to problems and challenges they hear about to their own situations. One wrote, for example, "though we don't have any official education in the subject of communication, as an entire group of professionals we now seem competent enough to better handle our new tasks."

Further they write about having started to reflect about communication. The courses seem to have given them motivation and skills to start new ways of working, to reflect upon how they communicate and to consider what the new approach to NRM implies. As another wrote, “we are not used to talk about communication, we use to discuss factual matters.” The conceptual framework and set of terms presented during the courses have become tools to discuss their communicative experiences and continue to develop their competence.

There are also voices of dissatisfaction. Some state there is too much focus on theory, while others state the theoretical focus is insufficient. Some are inspired by the role plays, while others are dubious about the value of these activities. The most consistent critique, emerging from a small number of participants in every course, is that the course does not provide a formula for success. These participants state that they expected to learn how to make people understand the importance of nature conservation, and the course did not fulfil their expectations.

### **Suggestions for additional programmatic development**

The NRM administrators of today are trained in and have developed their professional skills in a system that has taken their expert knowledge in natural science for granted, but has not demanded them to develop, or even reflect upon, their communicative skills. Although communication with stakeholders has always been an important part of their work, the new participatory NRM policies make communication skills central to their success or failure. From this perspective it is hardly any wonder that SEPA should commission a skills development program, that it is popular with employees, and that most participants find it a rewarding experience.

The ability to successfully initiate and conduct participatory NRM processes among stakeholders with different resources

and interests when there are no clear definitions about what should be meant by “participation”, is hardly developed by taking part in a few two-day courses, however. Given that participation, regardless of any definition, is squeezed between contradicting views of democracy and of the purpose of NRM, a communication skills development program appears almost trivial. However it can provide an important opening for introducing and recognising communication as a legitimate subject in the world of NRM, where natural science has dominated. We recommend SEPA should take two additional steps to take advantage of this initial effort to improve the communicative competences among administrators and managers and for successful implementation of new NRM policies are:

- Stimulate the establishment of professional “learning teams” at the administrators’ places of work in order to facilitate continuous reflection and communicative competence development.
- Support the communicative competence development, new role and tasks of NRM administrators by creating space for deliberation about the complex (and contradictory) task of supporting and facilitating bottom-up processes within top-down structures.

Participatory NRM can be described as a novel and still embryonic practice. As such, there is currently no generally accepted idea of how participatory NRM should be understood, carried out and accomplished within the framework of liberal democracy. As long as the policy of NRM continues to rely on ideas of participation, actors in society will continue to develop its theory and practice, thus gradually shaping and manifesting its meaning (see e.g. Cronen 2001). To make this learning process as fruitful as possible, that is, to enable a process where the possibilities and potential of participatory NRM is thoroughly explored, communicative competence development of NRM administrators is necessary, but not sufficient. Those responsible for the formulation and

implementation of NRM policy need to develop a more open and flexible attitude about the challenges posed by mandating the incorporation of public participation into NRM decision processes. This will require administrators to understand both natural and social sciences related to NRM, and to have the courage to test the limits of their previous understandings. Perhaps most importantly, the hierarchical NRM system needs to be reframed as a learning organization. Within an institutional setting that values mutual learning, NRM actors have greater likelihood of transferring theoretical notions of public participation into everyday practice.

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## **Landscape and place concepts meeting through encounters between birdwatchers and farmers**

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### **Abstract**

*Determining stakeholders' different perspectives on the same place can create an important platform for processes of mutual learning in natural resource management. We have interviewed farmers and birdwatchers who were members in a project called Swedish birdwatchers and farmers in cooperation. The aim of the project was to create discussions and meetings between these different users of the landscape; farmers and birdwatchers. In interviews were focused on their view of landscape, birds and nature conservation. To understand how the farmers and the birdwatchers perceive the landscape and discuss around this we use a landscape relation model created by Gustafsson (1993). The model describes three ways of relating to a landscape/place. According to Gustafsson people can relate to landscapes as 1) Pictorial landscapes, 2) Perception landscapes or 3) Identification landscapes. The different perspectives on the same landscape can derive from for example a person's function in the landscape and how long time that he or she has spent there. The model can also be a base for discussions about identities. How one perceive and relate to the landscape will affect how one uses and talk about the landscape, the species within the landscape and farm practice.*

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### **Background**

Several farmland bird species have gone through serious population reductions since the 1970's due to intensification in agricultural practice (Wretenberg *et al.*, 2006; Krebs *et al.*, 1999; Wilson *et al.*, 1997). Agri-Environmental Schemes (AES) have been adopted to counteract this decrease but the effect on biodiversity of these schemes are questioned (Berendse *et al.*, 2004; Kleijn & Zuijlen, 2004). Furthermore, the perceptions and attitudes towards nature have not changed within the participants of the schemes (Burton *et al.*, 2008). An explanation for this failure of changing attitudes is that farmers do not see their farming practice as part of the problem (Silvasti, 2003; McHenry, 1997). It is important to note that farming is not just the problem for birds but also the prerequisite for several bird species, since farming creates habitats and forage ranges for birds. Thus to convey a message that farmers and farming are important but could be even more important for birds, projects

aiming at creating open discussions and constructive meetings between birdwatchers and farmers have been initiated - e.g. Volunteer and Farmer Alliance in the U.K. (Smallshire *et al.*, 2004) and Swedish birdwatchers and farmers in cooperation (Caselunghe, 2007). The idea is that the meetings between farmers and birdwatchers will stimulate both groups to learn more about birds and farming. An important issue is that the birdwatchers can show birds and their nesting sites for the farmers and thus give background information for the farmers to act upon e.g. it is easier to protect something if you know where it is and it is easier to promote something if you know what it likes. Furthermore, if you can increase the pride the farmers feel towards their farming and bird conservation measures, the greater likelihood for successful conservation actions that will go further than general AES.

Farmers of today still see that their main task is to produce food and fibre (Burton &

Wilson, 2006) thus their view of the agricultural landscape can at first be seen as primarily utilitarian. However, Luz (1994) shows that farmers consider themselves as superior conservationists and protectors of the land due to their long connection and management of the land. It can be argued that many farmers are not against nature conservation aims but they rather question the means to get there. When farmers lose decision power of the land or when their management of the land is questioned then this will create a tension between farmers and conservationists (O'Neill & Walsh, 2000). This is mainly due to that these conservation actions question the farmers' identity as managers of the land, and when social and cultural identity is questioned the first idea is often to resist (Burton, 2004). O'Neill and Walsh (2000) argue that farmers describe landscape and biodiversity matters based on their view of the landscape as a worked landscape, which is an important part of their farmer identity. The farmers see structures in the landscape i.e. barns, stone walls, fields etc. These structures and objects are not merely a coulisse, but have a function in the farm management. Farming and all the elements that have a function in the landscape are important both for the farmer identity and for the community. Landscape is not just a picture as it might be captured in a photograph but a way of living and working (O'Neill & Walsh, 2000). Thus landscape conservation in some cases might threaten way of life and farmer identity.

Ahnström et al.(in print) argue that farmers tend to see the function rather than the object, e.g. the farmers in their study did not consider the change of open ditches to closed ditches as a landscape change mainly because the function to transport water was kept. Furthermore clear-cuts were not perceived as landscape changes because a clear-cut is only another stage of the forest. It should be noticed that farmers however are not unaware of the beauty of a flower rich meadow and other aesthetic

values in the landscape where they live (O'Neill & Walsh, 2000).

*Birdwatchers are indeed a varied group, e.g. bird watching can deal with finding as many species as possible within an area or watching birds in a specific area over a long period of time. Species knowledge is crucial for most birdwatchers. Birdwatchers spend much time in the landscape; they see, they walk, the smell, they feel nature but, as the case is in this study, they do not own the land and thus they cannot change or manage the land.*

### **Landscape and place meanings**

The kind of relation that an individual has to a certain place at a certain time depends on:

- Different kinds of experiences and memories from the past, as well as expectations of the future (Milligan, 1998; Relph, 1976; Tuan, 1974).
- How long time the individual has spent on the place, and how many times the individual has been there and with what continuity (Saltzman, 2001; Gustafsson, 1993; Relph, 1976).
- The function of the individual, as well as the function of the place for the person and the type of activities performed there (Sandell, 2007; Gustafsson, 1993; Relph, 1976; Tuan, 1974).
- The perceived substitutability of the place and in which context and to what degree the individual is dependent on the place (Cantrill & Senecah, 2001; Milligan, 1998; Relph, 1976).
- A place could also likely be important for an individual only by reminding her/him of another meaningful place.

The point from where the individual perceives the landscape/place is also a central aspect for understanding the place relation (Gustafsson, 1993). And parallel to the current activity in the place, the past and

the potential is very much influencing the present view (Milligan, 1998). Our suggestion for further understanding of landscape/place perception is that *time* for perception *experiences* in the past and present, together with future *expectations* (potential) should be combined with the present *activities* or *function* that a certain individual has in relation to a certain place.

### A model for understanding landscape meanings

The appearance of landscape we see around us is co-constructed by society and nature (Bürge *et al.*, 2004), based on interactions between social, economic, historic and environmental factors (Moss, 2000) and evolve constantly based on social and economic needs (Antrop, 2006). People relate to places and landscapes, and these relations are sources of identity and as essential as relations to other people (Relph, 1976; Brandenburg & Carroll, 1995). Such place relations determine how the landscape is managed and used. But how could these relations be described? Gustafsson (1993) has developed a model explaining how individuals relate to a landscape by analysing the individual's landscape relation from spatial and temporal dimension. The temporal dimension concerns exposure time, how long the individual has spent in the landscape/place, and the spatial dimension or landscape projection treats the person's distance to or presence in the landscape. A third, structural, dimension describes how the structures of the landscape are understood by the individual. Gustafsson writes that the meaning of the landscape to an individual is partly decided by (1) the degree of background influence on an individual in relation to a certain place at a certain time, (2) the function that the individual has at the time, and (3) how perception occurs. Based on these factors Gustafsson suggests three hypothesis of landscape meaning for describing what significances a landscape/place has to a person (figure 1).

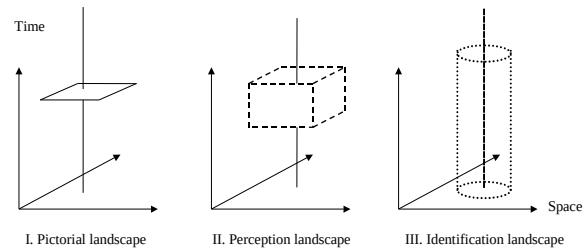


Figure 1. Hypothetical significances of the landscape for man described by Gustafsson (1993, p 27).

The *pictorial landscape* (I) appears when the spatial and temporal landscape dimensions are distinctly separated and there is a clear delimitation of space. The individual, in the observer's role, focuses on specific aspects during a limited point of time.

The *perception landscape* (II) is described as dissolved distinction between space and time and there is no clear delimitation of space. The individual experiences the landscape directly with all senses.

The *identification landscape* (III) evolves when the individual focuses on a specific landscape for a longer time and thus time and space merge into a context. This landscape holds more aspects that are non-pictorial.

The transitions between the three levels of significances are mediated through different ways of perception. In case (I) the visual impressions dominate, in case (II) all the senses are activated in understanding the landscape and in case (III) the sense stimulus is partly replaced by a long-term memory based place attachment. Practically the three levels do not exclude each other.

The model is also interesting as it contains/includes a range of meanings of "place" and "landscape". The very visual landscape or "scenery" is represented as well as the childhood landscape and a deeper "sense of place", although Gustafsson does not express the different



landscape relations in these words. The borders between scenery-landscape-place are bridged within this model.

### **Aim**

The aim of the study is to highlight differences between farmers and birdwatchers in their view of landscape and nature based on Gustafson's model. The landscape meaning might affect a person's thoughts, attitudes and actions in the landscape. Assumingly, the degree of consciousness about the other stakeholders' place relations might also affect how nature resource management should be presented and performed.

### **Methods**

In 2006 three organisations (The Rural Economy and Agricultural Societies of Sweden, The Swedish Ornithological Society, and The Swedish Society for Nature Conservation) therefore initiated a pilot project aiming to "develop a long-term collaboration model for birdwatchers and farmers in order to benefit agricultural birds." The pilot project borrowed its main features from the large scale British project "Volunteer and Farmer Alliance" that is carried through by the Royal Society for the Protection of Birds since 1999 (RSPB homepage).

The pilot project included 11 farms in Mälardalen, a region situated to the north of Stockholm, Sweden. Each farmer was contacted by a birdwatcher. Together the two of them decided what parts of the farm that should be included in the inventory. The breeding birds on each farm were then mapped by the birdwatcher at four occasions during May and June. In the end of the season, a complete map with information such as bird occurrence, nests and food resources was handed out to the farmers. The material also included management suggestions favourable to the current bird species. The project was monitored by the main author who interviewed farmers and birdwatchers to

establish the usefulness of the project for the conservation of farm birds.

Half of the projects participants were selected i.e. four farmers<sup>18</sup> and five birdwatchers, covering differences in age and sex of respondents, size, kind and location of the farms, and the birdwatchers' experience. Each farmer and birdwatcher couple was observed during the collaboration situations at the farm. In the end of the season, in-depth interviews were conducted with the nine respondents. The interviews were semi-structured and open-ended. All of the interviews were digitally recorded with the interview persons' consent. The interviews focused on the respondents' view on nature, landscape and birds, but comprised also their general experiences from collaboration within nature conservation and their notion of farmers and birdwatchers. All the interviews were transcribed and the quotes were later divided into categories. The categorisation effort was also part of the interpretation work, which would be classified as a hermeneutic and inductive interpretation process.

### **From the interviews- ways of expressing oneself characterize the relations to the landscape/place**

*"I recognize and know each and every tree, and all the 85 hectares. I know them in detail. I would say that I have a rather good picture and I can describe every hectare, and its development and processes." (1)*

This first quote (1) is from a farmer describing his relation to his lands. He is strongly attached to his farm, and knows the place intimately. Feelings are hidden behind the words, but not outspoken and he uses few adjectives. This quote is clearly an example of an identification landscape relation. Within the farmer identity the size of the farm, i.e. the exact hectares, seems to be important because it shows the

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<sup>18</sup> Some of the farmers' family members also contributed.

amount of land that you manage. The utilitarian view of farmers seems to be fulfilled by this description of hectares. However, this farmer says that he recognizes and knows every tree. We interpret this as he is saying that he recognizes every tree species but also he knows the appearance of each tree on the farm. Furthermore, he talks about that he knows each and every tree, a statement that for us shows that he in a way has a personal relation to every tree on the farm. The farmer also says that he knows all his land in detail and that includes the knowledge about development of the land and the processes occurring on the land. This deep awareness takes time to generate and his 'friendship' shows that he is deeply rooted in the land.

*"Well, the mountains are very fascinating, although I have only been there a few times. It is very beautiful, even if there are not plenty of birds. There are however some breeding birds that you won't find in any other environment. Yes, the mountains are really among the most beautiful I know. Snow covered summits, then willow region, and a stream, with bluethroat. A mountain stream with bluethroat! And Lapland buntings, on the heaths. And snow bunting up high. And dunlins and European golden plovers' lonely calls sounding above these desolated heaths. That's fantastic!" (2)*

This birdwatcher (2) describes a landscape that he likes. His description is illustrative and rich in adjectives, and characterized by feelings and sensations. It is a living picture of a place where the landscape (whole) is presented through the descriptions and whereabouts of birds (parts). The landscape that is described as fascinating is partly fascinating in itself but also fascinating by the fact that there are bird species not found anywhere else. It is a direct description i.e. there are no relations to processes and function or changes over time. This would be a typical perception landscape relation.

The respondents (birdwatchers and farmers) express their place attachment or the meaning of the landscape without using an academic language but representing how people talk about place and landscape in their every-day speech. During the interviews, the respondents describe their perception of the landscape/place several times, but they mostly use other words than place or landscape. There are some differences between how the birdwatchers and the farmers express their relation to the place/landscape, although they certainly have many words in common. They tend to observe different aspects and characteristics of a landscape, paying more attention to components important for their personal context. These differences can be related back to the model suggesting that the farmers have an identification relation to the landscape and the birdwatchers a more perception based landscape relation. The landscape descriptions differ in the sense that the farmers tend to fill the landscape picture with both a temporal and a spatial scale and furthermore with personal connections e.g. emotions or management relations. The farmers primarily articulate those landscape elements that are important for agricultural activities and their daily life at the farm (using words such as *ditches, land borders* and *playgrounds* for their children), see also (O'Neill & Walsh, 2000). However, the farmers also express other aspects of the place, such as memories they have and feelings attached to the piece of land that they own.

The birdwatchers fill the picture with descriptions of the spatial distribution of the landscape and they describe in detail the birds' needed habitats, but also the birds themselves e.g. how they look or how they sing. The birdwatchers speak about the current landscape as giving possibilities for housing birds and biodiversity values (using words such as *key biotope* and *nature type*).

These differences between farmers and birdwatchers are thus most obvious when speaking about the particular landscape, as

it was defined by the project participants. When expressing their experiences from other landscapes (sceneries) that they like, both groups tend to talk, on the one hand, about impressing mountains, and on the other, characteristic agricultural landscapes. When visual impressions dominate a person's landscape relation, Gustafsson (1993) speaks about the *pictorial landscape*. The visual words are though used in more situations than that and they are for example necessary for describing any place for someone, in order to orientate oneself in a place, irrespective of how one's place relation looks like. However, we would claim that the pictorial relation is rare both for birdwatchers and farmers even when they are guests in a landscape. This is due to that they tend to fill the picture with a content e.g. bird species and bird habitats, or how fields look and what management strategies that have been used.

The way of expressing landscape meaning indicates a person's focus of interest and place attachment, and we will further try to explore factors behind.

### **Time and function determine a person's landscape meanings**

#### ***Time***

Both birdwatchers and farmers talk about traces from the development processes of the particular landscape that they have worked in within the project, as well as the Swedish landscape in general. They mean that today's landscape development is very fast. One farmer states that *"in many ways this [landscape and landscape change] is something self-evident for us [farmers], although it really isn't"*. Respondents from both groups mean that the current landscape is a result of human activities, primarily the gradual agricultural development through many centuries, and that these processes have given the conditions for human and ecological values that it now imbues. These ideas are also supported in the literature (Baudry *et al.*, 2000; Ihse & Lindahl, 2000).

The birdwatchers are aware of the steep decline of many common bird species (Lindström & Svensson, 2006). The decline of birds is strongly dependent on landscape changes and farming management changes the last 30 years (Wretenberg *et al.*, 2006). One of the birdwatchers however, describes the radical landscape changes of the 20th century in terms of environmental degradation. Talking about landscape change, the birdwatchers seem to stress the negative changes threatening the wildlife or birdlife, thus they are in favour for nature conservation aspects. The birdwatchers see farming as a factor that has negatively affected birds. One of the birdwatchers (3) does not blame the individual farmers but see them as part of a system that has embraced the intensification evolution of farming.

*"I do not get too mad if I see a farmer doing wrong [something negative to biodiversity]. Because I know that there are not so many other ways to do it nowadays. That is how it has become... large-scale agriculture and so on."* (3)

It is interesting that this birdwatcher does not see that an individual farmer can do anything else than the system orders him to do. The system and therefore also the farmer identity is thus seen so strong that the farmers cannot breakout of it. It should be noted that in society farmers can be characterized as scapegoats of the degradation of the agricultural landscape but also at the same being characterized as having strong connection to and deep knowledge about nature and the landscape.

The farmers instead emphasize land development issues, as a natural part of the rural business and necessary for agricultural success. Collaboration between these groups of individual could then be an example of how to balance stakeholders' perspectives for understanding the "working landscape" (Cannavò, 2007). One of the farmers means that the focus in agriculture

is set not only on high production levels, but on the agri-environmental schemes assign the farmers to care actively for the landscape itself. He means that working with landscape values is a central task for modern farmers and he proudly identifies himself as a landscape manager.

A conclusion from the interviews is that a farmer's landscape/place relation is closely connected with his view on his own role and tasks as a farmer (his function in the landscape) and we suggest that this could be generalized to other categories of people as well. Beyond the function that an individual has, the time spent on a specific place also seems to affect the place meaning for a person.

There are considerable differences between the farmers' and the birdwatchers' types of rural lifestyles. The farmers live within the landscape and work with the landscape and the resources of the place, whereas the birdwatchers work in the city and do not depend on the landscape for their living. For the visitor the place might be seen as one place among others, but for those who live there the place represents unique values that are not substitutable. There is a range from complete dependence on a place to not depending at all. This in turn is affected by ownership, living, work, recreation, inheritance, history, continuity, social interactions, engagement in local issues, the childhood of your children and the effort put on different types of work and other activities. The degree of substitutability of the place is one of the aspects that distinguish landscape meanings corresponding to the *perception landscape* from the *identification landscape*.

The farmers are connected to their land through their living and their work, through their past and their future. As the farmers develop the land, their identity and mind is simultaneously marked by the landscape. What is a farmer without his land? A birdwatcher however, does not depend on these fields and places to the same extent,

coming there for temporal visits with recreational purposes and out of interest in birds and nature. The landscape is likely more substitutable then, this place being one of many, although the birdwatcher also might have strong feelings of different kind attached to this landscape. These experiences about substitutability are not clearly articulated by the respondents, but lie behind their statements and stories, see also Gustafsson (1993), indicating that a person's sense of place is also affected by place dependence (Cantrill & Senecah, 2001). The farmers clearly show that their life history is attached to the place, and that this is the only place for them.

All of the interviewed farmers mention the cyclic change of the seasons as something that brings them essential meaning. Seeing the same place in different lights might contribute to a closer place relation (rather a *perception* or *identity* relation, than a *pictorial landscape* relation). The farmers have a long continuity being on the same place for decades having experienced the processes that take place in their landscape, including how aspects of nature and culture are connected. However, they do not tend to separate between nature and culture, or similar dichotomies, but understand the place as with embedded aspects forming a whole. Although they seldom question the landscape where they live, but rather take it for granted, the farmers get very proud when visitors show attention towards the multiple values at their farm or if someone tells them about species living there.

*"And now I listen, I go and I listen, when they are playing, the quails...//...and now I find them on a new field, a new place, you know. And that feels, yeah, like I have succeeded a little bit..." (4)*

This farmer (4) has an evoked interest in birds. He is proud and wants the birds to use more of his land. We argue that this type of connection to a species gives that species a stronger protection than a nature

conservation effort could ever do. Thus, projects like the one investigated here where birdwatchers and farmers meet, can lead to a higher awareness and therefore stronger incentives to protect and promote birds.

### **Function**

The farmers seem to have quite different relations to their home landscape than to the places that they have been visiting during holiday journeys or when going somewhere for hunting, and those comparisons in fact correspond to the *identity landscape* and the *perception landscape*, respectively. The farmers have a strong connection to agricultural landscapes in general, but particularly to their home landscape, with a rich content that includes all kinds of background knowledge; physical setting, soil character, social, ecological, economical, cultural, historical, symbolic, aesthetical and other meaningful aspects. According to Hägerstrand (1994) this is what could be described as the layers of the landscape, something he means is apparent particularly to farmers. Recent and historical maps contribute to the farmers' knowledge about the area and they actively work with these maps when planning their crops and applying for subsidies. The birdwatchers instead, who come to visit the farm and its fields, use other types of maps, which focus more on roads and paths with recreational purposes.

The birdwatchers' reasons for visiting the place is mainly to *watch* and *listen* for birds, whereas the farmers *see* and *hear* birds in a less actively way while they *work* and *live* there. This exemplifies how the respondents express the use of their senses in different ways depending on their function and activity, resulting in different landscape meanings.

The forming of landscape significance is thus influenced by for example what type of activities that occupy a person in a certain landscape/place, what this person uses this landscape for and to what extent this person

is depending on the landscape, also described as the substitutability of the place (Sandell, 2007; Gustafsson, 1993; Relph, 1976; Tuan, 1974). The landscape relation also depends on how much time spent and work invested in the place, and what expectations that a person has connected to the place (Saltzman, 2001; Milligan, 1998; Gustafsson, 1993; Relph, 1976). Memories and all types of experiences contribute to the perception of a place, according to Milligan (1998), who claimed that place attachment is a product of (interactional) past and potential. The farmers largely relate to the place in terms of events and memories from the past, that are inseparable components of their identity. Plans for the future are also present in their mind, when they by long-term work prepare the farm to be in good condition, hoping that next generation later will take over. The birdwatchers are not that strongly connected to past and potential images of the place, even though it might matter for them, but they primarily refer to the present meanings, because of the considerably shorter period of time spent in the place.

The farmers appreciate their landscape in terms of aesthetics and function, something that the birdwatchers seem to agree upon. But for the farmers the function rather comes first and the aesthetic values are coloured by practical matters. The birdwatchers instead tend to prioritize the recreational aspects of the bird watching session, and then the intellectual, practical and ideological follows. These function dependent differences are also described by Buijs *et al.* (2006). However, those distinctions are subtle, and there are supposing innumerable opinions on how good function or admirable aesthetics looks like or is obtained (see also Yung *et al.*, 2003). Time and function are entities that are even more inseparable. They diffuse into each other forming a whole, which becomes the key when trying to understanding people's place attachment.

In adapting to the empirical work in this study there is a parallel use of the whole range of concepts stretching from the physical landscape (Cosgrove, 1989) to the multidimensional landscape as for instance described by Olwig (1996; 2005; 2007). The results show that the birdwatchers view the landscape primarily as scenery and bird habitat (*perception landscape*) while the farmers' understanding of their landscape rather corresponds to the place concept or the *identification landscape* (Gustafsson, 1993). In a similar way, Gustafsson allows the various landscape definitions to be contributing with different aspects in a parallel use. The *pictorial landscape* is very much a physical, scenic landscape, and the *perception landscape* covers a broader sense of landscape meaning, whereas the *identification landscape* and the concept of place indeed converge, as we would suggest.

The respondents perceived different landscape meanings, partly because they all are individuals with unique perspectives. In this study, however, focus has been on how landscape meaning depends on the individual's function in a certain place. In other landscapes, the same individual might have completely different landscape perception if she or he would have other functions. The sense of place thus seems to be situation linked.

Gustafsson (1993) describes how perception occurs, through which senses and during how long time, but not the strength of the sentiments. How are Gustafsson's levels of significance then connected to emotional strength of landscape/place experiences? Our results suggest that the emotions can be as powerful irrespective of landscape meaning category, but still hold different qualities. Different types of feelings are involved in the different levels and the feelings are connected to the senses that provide the individual with impressions. A birdwatcher can thus highly appreciate a farming landscape, in some aspects stronger than

the farmer himself does, but those aspects associated with the long-lasting memories of the farmer might generate emotions that the birdwatcher cannot experience. This difference between the groups of respondents could possibly cause disagreements and conflicts. For example, it could generate frustration among the birdwatchers if they would wish to influence the farmland management for protecting the birds, and they would maybe remain feeling powerless since they have no possibilities to control the land that belongs to the farmer. Only the farmers or landowners possess these possibilities, a fact that points out the anxious need to collaborate for finding long-term strategies in the striving for benefit farmland birds.

As mentioned earlier, the respondents do not make the same theoretical distinctions as the researchers. They tend not to have the same need to draw borders, but the small and the big scale are connected. The individual does not separate between the different aspects of landscape, but the multiple meanings amalgamate to a context, and the convergence between landscape and place seems to correspond to the reality of the farmers to a higher extent, compared to the birdwatchers' perspective.

## Discussion

### Applying the model of landscape meanings

The *pictorial landscape*, the perspective in Gustafsson's model that is characterized by an immediate perception of a delimited part of the landscape, is not represented to any higher degree among the birdwatchers or the farmers, concerning the specific farming landscapes where the bird survey have taken place. However, both farmers and birdwatchers experience the *pictorial landscape* when they as tourists visit other landscapes than their own well-known ones. Since both the birdwatchers and the farmers were rooted in or got familiar with the landscape where the farming birds were mapped, their relations to the place rather

correspond to the *perception landscape* and the *identification landscape*.

The birdwatchers in all carried strong emotions for the landscape, especially the natural life or “wilderness” aspects of the place, and they render impressions from all their senses.

The farmers instead carried strong emotions to the landscape as a place where farm management occur. Furthermore, they are closely attached to the landscape for its “*platial*”<sup>19</sup> qualities. Most of them inherited their farms from their parents, and the continuity within the families has lasted for several generations. Thus, nature conservation measures, e.g. nature reserves bought from the farmer that break this chain of family owning land, does not seem appealing. In addition, the memories play a big role, as well as the social relations within family and in a broader local context. This landscape has been the place, the setting, for all parts of their life history, and those imbued meanings are not easily articulated neither caught by a camera lens (see also Gustafsson, 1993). The farmers correspond very obviously to the *identity landscape*, although they also have experiences connected to a *perception landscape* perspective. They know their lands and even the soil in an intimate way, and this place is an important part of their identity.

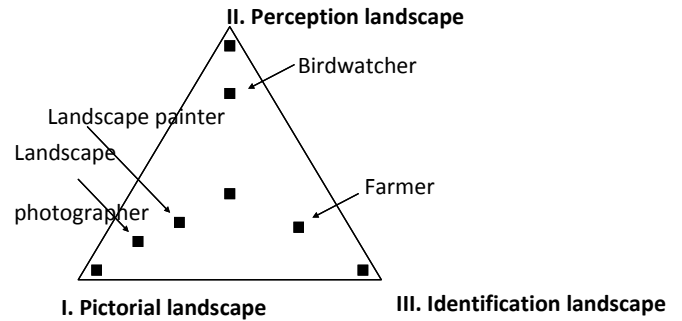


Figure 2. Hypothetical landscape relations. Three angles representing different stakeholders' perspectives. After Gustafsson (1993).

The three different landscape relations described by Gustafsson could be visualized as angles in a triangle. These could represent three different hypothetical perspectives in any given natural resource management situation. One could argue that the optimal way to perform collaborative landscape management would be to aim at bringing the different stakeholders to a fictitious point in the centre of the triangle. However, we would rather claim that the stakeholders' different perspectives should be accepted and respected. By realizing that different stakeholders represent different perspectives concerning landscape/place relation, collaborative processes could be designed with respect to these circumstances. When the stakeholders get to know about each others perspectives and their underlying reasons for these perspectives there could preferably be a higher level of communication and understanding, but at least this could explain some of the failures in perspective sharing leading to conflicts in natural resource management. The model and our empirical findings imply that everyone involved in a collaborative process that concerns landscape management, should acknowledge the different landscape relations present, and try to discuss in which aspects and to what extent one or another landscape relation should be in focus.

Gustafsson's model is indeed quite simple but opens up for many interesting

<sup>19</sup> Olwig (2007) differentiates between spatial and “*platial*” landscape, the latter being closer to the place concept and the Swedish word “*landskap*”.

discussions and might work as an eye opener why natural resource management e.g. nature conservation succeed or fail because of differences in language describing the landscape, differences in view how to use the landscape and differences in connections to the landscape.

Table 1 indicates one way of comparing different stakeholders' potential relations to an agricultural landscape. We suggest that birdwatchers in this case can have all the three landscape relations, depending on their interest, experiences etc. Those birdwatchers focusing on finding the rare species, the species hunters, would come to a landscape and watch a particular bird and leave. This is a short visit to a landscape that is visited only due to a certain species and not because of the landscape/place itself. We argue that most birdwatchers in our case rather have the *perception landscape* relation. They see the landscape in terms of bird habitats. However, bird watching is also a general excuse for being outdoors to experience nature. The birdwatchers describe all parts of the landscape, often in rich pictures of what can be seen, heard or smelled. Since birds are in focus the landscape is interchangeable i.e. the type of birds you want to watch that day decides where you are; at the sea, at the lake, in the forest or in the agricultural landscape. However, for many birdwatchers there are also places that they are deeper connected or attracted to either because they live there or just because they fancy a certain place due to how it looks or due to its bird species.

Table 1. Comparing the potential landscape relations of different stakeholders.

| Relation to agricultural landscape | Pictorial landscape                   | Perception landscape | Identification landscape                           |
|------------------------------------|---------------------------------------|----------------------|----------------------------------------------------|
| Birdwatchers                       | Birdwatchers focusing on rare species | Most birdwatchers    | Special landscape and or the surrounding landscape |

|                         |                      |                                                           |                                        |
|-------------------------|----------------------|-----------------------------------------------------------|----------------------------------------|
| Farmers                 | -                    | Visiting other farmland landscape or new harvest oriented | The farm and the surrounding landscape |
| Nature conservationists | Old day preservation | The modern conservation                                   | -                                      |

We argue that the farmers mainly hold two of the landscape relations when talking about agricultural landscapes; *perception* and *identification*. The *pictorial landscape* is in most cases excluded due to the fact that farmers in an agricultural landscape will in general connect what they see to management strategies or environmental variables e.g. soil or weather conditions. Thus, the *perception landscape* relation is the relation most farmers hold when visiting other farmland areas. In Sweden today most farmers live on farms where their families have lived for generations and this of course gives the place and the landscape an important role in the identity. But as time changes and there are more new business oriented farmers who buy farms and run big farming operations, it can be assumed that the landscape relation might shift from *identification* to *perception landscape*.

Nature conservation management earlier used to focus on protecting land by preserving it as it was. These thoughts were based on the community climax theory, which Clements introduces in early 1900's, suggesting that nature evolves to a certain stage and then it stays at this steady-state. Even though based on perceptions of species and habitats this in a sense represents a *pictorial landscape* relation, since this perspective departs from only one view – nature conservation, quite limited in time and space. Fortunately, the situation today is more based on several stakeholders and their interest, perception and wishes for a landscape, but still conflicts exist between different groups concerning nature conservation. One of the reasons behind, is that conservation seldom reaches the *identification landscape* relation. If farmers, hunters or landowners



feel that nature conservation does not respect or acknowledge their identity or their knowledge and interest in the landscape, then successful conservation is hard to establish.

### **Model evaluation and further applications**

A distinct landscape definition or a thoroughly defined place theory was not the most central when developing collaborative activities during this project. Rather we would like to stress the importance of how the knowledge about place attachment and landscape meanings can be implemented for gaining successful collaborative efforts within natural resource management. For this purpose, the used model of landscape meaning (Gustafsson, 1993) is suitable. Through the three simplified categories of landscape significance, scholars and practitioners could examine and try to understand several stakeholders' various perspective concerning a specific place or landscape.

### **Conclusions**

The main conclusions from this work is that (1) a person's way of expressing her/his relation to a place or a landscape could be used to categorize the type of relation, which is (2) determined by time and function (activity) that the individual has in the specific place. The landscape/place relation could also be analysed in terms of past, present and potential, where the substitutability of the place is a major factor. Based on theoretical and empirical arguments presented we further suggest that (3) place and landscape are converging concepts where place could be understood as the identification aspect of a landscape relation. Place theory could therefore be used to express at least some aspects of how people relate landscape. (4) A landscape relation model (Gustafsson, 1993) has proved to be a useful tool for understanding the landscape and place

relation of a group of farmers and birdwatchers. Eventually (5) this model could be applied in collaborative natural resource management contexts in order to understand the various perspectives of the involved stakeholders. The collaborative intentions might be more successful when explicitly considering the fact that people relate to places, discussing how that might affect the different stakeholders and the collaborative process.

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## **Natural resources management approaches in Ethiopia in retrospect**

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### **Abstract**

*This paper discusses the major perspectives adopted in natural resources management interventions in Ethiopia over the last five decades. It explores the discourse of the widespread interventions in soil and water conservation and community forestry. It distinguishes the incremental changes and improvements in the interventions that emerged in response to the crisis and failures encountered. The processes by which evidence about the physical environmental conditions were set as apolitical acts of setting agenda has not been questioned for long time. Interventions in natural resources were rampant and uncontested. Often, the scientific community, the state and other external institutions were the major initiators and drivers of most of the interventions across the rural areas of Ethiopia. Rural people, their institutions and ways of life/culture have often not been central in the interventions. In many cases, rural people continue to be understood as mainly 'conservationists', 'producers', 'land managers', 'forest managers' or just 'farmers'. Such frames lock rural people into prescribed and discrete tangents. The inclusion of people as social actors, with multiple and negotiated objectives, social and cultural roles and power structures is central to improving future approaches.*

*Note: This paper is mainly based on the Dissertation: Beyene, A. (2003) Soil conservation, land use and property rights in northern Ethiopia: Understanding environmental change in smallholder farming systems, The Swedish University of Agricultural Sciences, Sweden.*

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### **Introduction**

The dominant image of Africa in the natural resources management fields of studies is that part of the world trapped in environmental crisis. There is much 'evidence' about the physical environment being in crisis as shown through studies of soil erosion, land degradation, tropical deforestation, desertification, etc. Interventions have been done over the years, but outcomes have generally been very poor across many parts of Africa (Stocking 1996, Dessalegn 2001). This has prompted the need to re-think the approaches adopted in interventions.

Leach and Mearns (1996) argues that environmental interventions in the African continent have been driven based on 'received wisdom' that may be deeply misleading. Expert-generated evidence, description and narratives of the state of the physical environment have become an

issue of contest. Far from being mere descriptions of the physical environment, such evidence has been used as a blueprint to raise 'societal concerns' as regards the natural resources, often used by powerful actors like the State, NGOs, multilateral international organisations, the media and society at large to intervene on behalf of the 'common good'. In practice, this has meant intervention in the management of the natural resources, including political decisions that create the conditions for enforcing different measures, such as community labour engagement in conservation, exclusion of people from natural resources, discrimination of practices used by local people, selective legalization of practices, etc. This interventionist practice is so apparent and strong in developing countries in general and Africa in particular that there is now an emerging demand for third world political ecology (e.g., Bryant and Bailey 1997).

At the heart of the interventionist approach is the need to understand the discursive processes of the transformation of assessments and descriptions of the physical environment into an interventionist political agenda by the powerful actors, like the State. Conservation interventions in Africa have largely been regarded as apolitical. They have played down control and ownership of the very process of the intervention itself, representation of the state of the environment and the types of interventions/actions needed to address the perceived environmental problem. It is also crucial to recognize the fact that interventions in Africa have been pursued in a context where agency of rural/local people has been very narrow. This needs to be seen in relation to the general deficit of democratic, political and institutional (both governance and knowledge systems) conditions that have weakened rural people's position.

One of the widespread manifestations in natural resources management interventions is the deterministic and uncontested claim-making power of expert knowledge systems in promoting interventionist approaches. In subtle ways, interventions have been promoted from the notion of *'how known solutions to known problems be implemented'*.

*'We know, or can know, what needs to be done but we do not know how to get people to do it. Why is it so difficult to get people to listen and act.'* (Milbrath, 1989:356).

*'In many cases, it is already known what should be done, but action is stymied...'* (Jordan, 1995:2).

Or in a broader sense of the dilemma of humanity, Eder poses the question *'We know what we should do, but we do not do it. Why does this happen?'* (1996:vii).

After a review of the state-of-the-art of research on soil nutrient flows in East and

South Africa, Nandwa and Bekunda (1998:7) state that, *'... we know about the severity of this [nutrient depletion] process and the technologies at hand that can stop it. ... On the technical side much is known now, but research output is still poorly integrated into development.'*

These statements are loaded with multiple messages. All point deterministically what is believed to be known and certain. They all point to where *the* 'remaining problem'; namely, how to engage people to solve the problems, while at the same time acknowledge the disappointments in the progress of natural resources management interventions. It is interesting to note that the wide spread adoption of participatory approaches that were introduced in the late 1980 and early 1990s emerged as a way of softening the deterministic and authoritative interventions. Unfortunately, in many cases, participatory approaches were used as instruments precisely because the interventions were locked with the frame of 'how to involve people on known problems and solutions'. It is wrong to believe that development agents of both the state and NGOs do not know what they want to accomplish when they engage rural people to 'participate' in their agenda.

Clearly, natural resources management interventions have been grappling with a dilemma of broader scope that cannot be addressed within the prevailing interventionist thinking itself. In this sense, environmental description is not anymore a 'neutral', 'objective' and 'unproblematic' scientific undertaking (Escobar 1996). What are considered as *known* problems and solutions need to be seen as contested and political issues. Similarly, approaches used to devising means of influencing rural people's behaviour and their engagement to achieve a desired goal needs to be seen in relation to the above issues.

This paper describes the major generalisations that set the conditions for

mainstream external interventions and distinguishes their key differences. Five main strands are identified explaining the major thinking in conservation interventions. The figure below summarises the diversity of strands and their basic assumptions about the nature of the problem. The assumptions embodied in each strand determine the approaches taken in addressing the problem. The strands also help to identify and discuss the major challenges and problems associated with them. Parallel to this, the assumptions taken with regard to rural people are also drawn along the strands.

#### **Natural resources management intervention in Ethiopia: brief review**

In Ethiopia, state- and external- driven and bureaucratically organised interventionist approached to natural resources management has a history of about five decades. According to Turton, in 1962 Ethiopia requested the help of UNESCO in formulating conservation policy. With the help of foreign expatriates, a survey was conducted and three areas were recommended as national parks, namely; the Simen Mountains, the Awash Valley and the Lower Omo Valley. The critical criteria for designating such areas were the preservation of an endangered species (the Walia ibex which exists in the Simen Mountains), the wilderness of the Omo Valley, and the closeness of the Awash Valley to the capital Addis Ababa as an accessible tourist area (Turton, 1987:171-172). In some of the national parks where there were pastoralists, measures of exclusion of the national parks from grazing-domestic animals were taken. This created a barrier to the pastoralists' access to essential seasonal grazing areas (Turton, 1987). Indeed, as some authors note (e.g., Gamaledinn, 1987: 341), the behaviour of the State was surprisingly reminiscent of much of the colonial experience as its first efforts in conservation started with wildlife/forest and not people.

The second and major wave of intervention was on soil and water conservation. Soil and land degradation as an issue of agricultural challenge emerged in the second half of the 1970s. The droughts of the early 1970s and mid-1980s that occurred in the Sahelian and Sudanian belts of the African continent were the main causes for the government to promote conservation (Hoben, 1996). This triggered expert activities that significantly shaped the way land degradation has been represented and the way it has been approached over the following years. Research projects that aimed at estimating physical processes of land degradation (mainly measurements of soil erosion) and deforestation flourished across the country. A report of quantitative assessment of the physical environment conducted by FAO was published in 1987. This report, known as the Ethiopian Highland Reclamation Studies, marked a cornerstone in the way land degradation was presented in almost all of the literature on Ethiopian environmental conditions. As such, the document has been instrumental, as it has been treated as the blue print of the state of the Ethiopian landscape. The central message of the report was that agricultural resources of Ethiopia are on the brink of man-induced ecological crisis and urgent action is needed for strong interventionist conservation programmes throughout the country. Through the time, soil and water conservation has been seen as an issue of survival for Ethiopia (e.g., Brown, 1973; Hurni, 1993).

Since the late-1970s, the state has implemented extensive conservation intervention programmes aggressively over most parts of the country. During 1983-84 the Ministry of Agriculture used both unpaid community labour and "food for work" projects to raise 65 million tree seedlings, to plant 18,000 hectares of land, and terrace 9,500 hectares of land. Peasant associations used 361 nurseries to plant 11,000 hectares of land in community forest. Between 1976 and 1985, the government constructed 600,000 kilometres

of soil and stone bunds on agricultural land and some 470,000 kilometres of hillside terraces, and it closed 80,000 hectares of steep slopes for regeneration; and about 34 million person-days were mobilised to do conservation (Yeraswork, 1995; Hoben, 1996; Azene, 1997). In drought-stricken areas, in particular, the government employed coercive methods in promoting soil and water conservation programmes (Gamaledinn, 1987:341).

In the early 1990s, the measures taken have been found to have had no impact on the land degradation process in the country, since the physical conservation works deteriorated due to lack of maintenance and the results of the afforestation and closed areas were disappointing because of poor care, illegal cutting as well as deliberate large-scale destruction (Yeraswork, 1995; Shibu & Kifle, 1999).

### **Assumptions and bases of intervention**

#### **Facts and evidence (Type I)**

An integral part of conservation intervention discourse is the process of providing evidence about the state of the environment itself. The measurements of degradations of various types of natural resources have been the prime drivers of conservation interventions that the role of science has often been to bringing environmental concerns into the frontlines of policy priority, resource allocation decisions and broader social agenda.

Whereas the importance of environmental evidence in conservation research has been acknowledged, assessments of environmental concerns and their explanation have limitations. These limitations can be seen at two levels: 1) the complexity in assessments and description of environmental processes (challenges in Type I); and 2) the sufficiency of environmental information to suggest and enforce conservation intervention (described together with the other four perspectives) (see the figure below for summary).

Quantitative assessments of soil erosion are fragmentary and there is much room for negotiating about what erosion and degradation means. Soil erosion is a universal phenomenon, particularly for arable land resources (Singh 1998:7). How to localise and interpret a given figure of soil dislocation in a landscape is, therefore, not simple. The boundaries between a change in the state of the land and land degradation or between accelerated and natural erosion are so fuzzy that they cannot be assessed exactly. The practice of generating environmental data sets that derive from local case studies and aggregating them to form nation- and region-wide profiles and generalisation has also been problematic (Biot *et al.*, 1995). These are issues of uncertainty about the validity and accuracy of the data as well as of models used to make generalisation about the state of the environment.

A related difficulty of quantitative assessments of the environment is about the definition of what 'acceptable' level of erosion is. As indicated above, dislocation of soil, from arable lands specially, is the norm and not the exception. People have to work their land, change its boundaries, produce crops on it, build structures, *etc.* In such a context, it is unavoidable that the land changes, nutrients may leak and soils may be lost. This brings forward the definition of the level at which the changes induced due to the human practice can be interpreted as acceptable or not the decision-making of intervention. In the first place, in the actual sense of the problem of definition, there is no (and there cannot be) one universal level that can be used as a denominator that defines the acceptable level. In applied expressions of soil erosion, phrases like '*too high erosion*' and '*erosion problem*' are loosely defined (see Boardman *et al.*, 1990). Some of the vague and loose criteria in use, for example, are '*acceptable limits of erosion*', '*tolerable erosion*' or phrases like '*erosion should not result in progressive deterioration*' or impractical



statements like '*rate of human induced loss of soil should not exceed rate of natural soil formation*'. A consequence of this inherent fuzziness and complexity is that quantitative measurements of soil erosion actually lack a mechanism where the level can universally and authoritatively be set. In the second place, quantitative measurements are open to different interpretations, and the definition of what may be considered an acceptable level of erosion is subjective, negotiable and indeterminist. Hence, the question of who judges the level, and in what context, becomes important and legitimate in setting and defining levels of change in the land.

A similar interpretation can also be drawn concerning the problem of knowing or stating the threshold level of erosion at which a land user should do something about his/her actions. This brings into question the perception and expectation of conservation experts in relation to rural people. When do we say that the land user has failed to prevent soil erosion? What is the basis for saying that a farmer is eroding his land?

The following implications can be drawn from these discussions. First, 'objective' assessments of the environment are insufficient to make decisions about interventions. Additional information is necessary to make such judgements. The type of information lacking is social in character (such as perceptions); and the process needed to obtain such information is about social negotiation and acknowledgement about the perceived problems.

Second, the often-mentioned 'facts' about soil erosion and about accelerated changes of the land due to human use do not in themselves provide a sufficient account of the processes and contexts that cause them. Such 'facts' do not provide a convincing account of how the observations in the cases relate to social, economic, and political spheres. Explanations of

environmental change therefore tend to be cursory.

The challenges set in Type I relate to the descriptive aspects of environmental assessments. It is about improving the validity and uncertainty of data sets, integration of quantitative assessments to social dimensions, as well as definition of the level of erosion at which it is considered a problem. In addition, the mechanisms by which such environmental data sets can be transformed into an active social process of conservation intervention is another central challenge of its own. The essence of the problem in the latter case transcends issues of validity of the data sets and its definition as a social problem. The remaining four perspectives identified sufficiently capture the dominant perspective, each having a distinguishable position as regards conservation intervention.

### **Conservationist (Type II)**

The dominant perspective in conservation intervention has paid little attention to the complexity of the interrelationship between environmental data and policy intervention. Assessments of environmental concerns are often taken as sufficient conditions for intervention. As indicated above, most soil conservation projects are often motivated by quantitative assessments of soil erosion. There is little attempt to problematise the quantitative measurements in relation to the practices of rural people. The evidence is considered as a problem and the immediate objective is often to solve it.

A powerful driving force, but also a source of problems, is the projection of environmental concerns. For instance, soil erosion is implicitly understood as a "problem" that should be tackled. The subsequent focus is then on how to tackle the "problem" of soil erosion. In soil conservation intervention, in particular, the perceived problem was conceived as an integral way of ensuring the conditions of peasant livelihoods, and both governments and donors were often quick to identify

conservation intervention as a matter of urgency. Often tangible results in terms of areas conserved, number of people adopting introduced practices were sought as measures of success. Most conservation interventions, therefore, have adopted a goal-oriented approach where the intervention process did no more than accomplish the targeted goals.

The approach is dominantly top-down and deterministic, and is about enforcing predetermined mechanisms that are believed to be solutions to the predefined environmental problem. The mechanism could include policies, and provision and transfer of technologies. In this approach, local people are taken for granted. In this perspective, challenges encountered in intervention are formulated in terms of technical fitness of the solutions provided, lack of farmer awareness, and problems of adoption and incentives.

### **Production( Type III)**

In recognising the limitations and problems of the swift enforcement of soil conservation projects based on mere environmental evidence, alternative approaches have also been promoted. The assumptions made about the relation between hard evidence of the environmental and conservation intervention in Type II were recognised as oversimplification. Instead, the relation was acknowledged as complex that needed a shift of emphasis from quantitative soil erosion assessments towards understanding how such environmental phenomena relate to the local people. Two broad perspectives (Types III and IV) can be identified that pushed this along.

One of these (Type III) emphasised the necessity of linking evidence of soil erosion to farmers' goals and farmers' interest. Often agricultural production goals of the local people are emphasised. As Hudson, one of the leading experts on conservation, put it,

*'The real issue is not the amount of soil lost or the area of land degraded, but the effect*

*of this loss on the productivity of the land. Of all the tens of thousands of experiments around the world quantifying erosion only a handful have measured the loss of plant nutrients, and even fewer have attempted to correlate the nutrient loss with productivity'* (Hudson, 1992).

Such changes in thinking brought impact assessments to the forefront of conservation research. Erosion impact assessments on the relation between levels of erosion, crop production and financial returns are still a recent development. In practice, only few of the major cereal crops are considered in field experimentation that also attempted to assess the effects of proposed conservation methods on production. The results are far from being conclusive. Instead, the significance of such studies is highly appreciated in terms of revealing and explaining the complexity and dynamics involved in systems of crop production.

Another strand of research that has attempted to link soil erosion to the objectives of the smallholders' goal and interest is the economics of soil erosion and soil conservation (e.g. Graaff, 1998). The pattern and trend in conservation intervention, rate of methods adopted, etc. were assumed to be captured by principles of economics: cost-benefit analysis and economic returns. Assessment of proposed conservation methods on household economy is one principle that focused on the economic constraints and opportunities of conservation intervention. Costs of the labour needed to implement conservation intervention are often mentioned as constraints. Research on these aspects has also been useful in terms of broadening the diversity of solutions to conservation intervention. For example, provision of incentives and subsidies are often emphasised in such contexts.

A central element of these perspectives is that land users are perceived to have objectives, and the purpose of the research

is to find ways of integrating conservation goals into such objectives. Most often, the emphasis has been on how to incorporate or integrate proposed conservation practices to some purposeful goals of the rural people.

#### **System Dynamics (Type IV)**

This view further broadens the complexity of the relations between evidence about changes in the physical and policy development. It situates the issue not only within production or economics, but also within the '*total farm management*' complex. Land users are described as having multiple objectives; and objectives of conservation intervention need to take account of them. System complexity, dynamics of soil fertility management and land husbandry are some of the areas that are emphasised.

The essence of this perspective is acknowledgement of the importance of understanding conservation within the farm management complex. The primary issue is not about the exploration of processes of soil erosion and how they affect crop production, but more about the general balances and dynamics of land management. For instance, various studies have shown that, after erosion has taken place, yields are related less to the quantities of soil removed than to the fertility of the soil that remains (see, Burnhan & Mutter, 1993; Ebeid *et al.*, 1995; Littleboy *et al.*, 1996). These studies have emphasised the importance of unobserved and unrecognised land management strategies of the local people. Soil fertility, as productive potential, lies in the combinations of physical, biological, chemical and hydrological components of the soil and in their spatial arrangement, not just in the contents of nutrients and water alone. In such land husbandry, processes of periodic management systems, local systems of manipulation, and organic farming practices are emphasised as central research topics. Parallel to these, the centrality of quantitative measures of soil erosion has been questioned, and investment in

physical structures to prevent erosion has also been described as a non-viable approach (see Shaxson *et al.*, 1997). The focus shifted towards livelihood systems of the rural people and towards enhancing farm incomes. Holistic and farmer-centred approaches have been emphasised in this context.

#### **Soft systems (Type V)**

Finally, there is an emerging perspective that embraces intervention processes in a comprehensive way and that emphasises the significance of the '*soft side*' of land use and adaptive land management. In this perspective, sustainable land management is an emergent property of the interaction among land users, and intervention on land use is fundamentally a social process. In this regard, Röling (1997:248) argues that '*an analysis of land use systems must be positioned within a new context*' and that the research emphasis should be on the people and not the environment as such. In his perspective, successful intervention and sustainability are outcomes of the human activity grounded in institutions, policies, culture and power. Negotiation, communication and learning processes are mechanisms through which intervention could be improved.

The conceptualisation of conservation intervention as a social process has some distinguishing features compared with the other types. What is common to Types II, III, and IV is that they all strive to induce conservation practices that aim at resolving environmental problems. They maintain that promotion of conservation projects and introduction of conservation methods are non-controversial social positions and emphasise the need to find components or processes that reflect the real life systems of the people. While Type III pursues crop production and the economics of soil conservation, Type IV pursues total farm management dynamics. These perspectives, however, maintain the commitment of developing conservation packages. Their call is to integrate the new

conservation methods with the practices, goals and reality of the local people. Although the levels of the complexities embraced are different, all perspectives envisage that successful conservation intervention depends on how objectives of conservation integrate their respective complexes. In a broader sense, these approaches are primarily about finding appropriate carriers that enable delivery or realisation of conservation objectives. This is considered a guarantee for successful intervention.

The perspective in Type V distances itself from perceiving the problem of conservation as a process of strategic planning. Promotion of conservation practices as a process of systematic incorporation of specific practices into a farmer's everyday activities is instead seen as a narrow perspective. Similarly, evidence verification per se is not considered central in bringing conceptual changes with regard to conservation intervention. Conservation intervention is considered a social process that that embraces more than facts about the land. As Röling (1997:248) points out, *'Instead of an absolute criterion based on a scientific assessment of the state of the land, the soft definition emphasizes sustainability as learned, negotiated and agreed upon'*.

In general, the range of perspectives indicated above show an increasing complexity of the problem associated with soil and water conservation. Approaches to soil and water conservation intervention have gradually shifted from simplified approaches towards a more complex conceptualisation of the problem.

#### **Conceptualization of rural people in conservation intervention**

The space of smallholders in conceptual and practical courses of development intervention is a critical one. Perhaps, an appropriate way to accord space to rural people in developing knowledge about land degradation and its management is by

asking *'How should rural people enter the research?'* This question helps clarify implicit assumptions taken about the rural people and to make such assumptions explicit.

The forms by which conservation projects involve smallholders could range from simplified implicit conceptual consideration (where the 'presence' of the rural people takes passive forms of consideration) to explicit and active definitions of the role and commitment of rural people (where they are actively managing a research). In this broad range, at least four central conceptual frames can be identified. Namely, people as *'conservationists'*, as *'producers'*, as *'land managers'*, or as *'social actors'*.

A correspondence can be noted between how underlying assumptions for interventions are set and how the rural people enter into the research. In perspectives I-IV above, the environmental concerns are the primary focus of attention and the emphasis is to develop mechanisms for controlling them, although the centrality of the environmental processes varies among them. Whereas the centrality is strong in Type I and Type II, it is very weak in Type IV. In Type V, objective environmental evidence is not perceived as central in environmental intervention. Instead, social issues take the central roles in developing intervention approaches. The progressive shifts from I to V are responses to the actual development processes and to the problems encountered in intervention processes.

#### **Soil conservationists:**

The perception about local people as *'conservationists'* is one that has been closely associated with soil conservation research. The discourse of soil conservation intervention has been preoccupied with issues of soil and land degradation and how to halt such processes. In the discourse, the space or role given to the rural people can be described as nothing but

'conservationist'. The approach in Type II corresponds to this perception.

#### **Crop producers:**

Another distinguishable conceptual specification of space for rural people in conservation discourse emerges from the 'production-oriented' view (corresponds to Type III). This perspective basically conceptualises crop production as the organising frame. Both motivation and goal of the rural people are assumed to be fully captured. This perspective has been taken as an unambiguous goal. As a result, research has focused on searching for the best technical means of achieving them. Measurement of soil nutrient availability, relations between nutrient types and levels and crop yields, and developing recommendations for optimal fertiliser application are typical research topics related to this approach, e.g., Smaling's recent work *'The Nutrient Balance Model'* (Smaling, 1998). Naturally, once the production-oriented view of the rural people is taken, the methodology of such research is dominated by quantitative research where experimentation is instrumental. The social, organisational and institutional aspects often lack in such a perspective.

#### **Land managers:**

The seminal work by Blaikie and Brookfield (1987) is known for advocating that people should be seen as 'land managers'. The authors suggest that *'... we must put the land managers 'central stage' in the explanation, and learn from the managers' perceptions of their problem'* (Blaikie & Brookfield, 1987:16). By the standard of conservation research, the 'land manager' as a conceptual framework by which the role of rural people was defined, created broader space for conceptualising people in research. Despite such broadening, however, people are included into the research of land degradation as 'land managers' and, hence, the space created for the subjects is bounded within the sphere of land management.

#### **Social actors: alternative framework for intervention**

Based on the trends and perspectives described above, a wider perspective that creates the space needed for a rural person is important to develop in conservation research. A related, but wider, perspective of according space to subjects can be drawn from the actor-oriented approach, or alternatively actor-oriented analysis. In this approach, smallholders are not just 'conservationists' or 'farmers.' They are social actors who interact in many spheres. Their life does not revolve solely around soil, land, or agricultural production. The social networks, roles and status they hold in the rural institutions are important components and sources of differentiation. Access to information and decision-making processes is correlated with the social and economic structure of a local people (Long & Villareal, 1994). Diversity within rural communities also needs to be addressed by recognising that different actors hold different versions of knowledge.

The actor-oriented approach (AOA) emphasises that an intervention is not merely a set of activities, strategies, and objectives, but a negotiated process created through interaction between actors (Long & Ploeg, 1989; Long, 1992). In their *'Demythologizing Planned Intervention'*, Long and Ploeg (1989) argue that rather than viewing interventions as the implementation of a plan for action, intervention should be viewed as a socially-constructed and negotiated process in which contests of meanings, purposes and powers are central. The AOA visualises intervention as *'an ongoing transformational process in which different actor interests and struggles are located'* (Long, 1992:9).

The outstanding feature here is that the social actor enters into the research through the *'negotiation space'*. This perspective is liberating for a number of reasons. AOA refrains from preconceiving the actor into a predetermined assignment. The actor is somehow conceptually 'free' or 'liberated'. It

contrasts with the other conceptions about local people, which predefine individuals or social groups as 'conservationists', as 'producers' or as 'land managers'.

AOA does not assign tasks to individuals or social groups; hence, it is less authoritative in its approach. The creation of space through negotiation means that actors can claim such space, including the right to suspend the planned intervention if they find it irrelevant. As Long argues, central premises in the concept of actor is '*... the management of interpersonal relations and the kinds of control that actors can pursue vis-à-vis each other*' (Long, 1992:9). AOA considers interventions as potential sources of conflict, and conflict is a part of the social processes of contestation. This conceptualisation is significantly different from conceiving intervention as the necessary plan that must be imposed on the people.

AOA's position on knowledge represents another crucial aspect. It dismisses the belief that the foundational knowledge system is the only source of truth. In other words, an elitist knowledge system is not perceived as a precondition for solving social problems and sustainable management of the environment. It rather calls for '*an understanding of the processes by which knowledge is negotiated and jointly created through various types of social encounter, and an understanding of the power dynamic involved*' (Long, 1992:9). It aims to understand how processes of social construction and negotiation between such actors have shaped interventions (Cornwall *et al.*, 1994; Long & Villareal 1994). Conventional approaches have been emphasising environmental problems as simply lack of knowledge about the physical environment on the part of the local people.

By way of conclusion, the extent and degree of rural people's inclusion is critical to consider. The common approach in conventional conservation intervention on involvement or participation of the people

has been overlooked and often has an instrumentalist orientation, since people are involved in predetermined projects and programmes. Rather, the purpose for involving rural people for future conservation approaches as this study suggests, relate to their contribution to how problems are perceived, defined and prioritised.

In envisioning the role of rural people in research, the perspective should also create sufficient space to acknowledge that rural people participate in a multitude of communicative processes. In this capacity they have the potential to influence research and can participate in formulation of policies and regulations that concern them.

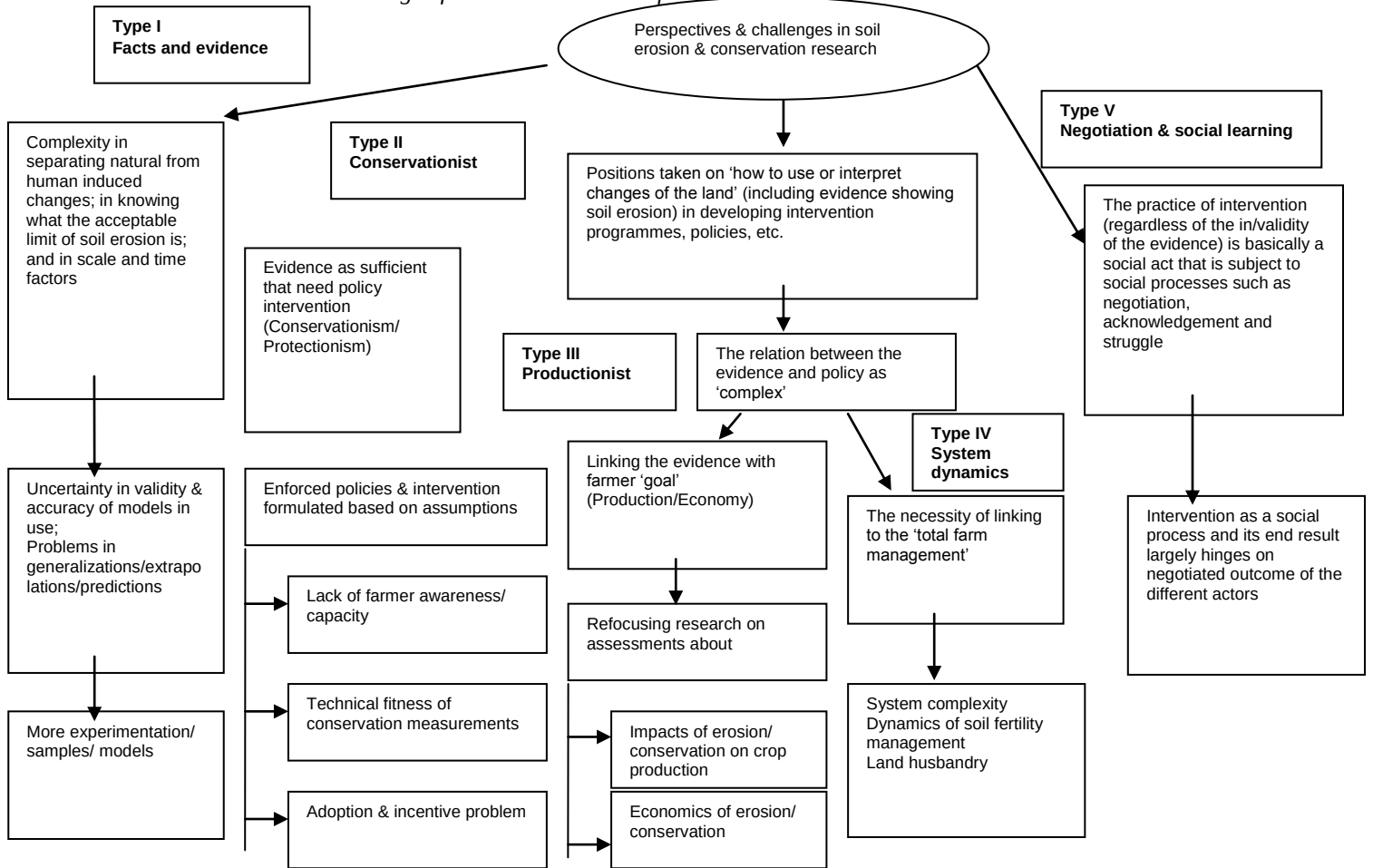
### **Concluding remarks**

More sensitivity is required in environmental policies and projects that engage the rural people. The people have different priorities, capacities and interests. Similarly, the levels of environmental challenges vary across the households and across plots of the farm. In this regard, the large-scale, top-down programmes are often too general and insensitive to the reality.

Decisions of the landholders in land management are mediated by a number of factors; and the decisions they take are highly selective. In order to understand the reasoning behind the management strategies adopted by farmers, we need to recognise and take account of certain subjective and cultural factors. This will involve moving away from approaches that explain farmers' behaviour and the physical state of the land purely in terms of its productive capacity, and from methodologies that assume that the value of land is not affected by intangible parameters. The manner in which farmers engage with their surroundings can help explain why certain arable lands are still 'good', despite having been continuously cultivated by successive generations, and why local people resisted some types of land distribution but accepted others.

Analysis of the values attached to certain land types is also important in any situation requiring collective human action, such as land and water management at catchment level. Activities extending beyond individual plots and farms should be based on an understanding of how groups of individuals regard and value the wider landscape and the elements within it.

The roles of environmental projects need to move forward from simple mechanisms of accomplishing predetermined goals, towards more open and active roles in creating platforms for negotiation and learning that aims at enhancing authority and opportunities of the landholders over their resources.



Diversity of perspective and the changing perceptions in conservation research .



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## **Colonizing Participation: Land Use Management and Lifeworlds: Two Cases of Natural Resource Management in Sweden**

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### **Introduction**

How do citizens participating in processes concerning land use management make their voices heard? The starting point of this paper was a will to understand why actors involved in participatory processes choose to radically change their arguments mid-process, what the rationale for their actions were, and what the outcome of their behaviour might be. We have investigated the interaction between land-owners, authorities and concerned citizens in two different types of land use conflicts in a Swedish forest context; the establishment of a nature reserve and a conflict concerning a clear-cutting.

The purpose of this paper is threefold. Firstly our empirical interest lies in trying to understand the communication between the different actors by using concepts of system and lifeworld (Habermas 1987). The theoretical concepts describe how action is coordinated through communication. In the lifeworld the communication is aimed towards understanding (*Verständigung*) whereas the goals of the system are instrumental.

Secondly we want to make a point regarding the consequences of our empirical analysis coupled to the current paradigm of public participation in natural resource management (NRM). The participatory paradigm has developed as a response to a legitimacy crisis of the traditional, top-down, instrumental NRM. While the theoretical background for the participatory approaches in NRM is built on deliberative ideals where the focus is on process, the praxis often functions on a

logic that understands public participation as a procedure to improve decision making and where the focus is on outcomes. With few exceptions nature resource literature also focuses on outcomes (Parkins & Mitchell 2005). In this study we want to contrast this by focusing on process and thereby in a better way be able to understand the problematic nature of public participation in relation to the deliberative ideals on which the “participatory paradigm” originally was built. In doing so we lift our analysis from the empirical level to a meta-level by using critical theory which demands relating the action level to a broader context.

Our third purpose of the paper is to try to bridge the gap between critical theory and empirical data. Habermas’ concept of the colonization of the lifeworld has its counterpart in other philosophers’ (see Weber, Marx) discussions about modernisation and the influence of capitalism (Elling 2004) and the concept has been discussed in several studies over the years (Barry et al. 2001). However, the discussion is often on a theoretical level with little contact with the empirical world. The Frankfurt school had intention of creating a critical theory that would be very much applicable but has been criticised for a lack of interest in empirical studies (Bourdieu et.al 1991:248 in Alvesson & Sköldberg 2000). Critical theory offers more criticism than constructive methodological suggestions (Alvesson & Sköldberg 2000). Here we follow the recommendations of Alvesson and Sköldberg (2000) and attempt of Hansen (2007), Barry et al. (2001) and others to connect a strain of

critical theory to concrete empirical material. In this paper we have tried to overcome the gap by giving detailed descriptions of the cases, including several interview-quotes to provide a rich picture of the cases. The statements have been interpreted in the theoretical frame of the concepts of lifeworld and system. The analysis will be described in more detail in the Methods section.

This article is structured in four main parts. In the following part we will describe our understanding of the concepts of participation, lifeworld and system to clarify our particular use of the concepts. In the next part we will introduce the two cases, starting with a presentation of the methods used for the study. The third and main part of the paper is the analysis and interpretation of quotes from the interviews. In the final part, a discussion of the consequences of our findings for the view on participation brings the paper to a conclusion.

### **The paradigm of participation in NRM**

Participation is currently being recognised as a way of dealing with pluralism, uncertainty, interconnectedness and dynamics in NRM (Pretty 1995 in Groot 2003). There is a growing interest of participation in many different areas, not just among Non Governmental Organisations (NGOs) but also among authorities who stress the importance of participation in the formulation of documents and policies both in Sweden and internationally such as the new Water Directive of the EU and the Nature Conservation policy of Sweden (Naturvårdsverket 2002; Naturvårdsverket 2003). The UN forest declaration also stresses the importance of participation for interested parties in the development, implementation and planning of national forest policies (Boon 1999; UNCED 1992, p 2). It is now widely accepted that members of the public should be involved in environmental decision-making. However, the exact nature of that participation remains ill-defined (Tuler & Webler 1999). The traditional public participation is a top-

down approach where public authority takes the initiative and where the stakeholders participate through formal hearings and comment periods (Daniels & Walker 2001). The “participatory paradigm” in environmental decision-making has developed because of the failure of more traditional top-down decision-making. If the participation should work in a different manner than the “top-down” decision making it needs to include a certain amount of deliberation. The idea of (public) participation has its background in Habermas’ (1964) definition of the public sphere where all citizens have equal access to express their opinion, unrestrained by political bodies (Hohendahl 1974).

There is an abundance of research literature that focus on how and if public participation improve decision making. Parkins and Mitchell (2005) criticises the general lack of reference to deliberative democratic theory in natural resource literature. They also claim that there is a general focus on outcomes and a neglect of process among natural resource sociologists. This emphasis functions on a logic that understands public participation as a procedure to improve decision making (Parkins and Mitchell 2005; Buchy and Hoverman 2000). What is considered “improved” decisions will most likely be measured from the rationality of the system, the instrumental rationality. Public participation procedures have been increasingly bureaucratised during the last two decades, especially in OECD countries. The opportunities for public involvement are often limited to one-way declarations and rarely lead to face-to-face deliberations amongst the stakeholders (Finger Stich & Finger 2003).

Rather than on public participation to improve decision-making, deliberative democratic theory functions on a logic that understands *public participation as an opportunity for public debate, personal reflection and informed public opinion.*

Although largely untapped by the natural resource literature, these ideas around public debate and public opinion formation appear highly relevant within the natural resource management context, where issues are often highly complex and deeply contested (Parkins & Mitchell 2005).

In this paper we want to focus on a description of the process of participating in land use management.

### **The system and the lifeworld**

Habermas' "Theory of Communicative Action" provides an explanation of the central problems in modern society (Misgeld 1985). In the following we will explain the parts of his theory that makes sense for our understanding of the empirical material. The theory is based in language and in our inherent will to understand each other. A fundamental part of the theory is the assertion that every time we make an utterance we say something about three aspects; facts, norms and experiences (Habermas 1987 Part 2 :120). Other participants in the conversation can question our claims and in this way test the validity of our statement. In every communicative situation we are aware of the chance of being challenged and we always adapt our statements to that circumstance (Habermas 1987 Part 2 :120). Reaching understanding, *Verständigung*, means that the participants have agreed on the validity of the claims (Habermas 1987 Part 2 :120).

When we discuss with each other the validity claims can be challenged and our arguments developed through *communicative rationality* (Waldenström 2001). The communicative rationality constitutes our *lifeworld*, and our lifeworld is the necessary precondition for the rational communication (Fultner 2001). The lifeworld is where we have our close relations, like family and friends (Månsson 2003). These relations are created, maintained and altered by communicative rationality and the essential will to understand others.

Habermas communicative rationality should be understood as something radically different from what we normally understand by rationality, which he calls "instrumental rationality" – something with a final aim that is determined in advance and controlled by definite interests (Elling 2004). Instrumental rationality is prevailing in the *system*. The *system* has grown out of the lifeworld but it is not oriented towards intersubjective understanding but efficiency (Waldenström 2001). Whereas the human action in the lifeworld is coordinated through the communicative rationality the human action in the system is coordinated through money and power, sometimes referred to as "steering media" (Månsson 2003).

In the modern lifeworld more and more spheres tend to be guided by instrumental rationality where validity claims are neither discerned nor raised (Waldenström 2001). Since it is our need of understanding each other that build the relations of the lifeworld the intrusion of the system have serious consequences on the relations between people. The result can be the loss of meaning and on the personal level a variety of psychopathologies (Miller 1992).

### **Methods**

The empirical part consists of an account of a series of events in two cases of land use management. The first case concerns a planned final felling of a forested area in the middle of Sweden. The other case concerns the establishment of a nature reserve. The data was created through audio-taped semi-structured interviews with actors involved in the cases. The interviews were transcribed. Written correspondence in public records between the different actors in the cases was also retrieved and analyzed.

To analyse the transcribed material an inductive approach was used, to begin with. No pre-conceived category structure was used, instead allowing categories to emerge from the engagement with the data. Statements of interest were highlighted

because of the particular choice of words, metaphors used, implicit contradictions or simply because they seemed to make no immediate sense.

The first part of the analysis opened up for questions regarding the actions taken by the people involved in the conflict. The actors seemed to use different arguments in the interviews than what they did when acting in the conflict. Habermas' concepts were used to generate interpretations of the phenomena. During the analysis of the statements *Meaning Interpretation* was used which means that the interpreter moves beyond the directly stated to develop structures and relations that are not immediately obvious. Meaning Interpretation demands a certain distance to the interview statements which is normally created by a firm methodological or theoretic approach (Kvale 1996).

### **Spruceville and Birchwood Estate**

In this paper two different cases will be described on the basis of quotes that will be interpreted in accordance with the chosen theoretical framework. In both cases the management of family owned forest is debated. Of Sweden's 41 million hectares of land 66 % is forested<sup>20</sup>. 51 % of the forest is owned by individual private forest-owner and 30 % by forest companies (SFA 2009). 4% of the forest is protected areas such as nature reserves and natural parks (Naturvårdsverket 2009). According to the present legislation, the private landowners have the freedom to make decisions concerning management in forests on their own estates to a large extent (Svensson et al 2004). Even if private landowners have a big freedom on how to take care of their land, access to private land by the public for non-destructive recreation exists through The Right of Common Access. The right of common access may give Swedish people a feeling of "ownership" towards private land, a feeling that could affect the

expectations individuals have on the forestry in their surroundings (Colby 1988).

The reason why we wanted to bring in the two cases in the paper is that we think they both have the suitable empirical foundation to illustrate the phenomena of altering argumentation among citizens involved in land use management.

### **The case of Spruceville, clear-cutting of a forested area**

Forest owners are obligated to report to the Swedish Forest Agency any final fellings larger than 0,5 ha, at the latest six weeks before the final felling is initiated. Biological diversity, cultural heritage, and social values must be preserved, but the consequences of this preservation must not be so far-reaching that they make on-going forestry activities significantly more difficult.

In the case of Spruceville, a forest owner had decided to do a final felling of his forest and marked the trees he planned to cut. In accordance with the rules he sent an application to the Forestry Board. Some of the nearby living people who regularly were walking in the forest learnt about the plans. They constituted an action group to stop the felling and placed a petition in the nearby grocery store: Undersign and save the forest! The forest owner turned to the logging company and forest authorities to get support. The municipality called the forest owner, forest authorities and the neighbours to a dialogue meeting, but the tensions were not reduced. The trees have now been cut down.

### **The case of Spruceville and the colonization of the lifeworld**

#### A description of the forest from a user perspective

In the interviews concerning the planned clear-cutting the members of the action-group describes the forest in question. The members all live close to the forest and make "use" of it every day. Mentioned during the interviews in connection to the forest were the sound of birds and the

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<sup>20</sup> The ECE/FAO definition: Area larger than 5 ha, canopy over 10 %

beauty of the forest as well in a more user-oriented sense the ability to have the forest as a play-ground and using the forest for hiking and riding.

***Because all of us here have children...and the children had a hut in here...in the forest and...we don't have a playground here. So, we...I who live right next to, send the children to the forest. And they had really...a swing and a hut, and everything up there. All natural, not like we had built anything, but you know like falling trees...and the like.. [...] We have no school transport, nothing, but at least we have our forest. And that is...why we live here! To be close to the nature!***

The forest is described as something beautiful and natural. It is mainly a playground for the children and contains, which another action-group member describes, berries and almost tame birds. The forest portrayed gives of an echo of an ideal forest, happy children playing and picking berries in a sunny forest opening, surrounded by cute animals that are actually, in one case, eating from their hands. The descriptions of the forest as a beautiful and recreational space are in this article understood as values for which it is worth protecting the forest. These values fit well with what has been found in other studies (Uddenberg 2000).

The lifeworld consists of our work and our close relations, like family and friends (Månsson 2003). The lifeworld is integrated through communicative rationality and the aim in this sphere is mutual understanding. In this world argumentation concerning feelings, beauty and playgrounds may be very well understandable but also possible to question.

One woman explains how she joins a church group that is praying for forests. Using spirituality and praying for the forest is certainly one way of dealing with the uncertainties the question of the clear-

cutting is awakening. Arguments of ethics and beauty can not be handled by the system if there are no criteria to judge them by, they can only be handled in the communicative rationality of the lifeworld.

This is the description the interviewees make of the forest as a place. When they go on to describing how they tried to preserve the forest they move to another set of arguments. If the forest is worth keeping because it is a beautiful and peaceful place the way to preserve it is by looking at it through the eyes of an ecologist.

#### **The action-group learn about legitimate argumentation**

When the action-group tries to investigate how they can affect the logging they soon learn what kind of arguments the authorities are able to listen to. The two interviewees from the action group explain how they as a first step decided to contact the Forestry Board and the municipality to find out who owned the land and what the rules concerning logging were:

***They gave a lot of information so that was when they told us to...well, if you find a key habitat you can stop the fellings...***

***[...] came back...and found one of those key habitats. Red listed species. Then we involved both [animal ethics], the County Board, the Environmental Protection Agency, so...everybody you could think of. Eh...then there were two girls who worked up north on some project, preserving forests and that.***

One of the first steps of the activist group is to contact the different authorities to learn more of the possibilities to influence the plans for the forest. Here they learn that finding key-habitats is the way to stop a planned felling. From now on the action group focuses their work on finding biodiversity values. They claim that they have also found a key habitat, the necessary biological values are actually

present in the forest, but that the authorities choose not to see them. The list of protected considered legitimate within the system and thus possible to talk about. We claim that the search for species is used as a replacement for communication about the things that they value that cannot be measured from the authorities side. The participants become instrumental in their communication and use the rules of biodiversity to reach their goal of preserving the forest. Habermas writes that delinguistified media connect “interactions in space and time into more and more complex networks that no one has to comprehend or be responsible for” (Habermas 1987:184). In this case we can see the search for endangered species or habitats as a delinguistified way of communicating, comparable with the use of monetary compensations for the establishments of nature reserves.

The activists adapt to the communication of the system and the accepted subject (biodiversity and species) and they think that they have found a way to deal with the issue. But the activists soon learn that the key habitat they found is not accepted as a valid argument, the authorities doesn't listen even when the correct language is used. It seems like the activists, even though they tried to use the frames legitimized within the system, misunderstood the criteria for valuable species. If the activists could have questioned the motives, the reasons, for the rules about biodiversity they might have been able to understand the rule as such. But the system's way of communicating is not communicative rationality and it is difficult to question the validity of statements as would have been done in the lifeworld.

#### A meeting as a place for strategic communication

During a meeting in the forest the aim was to speak openly about views on the management of the forest. The action group chooses a strategic approach that could be understood as being adaptive to the

instrumental rationality of the perceived forestry context.

Besides putting out the petitions and contacting authorities the action group “Save our forest” kept in contact with local media. The forest-owner kept in contact with the harvesting-company and the municipality through letters and telephone. The Environmental coordinator at the municipality initiated a meeting between the different stakeholders. The purpose was to have a meeting where the participants, according to the coordinator from the municipality, *could listen to each other and understand each others point of view*. The power of decision-making was still in the hands of the forest-owner but the meeting could be used for interchange of information and provide a possibility for sharing of perspectives.

The meeting took place one afternoon in the forest in question. Present were the landowner, a representative of the landowners-association, two representatives of the action group “Save our Forest”, one representative of the logging company, one local representative of a national Environmental NGO and two government agency staff, one from the municipality and two from the Swedish Forestry Board.

The behaviour of the action group was something the other interviewed participants mention when asked about the meeting in the forest. According to them one member of the action group pleaded the group's cause while one other member kept silent and took notes during the meeting.

The representative of the logging company explains how he experienced the situation:

***And...they had a bit of a nasty...attitude, because one of them...she was the one who was talking...and then there was one who just wrote it down, everything what we said. Yes because it was just like...everything we say can be used***



***against us sort of...if we say...happen to say the wrong thing.***

The quotation is an example on how the system's colonization may have effects in face-to-face interaction. A silent person who writes "everything" down can be perceived as threatening and make other people cautious of what they can and should say. The man from the logging company explained that he didn't want to say things that were wrong for the situation. The behaviour of the members of the action group seems to have limited his participation and may have hindered a supposedly constructive dialogue. If the goal of the action group was to decrease the other participants' influence over the situation it may be said they succeeded. This can be interpreted as an example of strategic communication which aims at influencing the action space of the other participants. At this point, where the aim was to have a participative meeting, a possible space for communicative action was created. However the way communication has been framed in this case makes the strategic communication of the system the language of the meeting.

#### Communal bonds in the village after the clear-cutting

Through the communicative action that is the basis of the lifeworld the individuals construct collective identities and form communal bonds. When the communicative forms of action are colonized by systemic forms of action the communal bonds break down (Miller 1992). In the village described the forest is eventually cut down. The land-owner describes the relationships in the village one year after the cutting. The forest-owner said he had no contact with the members of the action group:

***No. Not much. No. They stay away. I don't know...I rarely see them. I guess I nod but I mean...If I see someone and they greet me I will greet back, but else...I have nothing to say.***

A member of the action group reflected over the price of the struggle:

***So now we are...we really messed things up, there are a lot of people that you meet in the forest that used to say hello and be nice, they take big detours when they see me, like that.***

From the quote we can see that the member of the action group who avoided talking directly to the forest-owner is now experiencing being ignored by others while walking through the forest. It is not difficult to imagine that the current occupation with deciding who to greet is affecting the relations in the village relations they have will affect any future decision making in the village.

The land-owner and the to-be activists in the village of "Spruceville" knew each other; they were greeting or chatting when they met in the forest, walking their dogs. This is an example of the lifeworld reality where relations are reproduced against a common goal of *Verständigung*. As soon as the activists started their investigations on how to have an influence over the planned tree-felling the communication paths changed. Letters and e-mails were sent to different authorities from both the land-owners and the activists' side. Local media got involved. The activists/neighbours put out petitions "Save our forest!" in the local store for the villagers to sign. All of a sudden the face-to-face meetings between co-villagers had been replaced by formal ways of communication, which is the system's rationalized way of communicating. That this way of communicating can be seen as a threat to the lifeworld of the villagers' is clear when looking at the current relationships in the village. The land-owner is very hurt by the way the neighbours/activists have acted. They have avoided discussing directly with him, instead using letters and media as means of communication. He in his turn has responded strategically by not explaining his feelings to the neighbours face-to-face but instead using letters to the authorities as his

way of making himself heard. One year after the clear-cutting the relationships in the village are still tense. The activists and the land-owner are not on greeting-terms, relatives of the land-owner feel mentally very bad. The activists feel that it may not have been worth the struggle since many people in the village now look down on them.

The instrumental rationality of the system has altered the relations in the village, but it is important to stress that the relations, identities and actions are constantly renegotiated and changing. To move on to using communicative rationality is of course not impossible but has been made more difficult in a village infested with distrust. We are concerned with the fact that using a participatory, involving approach is supposed to let more stakeholders be heard. There were opportunities in these cases where mutual understanding could have been reached, or aimed for, but the participants were too occupied with strategic interaction.

### **The case of Birchwood Estate, implementation of nature reserves**

The Swedish state has the right to implement nature reserves on private land. The process usually starts with the state, through the County Administrative Board (CAB), doing inventories/censuses mapping land areas rich in biodiversity. The areas that have highest ecological values can then be subject to a process of nature reserve implementation. If this land is privately owned the representatives of the state (civil servants working at the CAB) inform the landowners that the state wants to conserve the biodiversity of their land by declaring it a nature reserve, which will bring further regulations of the land use. The landowner and other stakeholders are then asked to contribute with opinions during a limited set of time about the suggestion of the nature reserve during a public consultation. The landowners are then given two options: They can remain as owners of the land and then they have the right to receive financial

compensation for the financial loss the restrictions of land use the nature reserve regulations will bring, or the landowners can sell the land to the state.

In order to understand the interactions in such a process we have analyzed the written correspondence between the CAB and the landowners in a case of nature reserve implementation and interviewed both civil servants and landowners involved in the particular case.

### The family's attempts to make the authorities understand

In the case of Birchwood Estate the land area that the state wants to implement a nature reserve on is owned jointly by six people: two older siblings, who are retired and the four children of a third sibling. The interaction starts with that the CAB sends out a letter to the landowners where they reveal their plans of implementing a nature reserve on the landowner's land. The letter contains a description of the different ecological values of different parts of the land. There is a map included where the borders of the reserve are drawn. The letter also contains information about which part of the Swedish nature conservation law the statue of nature reserve are built on. There is also information about the possibilities of financial compensation for the restrictions in land use that the nature reserve will bring. The landowners are requested to send in their opinions about the nature reserve.

Letter response on the suggestion from "Carla" one of the landowner daughters.

***With dismay I read your latest writing, about your plans of taking our farm away from us. //..."The Farm is a farm that I love more than anything else. I feel pride and joy that my family has taken care of it for almost 100 years. From having been almost clear cut in the beginning of the 20<sup>th</sup> century when my grandparents bought it, it is now so beautiful. Despite me living in X-ville [some 100 km away]; I come there almost every weekend with my family, because I feel happy in my***

***whole body when I am there. I long there every day”.... //...”Because of that I am saddened to see that the CAB wants to take the most beautiful parts of the farm away from us. Don’t you think we have taken good care of it?***

***...// To camp in a tent on our land like I did a lovely summer’s night with my 5-year old will not be allowed to happen again...//***

The language in the letter is very emotional: “With dismay I read”, “I love”, “I am saddened to see” etc.

By pleading how she is feeling about the land and how much it means to Carla and her family she is claiming things that are valid in her lifeworld. She must reason that: if I can only convey how much this land means to her and her family, the CAB will drop their plans of implementing the nature reserve. She is trying to reach *Verständigung*. The historical ties to the land she presents from grandparents to her son indicates how important the land is for the constructing of the family’s identity. Also she argues the family’s importance to the values of the land, since it is the family’s management that has brought out its beauty and created the values that the CAB now obviously appreciates. Also she seeks confirmation from the CAB that the family has managed the land well. *Don’t you think we have taken good care of it?* Can they not at least agree on that validity claim? In the letter Carla also expresses worries about what kind of landscape the new management regime of the CAB will produce.

#### Response to Carla from CAB

The civil servant write that the CAB’s most important task is to see to that the decisions made by the government and parliament are implemented. One of these tasks is to protect especially valuable nature areas with nature reserves and that the CAB in this work balances the public and the specific interest.

***The emotional bonds You have to the land can unfortunately not be measured or valued, but a nature reserve does not mean that the land disappears or that You are forced to sell the land.***

***Because nature is not static it is necessary to evaluate the effect of the management plan. If changes are made [in the management plan] the reason the reserve should always be considered and when bigger changes are made the plan is usually referred. Any changes of the regulations [of the reserve] is taken by decision by the CAB that is being referred and can also be appealed.***

The CAB’s wishes to make this an issue were you communicate about and with laws, regulations and financial bidding (steering media) is evidence of colonization of the lifeworld of the landowners. When they try to use arguments shaping a rationality that is legitimate within the lifeworld they are told that there is no place for such arguments in a process like this.

The validity claims (“emotional bonds”) Carla makes towards the land are dismissed on the grounds that they can not be “measured or valued”. The civil servant of the CAB clearly states that the instrumental rationality of the system has no way of valuing the rationalities of Carla’s lifeworld. Also the worries Carla have about the land use change, which clearly is something of importance in the lifeworld of Carla, the civil servant tries to calm by ensuring her that whatever decision is made it will be made according to the systems rules, and thus by using instrumental rationality. The same instrumental rationality that created this situation that intruded the lifeworld of the family and that they do not understand the validity claims of.

#### Carla learns about legitimate argumentation

In Carla’s next letter to the CAB the emotional language of the lifeworld is almost absent or at least very much toned

down. She says that there has been talk about a nature reserve on parts of their land for a long time, but that there is no “real motivation” for the expansion of the reserve that she thinks the new proposal would bring. Thus questioning the scientific (instrumental) grounds on how the delimitation of the reserve is made. How can areas not be deemed valuable enough for inclusion in a nature reserve five years earlier, but be valuable enough now. What is the rational behind that sort of decision making? She does not think there is any reason to create new areas for grazing, since they hardly can keep the existing ones grazed with the current livestock. She tries to convey the non-monetary value the land has to the family in a more instrumental way.

***A nature reserve on the most beautiful part of the farm, right next to the buildings, is a very large interference on the farm. It decreases the value of the farm drastically: not only through the value of the forest exempt from production, but also (and probably much more) with values that come out of the comfort value, and the value of being able to live in such unique surroundings.***

Response to Carla's second letter from the CAB:

***There is no evidence according to the CAB's knowledge, that a property's value as a whole decreases as a consequence of a nature reserve on parts of the property***

The letter answers a claim that Carla has not even made. Even though Carla tries to make validity claims of emotional values of the family's personal ties to and feelings for the land into the instrumental rationality of the system, by using the steering media of money, she clearly fails, since the CAB's response is not really responsive to the validity claims Carla makes. The landowners and the CAB are not talking about the same values and they do not value the same things.

Carla's need for personal feedback and ordinary manners

Carla describes the communication with the CAB:

***It was a little bit like talking to a wall. We were [sort of] not given any answers and you felt that you put your heart in writing how you felt and what you thought. And then there were no answers at all. And then eventually, after eons of time, there would be a new revised proposal, where they had... They did not state it clearly, but you could see by scrutinising it, you could notice that they had taken some of our opinions into consideration. Many they had not considered. But there were sort of no one calling saying: - Yes, but of course we are going to change that! There was sort of no one doing that. Instead you got to read it in the next stack of papers after many months had passed. (From Interview with Carla)***

Carla does not feel that *Verständigung* is met. In those cases it had been met, she and the other landowners were unaware of it for a long time, due to the long time before they got feedback for their opinions from the CAB. Also it seems they had expected another type of response, so the one they got was difficult to understand what it meant.

There are examples in the correspondence that the general open ended language used by the CAB, thereby not reaching *Verständigung*, creates a great deal of frustration among the landowners. So much that the landowners try to delimit the answers of the CAB, by telling them how not to respond.

Carla also wishes for a specification on that the availability only should be improved on certain parts of the area. She wonders which parts specifically and how specifically. She adds:

***And preferably do not answer 'according to the judgement of the authorities'. It does not tell me anything else than we***

***landowners should be kept on a short leash. So far I have not noticed any ambitions from the side of the authorities to collaborate with us landowners. Not on any issue has the authorities adapted themselves to our viewpoints. (From one of Carla's letters to the CAB)***

The importance of the landowners' relationship to their land in their lifeworld

***Things like cutting down spruce for example. That we used to do ourselves before or to every year walk by the shoreline and clean garbage that drifts ashore. We used to do that. But now it becomes an emotional thing as well, that it is not ours any more in the same sense. Having it taken away from us and then it feels a little bit like than they [the CAB] can manage it [the land] too. Because you lose your motivation pretty much. They sort of take away this pride from us, that it is ours. (From interview with Carla)***

Managing the land is very much part of the lifeworld of the landowners. It is something they do together as a family. They used to need to communicate with each other on how to manage the land and why they would manage the land in a certain way. The communication about the land and the action resulting from that communication did not only have a practical instrumental function, but also a social function of keeping the family together and the family close to the land. They needed to negotiate what tasks needed to be performed on their land and in that negotiation they also negotiated their roles in the family.

The system's "intrusion" of the lifeworld has affected the relationships in the landowner's family. Possibly their ways of communicating with each other has changed.

***"Before it has lead to quite a bit of distrust and disharmony, but I still think***

***we have been able to collaborate reasonably well the last few years. But before it lead to a lot of distrust and that... absolutely. It has been tough emotionally. It has lead to quite a bit of disruption in the family." (From interview with Carla)***

If the CAB manages the nature reserves the place cannot have the same meaning to the inhabitants anymore because they have not collectively negotiated the management actions of the land. The result can then be that the solidarities of members of the lifeworld can be threatened by alienation and the unsettling of collective identity (Habermas 1987b, Miller 1992). The lifeworld is constituted through communicative action and is of course always changing, but what we see here is the system's way of sneaking into the lifeworld.

## **Discussion**

### **Comparing the two cases**

One noticeable difference between the cases is how the participation of the stakeholders is organised. In the case of the nature reserve in Birchwood it is legally defined process when and about what the landowners can have a say. There is also a *delinguistified* media, the compensational money, which can be used to coordinate actions and that is a recognition of the land's economical value. In the case of the clear-cutting in Spruceville the law is on the side of the land-owner who can, granted some constraints, decide by himself over his forest. There is no existing process to take in local views on the clear-cutting. Nevertheless, in process regarding public planning consultations the public should always be included and in the case of Spruceville the municipality seem to have adapted that approach here as well

It is however interesting to see how these very differently organised processes seem to generate the same result. The involved actors adapt to the language of the system and learn how to distance themselves from

the communicative rationality of the lifeworld.

### **The Participatory paradigm and the colonisation of the lifeworld**

The participatory paradigm has developed as a response to a crisis when traditional top-down NRM was not working satisfactorily. Participation is now widely recognised as a way of dealing with the dynamics of environmental management.

In our data we have seen that the major underlying concerns of the lifeworlds of landowners and stakeholders participating in consultation processes are not considered legitimate. The citizens are thus forced to use the discourse and rationality of the system to be recognized when trying to influence the outcome of the consultation/participatory processes. The system's rationality cannot incorporate arguments negotiated in the lifeworld thus the citizens have to adapt to the system. The participation has been limited by the system's affinity for colonizing the lifeworlds of the participants.

In the cases we have studied participation is not radically different from a traditional instrumental decision making process. The participants have a voice, but this voice can be used only to reproduce the system. This is a great failure since the development of the participatory paradigm emerged as a response to the failed success of traditional decision-making.

Public participation procedures have become increasingly bureaucratised during the last decades (Finger-Stich & Finger 2003) and scholars have criticised the lack of deliberative democracy theory in natural resource literature (Parkins & Mitchell 2005). In our material we can see a great divide between the deliberative ideal of seeing participation as an opportunity for public debate and personal reflection and the real-life situation where participation can only work within very instrumental frames. In the deliberative democracy the lifeworld

is seen as the potential for a democratic development of the modern society. The way to counteract the colonization is to let the communication of the lifeworld be developed and institutionalised (Månsson 2003). We could ask ourselves: What would happen if concerns and issues from the lifeworld would be considered legitimate in the process of consulting the stakeholders? According to our mode of analysis it would be difficult because the rationality of the system would then be delegitimized and thereby the system would be delegitimized too. That is probably why bureaucratised participation rarely has true deliberative qualities.

### **Conclusion**

By looking at the cases of Birchwood Estate and Spruceville village from the theoretical perspective of the lifeworld/system we could explain the actions of the participants. We could see that the way they changed their argumentation was logical when understanding it as an adaption to the system's way of communicating.

The attempt to stay close to the empirical material while using concepts from critical theory during the analysis proved fruitful because by this we could show where and how negotiation and changes of arguments take place. By this we could maintain a focus on the process of participation rather than on outcome which is common in NRM literature.

We also made an attempt at moving the analysis from the empirical level to a meta-level by using critical theory which demands relating the action level to a broader context. We achieved this by putting our empirical reading in connection to the ideal of public participation thus making it possible to criticise a paradigm with the starting point in our empirical material. Participation could be seen as a way of including the arguments of the lifeworld into the decision making processes of the system, but if the rationalities of the lifeworlds are neglected and actors are

forced into arguments of instrumental and strategic rationality, then the participatory processes are just another way of the system colonizing the lifeworld.

In this paper we show that participation in the cases studied is not radically different from the way traditional top-down decision making in NRM works, the inputs of participants merely act to reproduce the system. The conclusion is thus that there is a great divide between the ideal of a deliberative democracy and the way participation is being enacted.

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## **Localising the Methodology of Dialogical Boundary Critique for the Facilitation of Conservation Planning in Philippine Integrated Coastal Management**

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### **Abstract**

*Werner Ulrich's method of dialogical boundary critique has been proposed as an avenue for enabling citizen participation in decision making structures in modern democracies. The notion of boundary judgements represents a constructivist view of knowing as the bounding components of reality into knowable objects. Cognitive boundary judgements determine observations (facts) and evaluations (values) which knowers appreciate and act in relation to. Ulrich's framework of Critical Systems Heuristics (CSHs) is intended to provide citizens and employees with tools for negotiating the acknowledgement of legitimate competencies in public or corporate dialogues. This paper investigates the application of this methodology in the Philippines coastal resource management. The conclusions are based on a stakeholder dialogue carried out between November 2007 and May 2008 in the Babuyan group of islands, bounded by the Balintang and Babuyan Channels. We found that dialogical boundary critique require significant adaptation if it is to provide a liberating language for participants in resource management dilemmas with multiple and conflicting knowledge claims under conditions of controversy.*

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### **I Critical Systems Thinking and Dialogical Boundary Critique**

Critical system thinking (CST) offers a 'third wave' of systems thinking which attempts to redress the failure of traditional systems approaches to address dimensions of power (Midgley, 2000). In the pragmatist tradition of CST, the facilitation of dialogical boundary critique is proposed as an avenue for enabling citizen participation in decision making structures of modern democracies. Whilst boundary critique is originally anchored in a Kantian philosophy of reason (Ulrich, 2000) it yet seeks to provide guidance on how to appreciate the situated character of knowledge through exploring situation-transcendent validity of stakeholder claims. Arguably, this places dialogical boundary critique in an intermediate position in the debate between theories of communicative rationality and localised ideation of social constructivism and post-structuralism. This is particularly evident in its combination of a Habermasian acceptance of universal communicative competencies with the genealogical deconstruction of the given order through critical questioning (Hoy and McCarthy,

1994). Dialogical boundary critique offers a methodology for integrating these perspectives to reframe stakeholder processes.

To transform this 'critical kernel' of systems thinking into practice, Werner Ulrich has proposed the methodology of dialogical boundary critique to enable collective reflection on how 'the meaning of a proposition depends on how we bound the relevant reference system, that is, the context that matters when it comes to assessing the merits and defects of the proposition' (Ulrich, 2000, p. 5; 2005). The notion of boundary judgements represents a constructivist view on knowing as the act of bounding of components of reality into knowable objects (Berger and Luckman, 1966). The relationship between knowing and learning is contested through a variety of theoretical traditions, some of which are categorised as cognitive learning theories (Blackmore, 2007). The cognitive dimension of learning takes a central role also in individualist behavioural and pedagogical learning models (e.g. Kolb et al., 2000; Bawden et al., 2007). However, whilst

Ulrich's Critical Systems Heuristics (CSHs) approach relies on the cognitive dimension as its primary arena of operation, it does not neglect other aspects of the learning environment and learners. As such, cognitive boundary judgements are proposed to determine which observations (facts) and evaluations (values) we appreciate and act in relation to (Midgley, 2000; Ulrich, 2000). Ulrich's (2005, 1998) framework of CSHs is intended to provide citizens and employees with tools for negotiating the acknowledgement of legitimate competencies in public or corporate dialogues. It represents an attempt to pragmatize the communicative situation through critical systemic questioning of assumptions and boundary judgements (Midgley, 2000). In the CSHs framework 12 boundary problems, or categories, connected to one of four boundary issues are explored by means of a boundary question into each particular boundary problem (Fig. 1).

Fig 1: Critical Systems Heuristics, from Ulrich (2000).

|                                                                                                                                                                                                              |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>SOURCES OF MOTIVATION</b>                                                                                                                                                                                 |
| (1) Who is (ought to be) the <b>client</b> ? That is, whose interests are (should be) served?                                                                                                                |
| (2) What is (ought to be) the <b>purpose</b> ? That is, what are (should be) the consequences?                                                                                                               |
| (3) What is (ought to be) the <b>measure of improvement</b> ? That is, how can (should) we determine that the consequences, taken together, constitute an improvement?                                       |
| <b>SOURCES OF POWER</b>                                                                                                                                                                                      |
| (4) Who is (ought to be) the <b>decision-maker</b> ? That is, who is (should be) in a position to change the measure of improvement?                                                                         |
| (5) What <b>resources</b> are (ought to be) controlled by the decision-maker? That is, what conditions of success can (should) those involved control?                                                       |
| (6) What conditions are (ought to be) part of the <b>decision environment</b> ? That is, what conditions can (should) the decision-maker <i>not</i> control (e.g. from the viewpoint of those not involved)? |
| <b>SOURCES OF KNOWLEDGE</b>                                                                                                                                                                                  |
| (7) Who is (ought to be) considered a <b>professional</b> ? That is, who is (should be) involved as an expert, e.g. as a researcher, planner or consultant?                                                  |
| (8) What <b>expertise</b> is (ought to be) consulted? That is, what counts (should count) as relevant knowledge?                                                                                             |
| (9) What or who is (ought to be) assumed to be the <b>guarantor of success</b> ? That is, where do (should) those involved seek some guarantee that improvement will be achieved?                            |
| <b>SOURCES OF LEGITIMATION</b>                                                                                                                                                                               |
| (10) Who is (ought to be) <b>witness</b> to the interests of those affected but not involved? That is, who is (should                                                                                        |

|                                                                                                                                                                                          |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| be) treated as a legitimate stakeholder, and who argues (should argue) the case of those stakeholders who cannot speak for themselves, including future generations and nonhuman nature? |
| (11) What secures (ought to secure) the <b>emancipation</b> of those affected from the premises and promises of those involved? That is, where does (should) legitimacy lie?             |
| (12) What <b>worldview</b> is (ought to be) determining? That is, what different visions of "improvement" are (should be) considered, and how are they (should they be) reconciled?      |

Also Soft Systems Methodology (SSM), initially proposed by Checkland and Scholes (e.g. Checkland, 1999) to manage transformations in corporate organizations, draws on a form of boundary critique through a set of 'a priori' categories (Clients, Actors, Transformation, Worldview, Owners, Environment – hence the acronym CATWOE) to model, compare and reflect on conceptual systems and implement human activity systems for systemic transformations. This methodology is used to guide participatory stakeholder analyses and learning based approaches in natural resource management (e.g. Osbeck and Powell, 2008).

Boundary critique is intended to provide a 'liberating language' for citizens in the negotiation of what comprises a legitimate competency (Midgley, 2000, p. 149). The challenge of providing a liberating language for citizen participants is more difficult when they are invited into the negotiation of resource management dilemmas where they have to make sense of multiple and conflicting knowledge claims under conditions of controversy (Funtowicz and Ravetz, 2007; Ison et al., 2007). Midgley (2000) proposes that the facilitator is responsible for localising the methodology of the boundary critique to the conditions of the intervention. Arguably, the translocation of the methodology of boundary critique from a corporate or Western societal setting to diverse situational conditions of natural resource management in the majority of the world must involve ensuring an organic dialectic between the content and the form of the communicative process (Hallgren, 2003). This challenges the basic

assumptions of the approach regarding, for instance, the fusion of a commitment to simultaneously universal and situated conceptions of knowing, and how the cognitive domain is linked with other situated aspects of local context.

This paper investigates the application of this methodology in Philippines coastal resource management. The conclusions are based on a stakeholder dialogue carried out between November 2007 and May 2008 in the Babuyan group of islands, bounded by the Balintang and Babuyan Channels in the northern Philippines. The approach to the stakeholder dialogue as a process of social learning for stakeholder self-organization is presented. Midgley's model for marginalisation of issues is introduced as analytical device to grounding the boundary critique. The analysis highlights the ritual expressions of contestation over illegal resource exploitation, the boundary conflicts associated with the clash of 'alliances', and the boundary issue of a 'void of illegitimacy'. The paper concludes with a discussion of the experiences that whilst the CSHs may at the meta-theoretical level target the right boundary issues, the context of application (the rituals and the boundary conflict) poses a set of very significant needs for adaptation and localisation.

#### **Case: Philippine coastal resource management**

Coastal resource management in the Philippines is being institutionalised in an Integrated Coastal Management (ICM) policy paradigm (Cruz-Trinidad, 2003; White et al., 2005). Following the trend in the South East Asian region, the ICM regime espouses a shift towards increased stakeholder participation and balanced employment of coercive and non-coercive policy instruments (SEAFDEC, 2007; Milne and Christie, 2005; Alcalá, 1998). This represents a reaction to former command-and-control management, bearing on the colonial imprint on Philippine natural resource management. Under Spanish rulers and American administrations, state-

led centralized schemes, as elsewhere in the region, led to dissolution of common property regimes in the provinces and *de facto* open access to natural resources in many localities (Abinales and Amoroso, 2005; Dressler, 2006; Barut et al., 2003). Problems stemming from open access led to new approaches to conservation. The Philippines is today heralded for pioneering efforts in community-based coastal resource management converting open access into co-management regimes (White et al. 2005; Lowry et al., 2005). Balgos (2005) lists 10 major internal donor assisted and government funded projects and Pollnac and Pomeroy (2005) describe more than 100 community based projects carried out since 1980.

Despite the current ICM regime, severe over fishing and resource degradation has continued in many areas and the fisheries sector is rapidly declining in its contribution to GDP (WB, 2005; White and Cruz-Trinidad, 1998; Barut et al., 2003; Cruz-Trinidad, 2003). This has led to increased questioning of the value of non-coercive policy instruments and their role in creating the ICM regime. Concerns are surfacing regarding the perpetuation of hidden agendas through the implementation of ICM, including investment penetration by state and international capital and the influence of development banks and foreign aid agencies in shaping development from neo-liberal premises (Nicholls, 1999; Grainger and Malayang, 2006). Stakeholder participation in programmes is low and formal recognition of community organizations problematic (Silvestre et al., 2003; Barut et al., 2003). Studies of major foreign funded CRM programs in the country conclude that the notion of participation is contested and mirrors experiences elsewhere in hiding persistent 'fence-and-fines' management strategies behind a popular narrative of 'partnership' (Eden, 2005; Adams and Hulme, 2001). These problems of instrumenting non-coercive policy measures are key driving

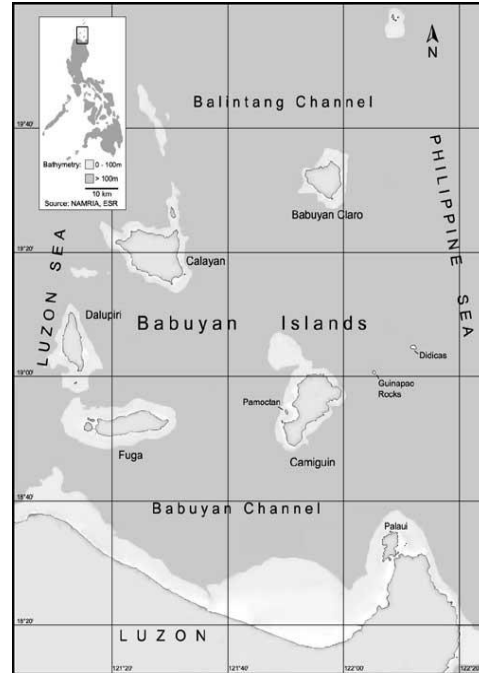
forces behind efforts to improve the existing ICM policy paradigm (Balgos, 2005).

### **Sources of evidence: Conservation planning in Babuyan Islands**

The evidence in this paper derives from a stakeholder dialogue carried out from November 2007 through May 2008 in the Babuyan group of islands, located at 121° 36' E and 19° 18' N, bounded by the Balintang and Babuyan Channels in the northern Philippines (Fig. 2). The waters around the Babuyan Islands are the only known breeding ground for humpback whales in the Philippines (Acebes et al. 2007). In 2000, Kabang Kalikasan ng Pilipinas (KKP) (WWF-Philippines) initiated the Humpback Whale Research and Conservation Project (HWRCP) in the Babuyan Islands. KKP facilitated a conservation planning process, which in October 2001 led to the formulation of an action plan. In 2003, motivated by this research, Provincial Ordinance 09-2003 was passed declaring the humpbacks a protected species within the jurisdiction of the province of Cagayan (PGC, 2003). After KKP pulled out, the only conservation NGO present in Calayan Municipality is ISLA Conservation Foundation Inc. who from 2006 has taken the leadership in establishing an island wide multistakeholder body; the Calayan Environment Council (CEC) (Broad and Oliveros, 2004). However, the CEC is undergoing a number of birth pains and the humpback whale conservation action plan has not been implemented. Camiguin residents have increased their use of dynamite to collect scrap metal from ship wrecks, coinciding with an increase in the practice of dynamite and cyanide fishing around the islands. Motivated initially by these experiences, the aim of the planning process was to develop an adaptive conservation action plan for the Babuyan Islands, focusing on Camiguin.

**Fig. 2:** Geographical location of Babuyan Islands in the northern Philippines (Courtesy of Leonard Soriano). The Babuyan Islands consists of the five main islands of Calayan, Camiguin, Dalupiri, Fuga and Babuyan Claro. Calayan Municipality, with the jurisdiction over four of the

islands, is located in Cagayan Province of Region II of the Philippines.



### **Operationalisation of boundary critique for the facilitation of social learning**

Positioning the planning process within the non-coercive shift in the ICM paradigm, it was decided to facilitate the stakeholder dialogue as a process of social learning. Social learning is an alternative policy instrument to environmental problems which views policy itself as a form of praxis, in that it does not exist in isolation from its implementation (Ison and Watson, 2007). Environmental problems are approached as resource dilemmas, characterised by the existence of multiple legitimate perspectives on what constitutes the actual problem and its solutions (Steyart and Jiggins, 2007).

Recent critiques of stakeholder processes and demands for concrete learning goals and expectations have led to concerns with traditional learning based approaches (Bouwen and Taillieu, 2004; Lightfoot et al., 2003; Armitage et al, 2008). We used the notion of stakeholder self-organization to operationalise a clear learning goal for the planning process, departing from experiences that the dialogical process in

social learning can aim to create a common context of meaning that can potentially lead 'to the emergence of self-organised concerted action amongst stakeholders' (Gibbon et al., 2004, p. 5). The notion of self-organization has recently gained prominence in social theory as well as resource management, often rooted in realist complex systems theory (Pahl-Wostl et al., 2007; Waldrop, 1992). Commonly, self-organization is expressed as 'the spontaneous emergence of new structures and new forms of behaviour in open systems far from equilibrium characterised by internal feedback loops' (Capra, 1996, p. 85). In constructivist epistemology emphasis is more frequently placed on the manifestation of self-organization through the creation and shifting of 'boundaries' between 'self' and 'non-self'. Notably, in the theory of autopoiesis by Maturana and Varela (1987) these boundary judgements establish a structural coupling between self and non-self (or the stakeholder and her/his environment). The mutually formative relationship depends on a process of 'closure', i.e. the functional containment of the self in viable relationship with its environment (Fell and Russell, 1994; Fuchs and Hofkirchner, 2004). Ulrich's methodology of dialogical boundary critique was chosen to enable the reconstruction of such cognitive boundaries.

The CSHs approach was integrated into a participatory stakeholder planning process guided by Soft Systems Methodology (Checkland, 1999) to stimulate creative thinking about how current stakes are constructed, potential conflicts of interests, scenarios for change, and collective action (SLIM PB2, 2004). The CSHs were conceptually translated to Tagalog/Filipino and were, following a methodological pluralism (Cordoba, 2008; Billaud et al., 2004), used in conjunction with a number of communicative tools (e.g. Venn diagram, mind mapping, brainstorming, force field analysis etc.) in different facilitated forms of interaction (workshops, working groups,

open space, focus groups, semi-structured interviews, informal conversations).

The back bone of the planning process was a series of planning workshops in Camiguin and Calayan Islands, and in Tuguegarao City, the capitol of Cagayan Province. In addition, individual consultations with key informants were exploring questions which emerged from the workshops. Close to 100 people participated in these workshops. In addition, interviews were conducted with 11 people from the three Camiguin villages (barangays) (Councilors (Kagawads), farmers, fisherfolk, parish ministers); 4 people from the Local (Municipal) Government Unit (LGU) (Legislative Council (Sangguniang Bayan)); 6 senior officials from the Provincial Government Unit (PGU) (from offices of environment, agriculture and tourism); 9 officials from the line agencies Department of Environment and Natural Resources (DENR) and Bureau of Fisheries and Aquatic Resources (BFAR) (directors, programme leaders and field staff); and 4 NGO staff (local and national).

#### **Discussion: Localising the boundary critique for Camiguin Island Emergence of a stakeholder platform**

Participants were generally eager to engage in boundary critique but a commonly accepted standard for such critique was absent. While it was possible to suggest ground rules and guidelines, it was not possible to introduce a form for this critique and it had to emerge in each dialogical situation through negotiation between the participants. Further, outside interventions were met with a general apprehension from the municipal elite, exacerbated by a sense of tension between conservation and development on the question of coastal planning. Previous conservation efforts in the islands had produced a contentious relationship and decreasing trust between the elite and 'outsiders'. Disputes regarding responsibilities for combating illegal resource use such as dynamite fishing, metal salvaging and its impact on whale and fish stocks had shifted from an inter-

personal level to national media connected to inflictions of embarrassment and hurt (Rivera, 2006; Arquisa, 2008). This was received as a challenge of LGU autonomy under the Local Government Code (LGC). Senior BFAR officials and heads of provincial government offices recounted how information extraction by outsiders leads to disappointment and anger amongst barangay citizens. For instance, the 'normal' research tradition followed by researchers, where data are published before shared with local partners, was experienced as competitive and exclusionary. The creation of an enabling learning environment ('platform') for the stakeholder interactions was as such a chief task for the facilitators. The stakeholder platform both delineated the prospects for boundary critique, and was created by the learning preferences of stakeholders involved, reflecting a structural coupling between learning environment and learner (Gibbon et al., 2004; Poerksen, 2004).

Contrary to assumptions in the literature on group facilitation (Schuman, 2005; Hunter et al., 1995), the process of emergence meant that from the outset the dialogue was characterised by an absence of shared 'group purpose'. The sense of what the planning process was about was continuously negotiated throughout in response to the unfolding of controversies and appreciation of interdependency of perspectives. One particular reflection of this emerging convergence was the redefinition of the problem statement from conservation to eco-tourism and sustainable development. During initial negotiations it was expressed by the municipal elite as well as island residents that there was no interest in humpback whale issues. The elite would only engage in the dialogue if it focused on tourism development, preferably with tangible benefits in the form of financial resources and visiting tourists. Island residents raised their concerns over legal and fiscal mismanagement and their dependency on middlemen. This reflected the fact that the critical 'pre-implementation'

phase of the planning process was conceptualised prior to involving a range of stakeholders and the entry into the project with a predetermined problem definition based on a quite strong conservationist perspective and narrating of the land/seascape (Leach and Fairhead, 2000). This was due to the project history and its anchoring in previous conservation efforts. As experienced in other applications of CST, a continuous reconstruction of the process and its assumptions was necessary (Cordoba, 2008).

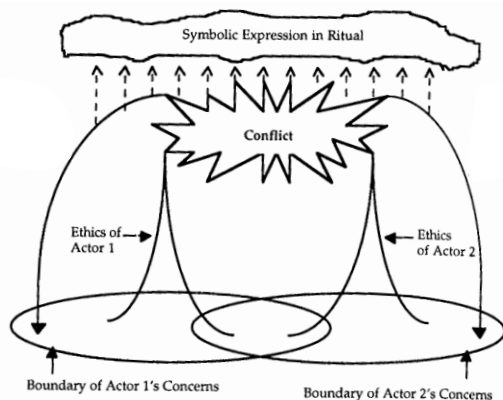
### **Localising the boundary critique**

In the initial workshops, CSHs were used directly in exploratory enquiry with the participants in each planning event. The approach was however problematic as it imposed a cognitive framework based on assumptions of what were the main 'boundary issues' for the participants. Participants commented about rigidity and felt constrained by this structure. After these experiences, the CSHs were used simply as mental devices for the facilitator in seeking to guide the dialogue. For instance, questions regarding 'reference systems' could be explored in a conversation on the interest in an ice plant for the island's fisherfolk or concerns regarding the prohibition of compressor diving, with the translation of the boundary questions into meaningful propositions or questions in the particular conversation. The boundary questions were also used as underlying questions to guide specific processes in workshops.

Whilst valuable devices for process design the CSHs were therefore not directly applicable for a dialogical boundary critique by the participants. The facilitation interventions had to incorporate an organic dialectic between initial boundary heuristics and more grounded categories which were not prior to the context. This resonates with the tenets of grounded theory (Charmaz, 2006). Whilst Ulrich (2000) emphasises the determination of the evaluative (values) and observational (facts) from a cognitive

dimension, these experiences highlight the need to depart more explicitly from the mutually formative relationship between the cognitive, normative and observational. To unveil these relationships as a basis for identifying more grounded boundary questions, Midgley's model for marginalisation of issues was used as analytical device (Fig. 3) (Midgley, 2000). This model explains ritualised and habituated forms of stakeholder behaviours from a divergence in normative foundations, or ethics, for the stakeholders involved. This normative divergence is in turn rooted in the boundary issue(s), which can be addressed by means of the dialogical boundary critique.

**Fig. 3:** Model of overlapping stakeholder concerns and marginalisation of issues, reproduced from Midgley, 2000, p. 154. Shows the three layers of ritual expression, boundary conflict, and boundary issue arising from the encounter between actors with diverging fields of concern.



The analysis below thus proceeds from an outline of the ritual expressions of behaviours through the central boundary conflict to a proposition for the most urgent boundary issue in Camiguin CRM. In so doing, the synthesis builds a rich picture of the management without delving into in-depth analysis of specific points regarding the challenges of stakeholder participation or the management as such.

### **Ritual expressions: Contestation over illegal resource exploitation**

The ritualised expression of behaviours in Camiguin's coastal resource management

is manifest in the perceived conduct and contestation of 'illegal resource exploitation', localised as well as induced by outsiders. Taiwanese fishing vessels intrude on the fishing grounds in the search for the highly priced yellow fin tuna. More localised offences are equally abundant, including encroaching on prohibited fishing grounds, use of illegal equipment such as compressor diving, cyanide and dynamite, pebble and shell collection, and illegal logging (*kaingin*). Metal salvaging from ship wrecks started initially with walls and sidings but has now moved to main frames, which requires larger amounts of explosives.

The definition of a problem of 'illegal activities' is instead logically extended to policy prescriptive reliance on legal coercion and awareness raising of ordinances as mainstream policy instruments. The Taiwanese vessels are often sized 30-50 meters with modern equipment and the smaller and worse equipped Filipino control boats rarely stand a chance to apprehend the violators. There is no PMP representation in Camiguin and the Coast Guard delegation is without basic equipment such as patrol boat, radio equipment or binoculars. Legal violators and poachers are most often associated with powerful networks, and barangay citizens fear punishments if disclosing information to higher levels of government. Local enforcement staff are anxious for retaliation from elite citizens in barangay and municipality in return for their partaking in official duties such as collecting dynamited fish specimen or reporting of legal offences (see also Acebes et al., 2008).

The engagement in illegal exploitation reflects a deepening vulnerability of the residents in Camiguin. Whilst most mainland fishing communities can complement income from fisheries with other commercial activities to make ends meet, Camiguin residents predominantly depend on a composite livelihood from forest products, back-yard farming and coastal resources and lack other income



sources outside fishing and farming seasons (KKP, 2001). Barangay residents complain over malfunctions in the legal systems which undermine household economy, for instance, the confiscation of catches by the Philippine Maritime Police (PMP) without legal trials to defend their stakes. Despite the decline in fish stocks fish prices have remained unchanged whilst fuel prices have been surging. Middle men operate a credit system where rice farmers are effectively mortgaged through an advance payment credit system in order to procure farming equipment and fertilisers. There is lacking economic cohesion in the barangays and the barangays are entirely dependent on the internal revenue allotment (IRA) from the national government.

**Boundary conflict: The clash of 'alliances'**

Contrary to experience elsewhere in Philippine resource management (e.g. Dressler et al., 2006) the CRM in Camiguin is not predominantly shaped by power struggles between different levels of government. Rather, the main defining feature is the existence of an intricate web of coalitions and alliances, which cross-cut administrative levels or formal stakeholder categories. These alliances come into being from the creative mergence of both formal and informal norms and behaviours through connections between different levels of government, political parties, clans, and companies. The core source of the ritualisation of illegal activities as conduct and discourse is thus the normative divergence manifest in a complex web of alliances who operate without collectively and publicly accepted (formal) rules.

The formation of different stakeholder alliances enhances the participants' access to and control over natural capital which, in the absence of an effective management regime, can be converted into financial assets, opportunity and influence. Tuna fishing, which originated as a formal fishery in the 1960s, is one of the high income fisheries in Asia (Cruz-Trinidad, 2003), and

national and international investors are important indirect actors as well as beneficiaries. Throughout the country, examples exist where municipal elites open their waters to foreign vessels to benefit from external cash flows. Intruders from other municipalities and international poachers dismantle communities into competing factions which employ tactics such as bribery, intimidation or threat (see also Mungcal, 2007). Similarly, the growing tourism industry is an arena for competition between different alliances enacted through seizing of executive posts in the tourism sector, ownership over accommodation, travel and infrastructure development, and coordination of promotional activities. An absence of guidelines for distinguishing between support to private and public initiatives make the use of financial and technical support from government ambiguous and there is a growing public questioning of the sharing benefits. Other resource exploitation contribute to the financing, including metal salvaging, where many island residents are hired and financed to purchase dynamite by a few individuals.

The patronage of strongmen and their alliances operates at different levels, e.g. within the island or municipality, however, often they are connected to other strongmen nationally and outside national borders. Apprehended Taiwanese fishermen claim protection by officers in the Philippine military. In the barangays, intruding fishermen from other barangays and municipalities use similar types of namedropping to influence the kagawads. In the Philippine forestry sector, Vitug (1993) describes similar experiences of how resource access is a source of political patronage, with army officers exerting significant influence and tenuring large concessions. In this 'clash of alliances' resource management is characterised by a need to continuously bargain over mandates and access rights through an unregulated and intransparent system of checks and balances. As cited widely from

other localities, selective law enforcement is one manifestation of the negotiated use of policy, by means of 'political interference and discretionary prosecution' (Eisma et al., 2005, p. 350). Islands residents have low trust in the law enforcement who is intricately involved in the remittance and receipt of bribes. Whilst the Philippine National Police (PNP) is a national line agency, in isolated localities the national linkage is broken and the PNP staff may be under the authority of the highest bidder.

### **Boundary issue: The 'void of illegitimacy'**

Under these conditions, the significant discrepancy is not between espoused and actual policy agendas of central or local government (Grainger and Malayang, 2006) or between rule of law and corrupt officials (ADB, 2006b; Sarmiento, 2000). The clash of alliances and their operation in a self-maintaining behaviour through an intransparent pattern of bargaining ultimately reflects the outcome of a conflicting set of normative systems. This boundary conflict and its politicising of the coastal resources emerge as a consequence of the absence of a commonly accepted norm of legitimacy, which is the core boundary issue for Camiguin's coastal resource management. The boundary judgements which underlie the clash of the alliances and the resulting contestation regarding illegal activities thus pertain to a basic uncertainty regarding the most fundamental understanding of legitimacy of most actions pertaining to coastal management in a broad sense. In consequence, most practices are potentially criminalised and associated with severe punishing, depending on which alliance's interpretation one happens to be exposed to. In turn, this creates a 'dialogical vacuum' for stakeholders negotiating the actual resource use practices as the boundary judgements are at odds at the very level of determining what can be acceptably discussed in public. In turn, the consequences to one-self and relatives of trespassing any such boundary can be

significant. This carves out a void where marginalised stakeholders are further oppressed as they cannot engage in dialogue from fear of suppression. In this vacuum the actual powers and patronage politics over resource use are regulated by informal negotiations which cannot be formally address.

### **Conclusion**

Critical Systems Thinking seeks to foster the legitimization of citizen competence and Ulrich's (2000) methodology of CSHs does include 'legitimacy' as one of the four core boundary issues. However, the experiences discussed above indicate that whilst the CSHs may at the meta-theoretical level target the right boundary issues, the context of application (the rituals and the boundary conflict) poses a set of very significant needs for adaptation and localisation. The CSHs were not directly applicable and the dialogue on the proposed boundary categories could serve only as guiding devices for the facilitators. This was due to the fact that the design of the stakeholder platform and the form and process of boundary critique had to be grounded in the appreciation of the existing systems of patronage and stakeholder alliances. The 'void of illegitimacy' prevents an explicit dialogue on predefined categories and requires inquiry into tangible boundary problems of the stakeholders involved in a more subtle and strategic manner not addressed in the theory of CST or boundary critique. Given the competition emerging from the clash of alliances, dialogical initiatives are easily compromised as elites can selectively avoid public discussions on contested resource access and repress other groups in order to maintain their status as well as the survival of their alliances.

Within existing approaches to CST there are divergent views regarding the universality of boundary judgements and the relativisation of moral judgments to local conditions. This is, for instance, reflected in the disagreement between Ulrich and Midgley on this topic (Midgley, 2000). Arguably,

theories of Habermas and Kant, which has shaped CST and the CSHs, provide a meta-theoretical perspective on empirical evidence (Hansen, 2008) and the framework of CSHs provides a set of boundary questions which are logically prior to the context of application. Chekland's CATWOE model has been more extensively used in to environmental problems and concerns have here been raised regarding its corporate focus on 'clients' and a lacking appreciation of the complexity of the social dilemmas embedded in conflicts between individual and collective interests (Röling and Wagemaker, 1998). Reflecting the emphasis in the third wave of system thinking, this hinges on concerns of properly appreciating existing structures and power-relations amongst stakeholders which creates risks of further marginalising already disadvantaged groups (e.g. Edmunds and Wollenberg, 2001). Basden and Wood-Harper (2006) supports the claim that CATWOE tends to result in 'conventional' and regulative results rather than opening up for challenging political and economic structures.

However, the experiences in discussed in this paper challenge the claim that CST's critical character can derive from a 'critical' predetermined lens of the facilitator, notwithstanding its nature (e.g. Ulrich, 2000; Midgley, 2000; Basden and Wood-Harper, 2006). Rather, it emphasises the inherently heuristic role of CSHs as vehicles which must be co-constructed with the enquiring stakeholders in recognition of the prevailing structures (or boundary conflicts and rituals). It supports experiences from co-management and organizational change which have shown that the most important contribution of facilitation interventions are to give people tools to analyse their own experiences (Wollenberg et al., 2001) and

to move away from predetermined formats and guidelines (Roberts, 2003).

In this light, Midgley's model for marginalisation of issues may support the localisation of the boundary critique through addressing the mutually formative relationships between normative and observational realities of stakeholders and the cognitive boundary issues. Whilst this does not provide specific guidance on how to carry out the strategic facilitation needed it assists in the first steps of identifying grounded boundary problems with those who participate in the boundary critique and in surfacing the needs for grounding the intervention in situations when questions of legitimacy are highly contested and significant stakes are in play for the stakeholders involved.

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## **The Tao of Food Activism: Institutionalized Discourse, Markets, and Strategic Opportunities**

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### **Abstract**

*In the US battle over genetically modified foods, biotech producers and distributors such as Monsanto and Cargill operate comfortably within a set of well- institutionalized ideologies, discursive structures and practices. US agribusinesses and federal regulators operate according to a long-standing, taken-for-granted worldview which conceptualizes humans as separated from, and intellectually superior to, the rest of life on this planet.*

*This mechanistic, modular worldview is the basis for the FDA's policy for determining the safety of biotech foods. By contrast, most anti-GM activists share a worldview that conceptualizes all of life as an interconnected, interdependent web of species and elements. The activist ideology is an emerging worldview; its discourses and practices do not enjoy the comforts of an institutionalized, taken-for-granted status in the US. (Best and Kellner, 2001). But rather than trying to change the discourses and practices of the industrial-agricultural-regulatory complex, this study proposes a strategy of piggybacking on the social power invested in another institution: the market. By reconceptualizing environmental issues as consumer choice issues, anti-GM activists are able to sidestep the insurmountable task of attempting to change institutionalized discourses and practices.*

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In the decades-old fight to shape regulation of genetically modified seeds in the US, environmental activists have face a non-stop, uphill battle. The US has some of the world's most lax regulation of genetically modified crops in the world (Center for Food Safety, 2009). In 1994, Monsanto won government approval to market the first genetically modified soybean; by 2008 over 75% of US soybean and corn have been planted with crops genetically engineered primarily for herbicide tolerance and insect resistance (United States Department of Agriculture, 2008). Today, recombinant DNA can be found in breakfast cereal, corn and tortilla chips, granola bars, cake and muffin mix, corn meal, diet drinks, dog food, soy burgers, powdered chocolate drink, taco shells, baby foods, and soft drinks containing high fructose syrup. Dairy farmers use genetically engineered hormones to make cows produce more milk, and most of the cotton that makes up our clothing is from genetically engineered

plants (Kleinman and Kinchy, 2003a, 2003b; Lambrecht, 2001).

All these foods can now be altered with DNA that "has never before existed in the supply of human food" (Lambrecht 2001, p. 7). Yet this and other social and environmental issues, such as the potential loss of genetic diversity posed by GM crops and oligopolistic control over the global food seed market, are not addressed by current regulatory policy. One reason for this is because regulation of genetically engineered food crops is governed by the Coordinated Framework for Regulation of Biotechnology Policy, which was signed into law by President Reagan in June 1986, six years before the first GM food went to market. The Coordinated Framework emphasizes "the product and its use, not the fact that biotechnology is the production method" (Monsanto spokesman quoted Lambrecht 2001, p. 50). This focus on product not process obfuscates virtually all of the issues of concern to environmentalists.



This paper argues that activists currently face an impossible task in attempting to change federal policy regarding genetically modified crops, and should move their efforts elsewhere. This impossibility is due, in part, to the cozy relationship between regulators and large agrichemical corporations (Ferrera, 1999). But I would like to argue that activists currently face an impossible challenge due to a much larger issue, one that is founded in the role they play in promoting a deep and powerful cultural shift that has been described as “analogous to the remapping of the world under Copernicus” (Best and Kellner 2001, p. 10).

In this contemporary cultural shift, the human and natural world is being discursively reorganized in terms of ecology and the complexity of relationships between all living things. As we shall see, the challenge activists face, then, stems from the fact that regulatory agencies operate according to the demands of a worldview that is not only ontologically incompatible with that of activists and other environmentalists, but institutionalized within all aspects of society.

### **Theoretical Foundations and Analytic Methods**

This study employs a Foucauldian-inspired genealogical analysis. I focus on discourses which Foucault defined “serious speech acts: what experts say when they are speaking as experts” (Dreyfus and Rabinow, 1983, p. xxiv). According to Foucault, knowledge, especially scientific knowledge, exerts power through its ability to impose order on an otherwise disorderly world: “The sciences always carry with them the project, however remote it may be, of an exhaustive ordering of the world . . . and at their center they form a table on which knowledge is displayed in a system” (Foucault 1970, pp. 74-75).

Foucault conceptualizes discourses not as events of understanding in which deeper, more “true” meanings can be uncovered through hermeneutic analysis, but as events that create knowledge, and

through doing so, order thought and thus social actions. This understanding aligns well with social activism projects: Activists seek to change not only the cultural ideas that shape how citizens participate in their lifeworld, but also the institutionalized structures that shape and govern this world (Kozinets and Handelman, 2004; Sklair, 1995; Smith, 2003). One useful concept for understanding the dynamics of this process activists face is Touraine’s (1981) notion of “historicity.” As described by Kozinets and Handelman (2004, p. 692), historicity refers to “the symbolic capacity of social actors to construct the cultural and technical systems required to produce a functioning society.”

In other words, the construction of systems essential to a functioning society relies first and foremost on the construction of symbolic systems, and what I hope to illustrate is that anti-GM activists draw upon a discourse that—due to its emergent nature—does not hold the social legitimacy necessary to change federal biotech policy.

*Research Context.* To capture the discursive dynamics that surround activists’ attempts to tighten the regulation of GM crops, I collected texts and interviews from individuals active within a local issue-centered organizational field. An ordinary organizational field consists of “those organizations that, in the aggregate, constitute a recognized area of institutional life: key suppliers, resources and producer, consumers, regulatory agencies and other organizations that produce similar services and products” (DiMaggio and Powell, 1991, pp. 64-65). Members of an organizational field most often share a common meaning system and operate according to generally agreed-upon practices (Scott, 1995). The concept of an issue-centered organizational field, is slightly different. It describes situations where “fields become centers of debate in which competing interests negotiate over issue interpretations” (Hoffman, 1999, p. 351).

The field I investigated consisted of a well-organized network of anti-GM activists, a university microbiology professor strongly in favor of GM crops, a university

agricultural department that cultivated a very neutral stance towards the risks and benefits of GM crops, local spokespeople for a global producer of GM seeds, state regulatory agencies, as well as the state beef and corn growers associations, which are loosely connected to the UDSA.

I collected texts from each organization as well as interviews with over 12 people active in this field. In analyzing these texts, I asked two basic questions: "What are GM crops?" and "What do they do?" By tacking between locally produced texts, interviews and published sociological and cultural studies, this method has proved sufficient to discern the ways in which genetically modified crops were objectified, organized, and represented in two (very different) systems of scientific knowledge.

### **Findings**

#### *The Hegemony of Science.*

Regulation of the food market in the U.S. is governed by a larger discourse that Kleinman and Kinchy (2003) term scientism. Scientism is "the notion that values should not be allowed to mix with facts, and, further, should not be considered in decisions about science and technology." This is because "the authority of science rests on its claim to be value-free and politically neutral" (Kleinman and Kinchy, 2003a, p. 6). Thus to understand how discourses "produce" genetic modification within the constraints of scientism, I asked what constitutes scientifically accurate knowledge of this technology, and focus on the definitions that circulate within institutionally legitimated discourses. I found two distinct forms of scientific discourse. The first, normal science (Kuhn, 1962) refers to the scientific discourse drawn upon by industry and by university scientists who consult with regulatory agencies. The second, pre-paradigm science (Kuhn, 1962) refers to the scientific discourse drawn upon by activists. Within these two distinct discourses, I found three different genres, which I am calling genetic engineering, transgenesis and biotechnology. The names for each genre

are drawn directly from the texts under study.

*What's in a Name?* Genetic modification is a technology with many names: biotechnology, transgenesis, recombinant DNA (rDNA) technology, and genetic engineering. All of these refer to the process of taking genetic content (usually a segment of DNA) from one living organism and expressing this genetic content in another organism. Yet within this highly politicized discursive field, each of these signifiers comes to signify very different conceptualizations of this technology. Indeed, the choice of signifiers is so important to this debate that a large national environmental organization sent out an email to members of its genetic modification group explicitly stating that biotechnology was not an acceptable word for activists to use.

### **Pre-paradigm Science**

I begin by exploring the content of expert statements that illustrate the dangers of genetic engineering for the general public. I begin with a definition from *Safe Food News*, a 34-page full-color publication with a visual style similar to Sunday newspaper inserts such as *Parade Magazine*. *Safe Food News* was produced by a political organization that nominates environmentally friendly candidates for state, local, and national offices.

"What is genetic engineering?" the publication asks on page two. It answers with a discussion of genes:

Genes are the building blocks of life—they make a tomato a tomato and a human being a human being. Genetic engineers cut, splice, and transfer genes between totally unrelated living things to produce combinations that would never occur naturally—like fish and strawberries, viruses and vegetables, humans and animals. Many leading scientists say that the process is unpredictable, unstable, and dangerous.

This definition begins with a discussion of where genes fit into the overall picture of life and reproduction. Genes are “the building blocks of life.” It also focuses on what genes do: they “make a tomato a tomato and a human being a human being.” This definition is scientifically accurate, but it also draws upon Christian models of God’s power, wherein God makes humans human and trees trees. In this case genes do the same, which renders them incredibly powerful and important. Within this logic, then, the process of genetic engineering interrupts the innate function of job genes. By cutting, splicing and transferring genes between “totally unrelated living things,” genetic engineers play dangerously with a fundamental life process.

*What Genetic Engineering Does.* Activist texts provide clear descriptions for what transgenesis does (it moves genes from one species to another unrelated species) and describe how it works in simple yet accurate terms (genetic engineers cut genes from the cell of one organism and splice them into another). Based on current scientific understandings of “the interactions within living cells,” the scientists in Safe Food News argue that the risks of growing plants that express foreign genes are too great. Furthermore, humans are incapable of even knowing how genetically modified plants truly will behave when left to their own devices in the wild because, “The interactions within living cells are infinitely more complex than those occurring in today’s largest supercomputers,” and if a supercomputer can’t show us what might happen, how are we to know?

This logic also structures the following statement on page three from Richard Strohman, Professor Emeritus at the Department of Molecular and Cell Biology, University of California at Berkeley:

Genes exist in networks, interactive networks which have a logic of their own. The technology point of view does not deal with these networks. It simply addresses genes in isolation. But genes do not exist in isolation.

And the fact that the industry folks don’t deal with these networks is what makes their science incomplete and dangerous.

*Ecological Holism: A Scientific Paradigm and Emerging Cultural Orientation.* Activists believe that genetically modified foods are dangerous for the environment and human health and should therefore be regulated more tightly. They draw these conclusions based on a set of distinctions that derive from a scientific paradigm and cultural orientation that researchers are beginning to term ecological holism. Best and Kellner (2001, p. 118) describe ecological holism as an emerging postmodern paradigm “organized around theories of holism, ecology, complexity, co-evolution and the self-organization of living organisms.” This paradigm emerged in the late 1950s and views the earth as “a densely interwoven web of ecosystems, organisms and matter, where every nonliving and living element—rivers, rocks, volcanoes, trees, soil, microorganisms, animals and so on—interact and contribute to the harmony of the whole (Best and Kellner 2001, p. 121).”

Through constructing grids of specification that articulates the infinite and complex relationships between all living things, ecological holism restructures scientific knowledge of all life in a way easily highlights the dangers of genetic engineering. This is because ecological holism views organisms as evolving “in rich relations of interdependence, rather than in a one-to-one correspondence with their physical surroundings” (Best and Kellner 2001, p. 121). This demands a new mode of social behavior towards the natural world in which cooperation with nature is emphasized over competition with nature.

More importantly, it also demands new form of conducting science—new theories and methods for assessing the risks that transgenic crops may provide to the system as a whole. As we shall see, these theories and the investigative methods they demand do not fit within the

discourse and institutionalized practices of what currently constitutes normal science. There are many pockets of scientists striving to develop, articulate and propagate these practices. But the concepts of ecology, systems thinking and cooperation are emerging and have yet to be—or may never be—institutionalized within the FDA, EPA and USDA.

### **Normal Science**

*Explaining Transgenesis.* I begin with a definition available on a web page designed by the Life Sciences and Agricultural departments of a large, state agricultural university. This web page has been consciously constructed as an unbiased source of information regarding the technologies and products of genetic modification (web site author interviews).

These authors chose the word transgenesis to signify the process of transferring genes between living organisms. Under the heading, “What are Transgenic Plants?” the site provides the following definition: “A transgenic crop plant contains a gene or genes which have been artificially inserted instead of the plant acquiring them through pollination.” This distinction—between a plant that acquires genes through artificial insertion and a plant that acquires genes through pollination—is perhaps the most basic definition of transgenic plants, one that all stakeholders in this debate would agree on as factually correct.

Yet at the same time, this definition highlights how transgenesis is different from previous modes of breeding. The website continues: “The inserted gene sequence (known as the transgene) may come from another unrelated plant, or from a completely different species: transgenic Bt corn, for example, which produces its own insecticide, contains a gene from a bacterium.”

Prior to the development of transgenic technology, plants and other living organisms could only acquire and express genes from organisms that were within the same species or similar genus.

With transgenesis, researchers can isolate a gene sequence coded for a desirable trait (for example, a gene in cold-water fish that allows them to withstand cold temperatures) and insert the sequence into the nucleus of a plant cell (for example a tomato or strawberry). From that cell, they can then cultivate a new tomato or strawberry that can likewise withstand cold temperatures.

The web site does not elaborate further. Instead, it follows this discussion of transgene sources with a subtle semiotic distinction. This distinction focuses on two signifiers, “transgenic crops” and “genetically modified or GM crops,” and does so in a way that downplays the significance of the relationships between species that is so important to activist understandings. The web site states,

Plants containing transgenes are often called genetically modified or GM crops, although in reality all crops have been genetically modified from their original wild state by domestication, selection, and controlled breeding over a long period of time.

### *What Transgenic Technology Does.*

The next section on this web site begins with the title, “Why Make Transgenic Crop Plants?” It answers that question within the well-institutionalized context of breeding: “A plant breeder tries to assemble a combination of genes in a crop plant which will make it as useful and productive as possible.”

Food crops are created and comprehended within well-established discursive and economic systems that place certain demands on these crops. According to this text, these demands include “features such as higher yield or improved quality, pest and disease resistance, or tolerance to heat, cold, and drought.” Transgenic technology is thus explained in this web site as a “powerful tool” in the development of a specific set of desirable features. As the web site elaborates,

Combining the best genes in one plant is a long and difficult process,

especially as traditional plant breeding has been limited to artificially crossing plants within the same species or with closely related species to bring different genes together. . . . Transgenic technology enables plant breeders to bring together in one plant useful genes from a wide range of living sources, not just from within the crop species or closely related plants.

In this discourse, transgenesis is known as a crop breeding technique that, like all breeding techniques, transfers desirable genes from one organism to another. But it is different from other breeding techniques: not only does it allow genes to be transferred between a greater variety of living organisms as stated above, it is better because it expands the range of traits that can be expressed in one plant. This constructs transgenesis something that delivers benefits, but it also leaves the risks of the process open to interpretation.

*Explaining Biotechnology.* The next set of discourses is taken from a series of reports linked to a state branch of the U.S. Beef Council, one of many commodity-based marketing arms of the USDA (others include corn, soy, and cotton). Biotechnology is the signifier most frequently employed by corporations and industry consortiums that hold a financial stake in the success of this technology. For example, this Beef Council's web page on biotechnology provides the following definition: "Today's biotechnology is simply a more precise means of doing what has been done for centuries through conventional breeding—striving to develop crops and foods that have desirable characteristics."

Here biotechnology signifies simply an improved version of practices that have been done for centuries—all of which are a concerned with "developing foods and crops that have desirable characteristics." Embedded within this definition is the comforting knowledge that humans have

been modifying the genetic content of plants and animals for millennia.

This definition is in keeping with a statement from the university web site, that "in reality, all crops have been genetically modified from their original wild state by domestication, selection, and controlled breeding over long periods of time." The university site, however, distinguishes between transgenesis and previous forms breeding when it states, "On this web site we will use the term transgenic to describe a crop plant which has transgenes inserted." The Beef Council definition of biotechnology erases this distinction through linking transgenesis with previous plant breeding practices based on the fact that all of these practices are designed to achieve the same goal.

Even in reports where biotechnology is given a more elaborate definition, knowledge of genetic modification is consistently framed by the similarity between the goals of genetic modification and the goals of earlier agricultural and food practices, creating a seamless web of scientific progress in human mastery over nature. For example, in "Biotechnology and Food," a report linked to the Beef Council site, biotechnology is defined as such:

Biotechnology is the use of living organisms or parts of organisms, such as enzymes, to make or modify products. It is as ancient and familiar as using yeast to leaven bread and as modern as genetic engineering. Today's biotechnology is most commonly characterized as the latter—genetic engineering techniques that selectively modify individual genes or transfer genes from one organism to another.

By expanding biotechnology's network of semantic connections to include ancient processes such as leavening bread as well as the most recent processes ("as modern as genetic engineering,") this definition also places genetic modification within the Judeo-Christian belief system dominant within North American culture.

This definition further relies on well-institutionalized biblical narratives to construct other living organisms as tools for man's progressive attainment of a new and improved state of being, as ordained by God (Noble, 1997; Troester Nunez, 2008). In this context, the selective modification of individual genes and/or the transfer of genes from one organism to another are framed as a beneficent tool for achieving an undisputedly noble goal.

*What Biotechnology Does.* What biotechnology is (a process of artificially inserting genes from one organism into another) is erased by a discursive process of explaining biotechnology by what it does. What does biotechnology do? According to these sources, it provides benefits. In this definition of biotechnology, as in the others, "recombinant DNA biotechnology" is understood as an improvement over earlier methods: "Instead of cross-breeding plants for many generations, or introducing mutations to introduce a desired trait—processes that are imprecise and that sometimes introduce unwanted changes—scientists can identify and insert one or more genes responsible for a particular trait into a plant or microorganism with greater precision and speed." This definition substitutes effects for processes: "scientists can identify and insert genes" but we don't know how they do so, nor do we know where these genes come from and where they are going. We do know how well biotechnology works: it works effectively and efficiently, with greater precision and speed than earlier techniques.

*Newtonian Mechanism, Normal Science and Biotechnology.* Normal science and conventional agriculture both draw from a deeply established discourse of science that draws upon the assumptions and principles of mechanistic Newtonian physics. Newtonian mechanism has been a dominant logic governing physics and biology since the European Renaissance (Noble, 1997; Best and Kellner, 2001), and views the physical and organic universe as a well-tuned machine that can be controlled

through an understanding of how each part works.

One useful way to conceptualize the power of this discourse is through the concept, drawn from cognitive anthropology, of a foundational schema. A foundational schema is "a high-level model of great generality and abstractness" (Shore 1996, p. 117) that "organize or link up" similar and related discursive fields and allow seemingly disparate institutional domains to link together with relative ease (Shore 1996, p. 53). Newtonian mechanism has many discursive strains that can be found throughout the discourses of business, engineering. One strain relevant to the present study is a discourse and corresponding logic Shore calls modularity.

A modular logic renders elements interchangeable; it highlights mobility and flexibility and views all life as a "configurable entity." Modern modularity is "not merely a set of techniques aimed at control. It is an attitude of modern humankind towards their world which treats the phenomena of the worlds as. . .resources to be harnessed and manipulated for human ends" (Shore 1996, p. 144).

*Modularity and Biotechnology.* As a cultural orientation, "modularity proposes that reality is atomic. Ontological atomism is a kind of radical reductionism that seeks to decompose experience into its elementary building blocks" (Shore 1996, p. 152). This is the logic of transgenesis, which sees living organisms as composed of genes ("building blocks of life") that are understood metaphorically as resources capable of being taken apart and reconfigured to serve the needs of society and industry.

Furthering this logic, agricultural products such as GM seeds are metaphorically understood as resources that provide economic benefits to farmers, to suppliers of "inputs" such as chemical fertilizers, pesticides, and herbicides, to food processors, final food manufacturers, and consumers (Goodman and Redclift 1991, p. 167). This logic, which turns genes into benefits used in products that in turn

provide other benefits, dominates definitions of biotechnology.

These benefits take on social significance when placed within the larger context of scientific plant breeding's mandate: to develop plants that feed more people using fewer acres of croplands. This was the goal, and the effect, of the Green Revolution and, as the human population increases and the amount of arable acreage decreases, the mandate to increase yield per acre becomes even stronger. Because it is framed as the most recent advance in plant genetics, transgenesis becomes the heir apparent to this expectation. Already touted as the "Second Green Revolution," the benefits of transgenes engender another politically potent metaphorical framing: transgenesis (biotechnology) is the best tool available for feeding a growing population of hungry people.

### **On Activism and Institutions**

Durkheim (1912/1961) argues that societies are structured according to symbolic systems which, when institutionalized, operate within society as "social facts." He defines social facts as belief systems that are imbued with a moral authority capable of channeling and constraining social action. In other words, despite the symbolic nature of social facts, members of a society believe them to be external, "real," and powerful forces. Once capable of this coercive power, social facts become social institutions, invisible perhaps, yet powerful nonetheless.

The discourses and logics that naturalize genetic engineering within US agriculture operate as Durkheimian social facts, not only within agricultural biotech companies but also within the governmental bodies that regulate transgenic crops. By their very definition, however, activists stand in opposition to the institutionalized discourses and practices that they wish to change. Institutions, on the other hand, are characterized by their resistance to change (Scott, 1995), which renders the activist task difficult and sometimes impossible.

In the case of genetically modified foods, the challenge seems to be even greater. Findings from this study illustrate that mainstream agriculture (which includes the USDA and regulatory agencies) makes decisions according to a radically different "grid of specification" (Foucault, 1971) than that of activists, and that furthermore, the grid of specification that supports the marketing of GM seeds is institutionalized in the discourses, logics and practices of regulatory agencies. Because ecological holism is an emerging scientific paradigm, its discourses, logics, and practices have yet to (and may never) hold the social power accorded to the mechanistic, Newtonian logic that governs regulation of biotech crops.

In short, it seems that our cultural understandings of how nature works and how humans should interact with nature are evolving faster than the institutions (such as the EPA and the USDA) that govern human/nature relations. Yet strategically speaking, activists have a very real opportunity within another institution—that of the market. Ironically, the discourses of market competition far too often trump environmental discourses. What I will argue in the next section is that the market presents a strategic opportunity for anti-GM activists—especially given that the best alternative to conventional, high-input monocrops is organic agriculture.

### **On Activism and Markets**

Consumer markets, and the practices, beliefs, and values they engender, comprise one of the central institutions in contemporary American society (Friedland and Alford 1991; Hannerz 1992), and exert an increasing power over other institutions such as the labor market, the church, and the federal government (Firat and Venkatesh 1995; Kozinets and Handelman 2004). The cultural centrality of markets and marketing in North American society suggests that any belief system that stands in opposition to market logics must be consciously and deliberately constructed. However, the cultural centrality of markets

also suggests that any belief system that works within the market can potentially leverage the power of markets to instigate social change.

While the discourse of “the market” has remained rather rigid during the era of neoliberalism (Bourdieu, 1998), a considerable amount of discursive flexibility characterizes individual markets, and especially the market for food and personal health products (Troester Nunez, *forthcoming*). One reason for this flexibility is that marketers and advertisers frequently tap into various culturally salient narratives while promoting their product (Twitchell, 1995). A cursory examination of the advertising on the backs of natural cereal boxes, organic milk and organic macaroni and cheese suggests that the food market can accommodate the discourse of ecological holism much more easily than federal regulatory institutions can. Furthermore, the discourses of competition and of “the market” creates a field where organic producers can create and promote their own technical and symbolic systems—a process fundamental to the type of social change anti-GM activists wish to enact.

### **Conclusion**

This paper does not argue that ecological problems will be solved if regulators simply allow the market to function on its own. Rather it suggests a more subtle strategy of leveraging the social power accorded to markets by introducing, institutionalizing and naturalizing the discourses of ecological holism as more efficient means of enacting ecologically sound social change. Ecological holism is an emerging worldview; its discourses and practices do not enjoy the comforts of an institutionalized, taken-for-granted status in the US. (Best and Kellner, 2001). Furthermore, the discourse of anti-GM activists is fundamentally incompatible with the US regulatory system. Rather than trying to change the discourses and practices of the industrial-agricultural-regulatory complex, this study proposes a

new strategy of piggybacking on the social power invested in another institution: the market. By reconceptualizing environmental issues as consumer choice issues, anti-GM activists are able to sidestep the insurmountable task of attempting to change institutionalized discourses and practices. Instead they gently, and more effectively, stimulate change within the more fluid discourses of the consumer market. By shaping consumer perspectives and demand, activists are forcing corporations to respond (Cummins, 2002). If demand for GM products shrinks, corporate profit margins wither on the vine.



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**The Biosphere Metamorphosed as 'Buyosphere':  
The Human Footprint, Commercial Television, and Consumerism**

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**Abstract**

This paper considers the limitations and prospects of commercial television to represent critical discourses on consumption and the environment. It examines *The Human Footprint*, a program on consumption and the environment, as a case study and supporting evidence. I argue that commercial television is inhospitable to critical environmental discourses, particularly those concerning consumption. TV assumes and reinforces through formal conventions, subjectivities that are individualistic and centered around consumption. Furthermore, TV's realist aesthetic, and the public's habituation to it, facilitates TV representations that cultivate misrecognition and confusion. And finally TV's chief formal characteristic complements and reproduces social fragmentation and alienation, and serves to gather and hold subjects in the form of a commodity audience. Although the program is crafted to sell a commodity audience, it also forwards some critical perspectives on consumerism. However, these are supplanted by the formal decisions made by the producers to metamorphose factual information into televisual conventions. The paper plumbs these and other contradictions to highlight what is at stake with TV as a public sphere in which activists and public figures engage the public in critical dialogue on consumption and the environment.

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This paper concerns television as a means of communication about the environment, and as a formal environment in itself. Support for public policies to address environmental problems in the U.S. rests on public opinion, which in turn is greatly dependent upon mediated debate and discourse, including that disseminated by television. Are commercial and non-commercial media structured to facilitate serious debate and discourse that addresses environmental problems? Furthermore, as the U.S. is the chief consumer society in the world, its aggregate consumption must be addressed as part of any serious public environmental policy. Are commercial media, and television in particular, suited to spurring and facilitating public debate and dialogue on consumerism and environmental degradation? Commercial television is the chief means of news, information, and entertainment for U.S. citizens, making it for better or worse

the *de facto* public sphere. To abandon it as a means of education, discourse and debate is to dismiss the public. Can activists, policy-makers, and the public engage consumerism and the environment via commercial television? They certainly can and do. These questions pivot not only on TV as a forum, but as a formal apparatus, not only in terms of content, but form. The medium is the message, as Marshall McLuhan famously put it, but the medium has consequences.

In this paper I argue that commercial television, as a political economic apparatus with homologous formal conventions, is inhospitable to critical environmental discourses, particularly those concerning consumption. More specifically, I claim that commercial TV as a cultural form is a key apparatus for facilitating consumerism by metamorphosing it into an ideological discourse of consumption. The ideological discourse of consumption advanced through

commercial television, and other media, is constitutive of maintaining consumerism as a collective social force while making it culturally palatable as a pseudo-individualistic one. I forward three reasons in support of this claim. First, TV assumes and reinforces a concrete individual subject through its interpellation and positioning of them. Second, TV's realism facilitates its representations as reality. Third, TV's chief formal characteristic, flow, complements and reproduces social fragmentation and serves to gather and hold subjects in the form of a commodity audience.

Concrete evidence in support of the reasons and claim comes from the program, *The Human Footprint (THF)*. It was chosen for several reasons. First, it offers a well-defined textual case in which the limitations and possibilities of television's formal representations can be tangibly analyzed. Second, it was broadcast on commercial television in May 2008, and ostensibly focuses on consumerism and the environment. And, third, the network that produced it, National Geographic Channel—or NatGeo—is in the forefront of televisual programming that engages the environment, and thus is arguably a trendsetter. The show is one of NatGeo's *Preserve Our Planet* programs the slogan of which is "what you do counts." The choice of one program as evidence and case study limits the persuasive punch of the claim. Therefore, I contextualize it by engaging TV as a structural apparatus, as a set of signifying conventions, and as an environment (Budd, Craig & Steinman, 1999).

#### Interpellation & Positioning

TV metamorphoses collective social being into concrete individual subjects through interpellation and positioning. Building upon the work of Lacan (1977), Althusser (1970) argues that the human subject is socio-culturally constructed, and that texts discursively inscribe and recruit the subject through interpellation. Interpellation is the process through which discourse speaks to or hails, and individuals recognize themselves as subjects, how

subjects are constructed via discourse. Television as a distinct discursive medium has specific means of interpellation, including modes of address, conditions of reception, and positions of identification.

#### Mode of Address

While TV's interpellation metamorphoses viewers discursively as concrete individual subjects, essentially who we are, its mode of address constructs a relationship between discourse and subject, producers and viewers. In TV this relationship is monologic and hierarchical. TV's mode of address structurally limits the subject's role to receiver and spectator, precluding any substantive interaction or reciprocal exchange. And it is hierarchical, with TV in a position of authority.

*THF* adopts the convention of the sole anchor as a signifier of this relationship, so that the program's way of presenting itself, and the network, interpellates and positions us to establish and reinforce its power (Budd et. al., 1999). Elizabeth Vargas, co-anchor of ABC's TV magazine *20/20*, narrates the show. Vargas has worked on the *Today Show*, *Dateline NBC*, and *Good Morning America*. As in such news programs, Vargas serves as anchor, underscoring the program and network's "hierarchy of authority and its deliberate confusion of the gravity of the news with the constructed personalities of its anchors" (Budd et. al., 1999, p. 124). Although we see many other people in the program, only Vargas speaks—directly and through voiceover. The use of the single, anchor masks the collective production of the program and mirrors the interpellation of the individual subject. As the discourse is represented through television, it has more than verbal elements.

#### Conditions of Reception

The television apparatus determines conditions of reception, and this elevates the hailing of the audience as concrete individual subjects. The individual subject is advanced by the privatized distribution and reception of the television

apparatus. In terms of distribution, as a non-premium cable channel, NatGeo is only available to those who pay for its content—it isn't available on so-called "free" television or on basic cable. In reception terms, television is also private. Although its discourse is public in many respects, its consumption takes place overwhelmingly in the privatized home. TV epitomizes the chief contradiction of U.S. society as a means of "separation from and integration into the outside world" (Spigel, 2001, p. 32). As Vargas notes, "we trust and depend on our televisions to bring the world into our living rooms." The subject is positioned as a concrete individual, via TV's conditions of reception, and some of the tensions in the verbal address are revelatory of the tensions of the partially public discourse disseminated and its privatized reception.

In the first segment, *THF* attempts to verbally interpellate us as concrete individual subjects and as collective subjects. The voiceover illustrates this:

As individuals we may think we have little impact on the world around us. We may feel that our contribution to the world goes unnoticed. We'd be wrong. Each of us makes a contribution. We each make an impact. And we each leave a footprint.

By the fourth sentence, the collective "we" is supplemented by the individual "each." Verbally, the show attempts to address viewers as concrete individual and collective subjects, and this continues throughout the program. This discourse is illustrative of a fuller sense of subjectivity than is generally offered in media discourse, and indicative of the intent to address individuals and the public. But conditions of reception mitigate the prospects for collective subjectivity in the televisual environment—privatized and atomized reception elevates the individual over the collective.

### **Positions of Identification**

Likewise, *THF*'s construction of positions of identification facilitates the concrete individual subject. TV, like all

discourses, offers subjects a place that they can imaginatively situate themselves—verbal and visual positions of identification. The show does so through individualizing the aggregate statistics on consumerism via the fictionalized, personified construct of a typical North American, as boy/girl and later man/woman, reducing the collective dimensions of social being to concrete individuals. It thus offers distinct gendered positions of identification and reinforces the articulations between gender, identity and consumption. Like privatized reception, the choice of fictional individuals to concretize aggregate consumption works to interpellate viewers as concrete individuals.

### **Subjectivity Fetishism**

Interpellation is mutually constituted by the prevailing consumer subjectivity in an advanced consumer society and its socio-cultural context. Consumer subjectivity in such societies, Bauman (2007) argues, is fetishized. Just as commodity fetishization masks human labor in commodities, subjectivity fetishization masks labor in the construction of subjectivity. "Subjectivity' in the society of consumers...[is] a thoroughly human product elevated to the rank of superhuman authority through forgetting or rendering irrelevant its human, all too human origins" (Bauman, 2007, p. 14). Such forgetting helps elevate consumerism to the *raison d'être* of a society. Bauman (2007) argues,

the thoroughly individual capacity for wanting, desiring and longing needs to be, just as labor capacity was in the producers' society, detached ('alienated') from individuals and recycled/reified into an extraneous force which sets the 'society of consumers' in motion and keeps it on course as a specific form of human togetherness, while by the same token setting specific parameters for effective individual life strategies and otherwise manipulating the probabilities of individual choices and conduct (p. 28).

Subjectivity fetishism is an ideal type—individual exceptions do not undermine its collective validity. It describes aggregate social determinations. Subjectivity fetishism is important to understanding how consumerism is metamorphosed in individual terms, something *THF* and *TV* draw upon, reinforce, and develop as an environment.

### **Consumerism and Consumption**

Consumerism comprises the socio-cultural constituents of societies structured by capitalist consumer relations. “Unlike *consumption*, primarily a trait and occupation of individual human beings, *consumerism* is an attribute of *society*” (Bauman, 2007, p. 28). In consumer societies, the individual disposition to consume must be socialized and rationalized. Consumerism must drive consumption. However, there is a need to maintain the facade of the individual subjective roots of consumerism as consumption, given the discourses of freedom, individualism, and choice that are articulated with it. Consumerism therefore must be constructed as consumption deriving largely from individual desire, want, or need. Ideology, which is “the meaning *made necessary* by the conditions of society while helping to *perpetuate* those conditions,” provides means for overlooking or explaining away the contradiction between collective consumerism and the fiction of individual subjectivity driving consumption (Williamson, 2002, p. 13). Subjectivity fetishism cultivates the representation of consumption rather than consumerism, and reinforces a powerful ideology that articulates consuming with freedom.

Throughout *THF*, the assumption and facilitation of subjectivity fetishism are clear through the ways consumption is, and is not addressed. The show’s discourse offers suggestions about reducing environmental degradation, but they’re always framed as consumer choices rather than consumerism. For example, after a

segment on cars and their CO<sub>2</sub> emissions, Vargas offers a consumer solution. “There is good news: if everyone drove a hybrid car, it would be possible to cut emissions by a third.” Unarticulated is that as long as buying and driving any type of car is considered a consumer choice, but remains a consumerist necessity, cutting emissions will remain largely the purview of the automotive and petroleum industries. Not coincidentally, the next commercial break features an ad for Honda’s fuel cell vehicle, illustrating how the program facilitates consumerism as consumption by facilitating subjectivity fetishism, capitalizing on this through a seamless flow between program and commercials.

In another segment on media, the show illustrates the footprint that media consumerism—in the form of TV, newspapers, magazines—has, but only in terms of material inputs. Electricity, paper, the number of trees, the carbon produced, etc., are detailed, however the commercial base of these media—advertising and its consumerist role—are unengaged. As the show itself is a vehicle for consumerism, albeit with content that’s at odds with it at times, perhaps scrutinizing advertising as consumerism’s primer is too close to home. However, it’s also clear that the show’s interpellation of subjectivity fetishism conveys that it is irrelevant that media are advertising-based consumerism vehicles. If consuming is derived from free, individual choice, advertising is unimportant.

### **Pseudo and Synthetic Individualism**

The interpellation of audience members as concrete individuals with fetishized subjectivity, and subjects engaged in consumption rather than consumerism, is mutually constitutive with the prevalent socio-cultural conception of the individual. This conception is of a pseudo-individual with synthetic individualism. Pseudo-individualism augers that we are separate and atomized, rather than indivisible and unique iterations of the human species. A fundamental tenet of commercial culture in general, and

television in particular, is the often “unstated presumption that human nature is mostly individual” (Budd et. al., 1999, p. 110). Synthetic individualism builds on pseudo-individualism and posits that our unique identities are partly a function of products (Budd et. al., 1999)—that having is constitutive of being (Fromm, 2007). Both types of individualism militate against an authentic sense of community, collectivity, and social responsibility, and are the chief forms of identity constitutive of an advanced consumerist culture. *THF* both assumes and reinforces these forms of individualism through formal characteristics. The narrative choices of framing consumerism as consumption via composite individuals structured in an arc of a lifetime indicates an acceptance of these forms of individualism. And the representation of this arc is punctuated by key generic events (adolescence, marriage, old age, etc.) that are constituted by particular products (skin care products, big screen TV, etc.), reinforcing such forms of individualism.

Consumerism is metamorphosed into consumption, and consumption as an expression of individual, subjective desire. As an apparatus, TV metamorphoses social being into concrete pseudo-individuals, via verbal and visual interpellation. TV is mutually constitutive with a consumerist society in which subjectivity is fetishized and synthetic identities are articulated with consumer goods. Consumerism as an environmental problem is metamorphosed as, “the life of an American couple making an impact on the world simply by living in it.” The ideological discourse of consumption advanced through *THF* is constitutive of maintaining consumerism as a collective social force while making it culturally palatable as a pseudo-individualistic one through interpellation, positions of identification, and pseudo and synthetic individuality.

### **Television Realism**

Commercial TV and *THF* also metamorphose consumerism into an ideological discourse of consumption

formally through rendering intercourse and interaction as representational communion, translating reality into realism. TV’s realism facilitates its representations as reality. TV is a particular symbolic environment that formally promises, yet in many ways precludes, realistic intercourse with the environment and reality (Budd et. al., 1999). Realism is the signifying system of television that unifies a number of aesthetic, technical, and narrative practices and provides TV content with an index of credibility. Television realism is not synonymous with reality or direct experience thereof—interaction with reality is always mediated by signifying systems and discourses. According to Budd et. al. (1999), what makes television realism so powerful is it,

tries to efface itself as a discourse...[it] wants to become invisible, for its choices to disappear. Realism can only succeed in seeming real and natural if it seems to be a transparent window onto a preexisting world, a neutral record, in image or sound, of reality. *Realism is a central strategy in the naturalization of ideological discourses* (p. 108).

To the extent that television realism as a signifying system is invisible, representation is transformed into stories, segments, or narratives that tell themselves, seemingly offering direct communion with the realism they’re constructing. Realism’s impact is not that viewers necessarily believe television content, although many certainly do, but rather that television as a form of signification and discourse is not apprehended as such. Realism cultivates the powerful impression that television’s representations are outside of discourse.

### **Codes and Conventions**

*THF* is firmly situated in television’s signifying system of realism, which comprises a number of specific codes and conventions that producers draw upon to construct TV texts. Codes tap established cultural maps that classify, distinguish, and

make texts easily comprehensible. Conventions are more medium-specific and malleable means for constructing coded texts. The main code TV draws upon is the prevailing distinction between fiction and non-fiction. *THF* is a hybrid of non-fiction and fiction conventions although it is clearly coded as non-fiction. Non-fiction conventions include its use of direct address via an authoritative, journalistic figure, and objective statistics. Also, throughout the program, objective, aggregate data are used to frame certain segments and provide the architecture for the discourse on consumption and the environment. This convention of objectivity, as well as its direct address voiced by an authoritative anchor, further supports the show's coding as non-fiction.

### **Narrative**

Fictional convention is also strongly represented in *THF*. The text is constructed through conventions of indirect address, primarily through visual narrative. Unlike a narrator or voiceover that addresses us directly, narrative addresses us indirectly. While direct address tells, indirect address shows. Narrative is a powerful element of television's realism as television stories, "seem to have no tellers, no narrative source. Things just happen. The narrative can seem less mediated, more immediate and real than one related in words" (Budd et. al., 1999, p. 109). Likewise, narrative is more powerful than direct address as it's perceived as more pleasurable. The pleasure derives from the perception that narrative seems more realistic (Ibid.).

In *THF* the narrative is based in objective aggregate data on consumerism, but the data is metamorphosed into narrative conventions, which has the effect of making the data less accurate but more credible by the criteria of TV realism. The data are metamorphosed into narrative through the constructs of a typical North American boy/girl and later man/woman. Hypothetical male and female protagonists are constructed, and the aggregate lifetime average metamorphosed into the lifetime

narrative arc of these protagonists. This serves to facilitate a position of identification for viewers, and is more pleasurable for spectatorial consumption. But this metamorphosis diminishes the critical potential of the program while raising its televisual realism. Objective information is supplanted with fictional individuals that viewers can identify with and narratively follow, but this qualitatively transforms the aggregate data into fictional composite individuals. The aggregate information does not disappear; rather it becomes fictionally embodied and shown through visual narrative. Once translated, the information becomes part of two individuals' narratives, which undermines the context for the information as data. Within the visual narrative it is no longer aggregate descriptors of tendencies in a population, but part of a fictional storyline. The show is coded as non-fiction, but the objective data are made fictional although rendered real via visual narrative realism. Habituation to television's realism makes this seem more realistic, to most, than aggregate statistics. Generically, *THF* is a docudrama, but formally and ideologically the documentary dimension serves as a host for the parasitic narrative drama, which takes over the program discursively. The choice of conventions and genre also illustrate the ways form articulates with the show's rendering of consumerism as consumption.

### **Style: Consumption Spectacles**

*THF*'s style likewise illustrates how its formal realism metamorphoses consumerism into consumption, working to abolish links with environmental degradation and reinforce those with pleasure. Style is the repeated, significant use of technical choices characteristic of a work (Budd et. al., 1999, p. 98). The chief stylistic feature is what I call consumption spectacles. Throughout the program the producers assemble the physical objects of aggregate consumerism— milk cartons, bananas, or cups of beer—crafting a concrete assembly of the total consumption of a particular product by an average North American.



Their realism is fetishistic—behind the scenes segments during commercial breaks reveal how the producers chose actual objects rather than digitally reproducing them. The spectacles often occur right before, and often again right after, the commercial breaks. The spectacular impression is a function not only of the formal realism—for instance 13,056 cartons of milk—but the way that the camera and our gaze accompany them, and the ways they're rendered. Sometimes the camera tracks beside them at a low angle before moving upward to present them in an increasingly full view until we see the entire assembly. Other times the objects are dropped from above, slowly at first, and then with increasing intensity toward a climax. Commentative music always accompanies the spectacles, building in intensity or rising in tempo. These also contribute to the narrative trajectory of the program: the story of lives as consumption and the program as spectacle. At the end of the show we are presented with a grand finale comprising most of the product spectacles.

The consumption spectacles metamorphose the aggregate objective data into TV realism, and stylistically aestheticize the products in ways that facilitate a "consumer gaze," a form of spectatorship where people are positioned, "as masters of, connoisseurs of, or potential customers for what they have the power and right to see" (Budd et. al., 1999, p. 8). The stylistic aestheticization of products into tableaux for the consumer gaze transforms a potentially objectifying account of consumerism into an object of spectacular consumption. In each consumption spectacle, the visual and verbal narrative quickly move from aggregate data to individualized consumption, before arriving at a climactic, spectacular display of the products. Their composition implies a dialectical relationship. First, each is set up verbally with an overview of the product before moving to a visual montage and voiceover that details the collective U.S. consumption of the product. This serves as an

introduction to consumerism and this product. Second, the spectacle shifts from aggregate toward individual consumption, from the total numbers of the product consumed to the total number consumed by an average individual. Sometimes this transition is accompanied by images of the fictional individuals consuming the product, seemingly enjoying themselves. Third, we see the spectacle build and come to climax. Consumption and pleasure carry forward and are advanced through upbeat, commentative music, and the excess of products. Each sequence enacts the metamorphosis from consumerism to consumption, with the climax transcending its component parts, providing a hyperbolic tableau for the heightened consumer gaze.

The spectacles have a strong aesthetic quality that enhances pleasurable spectatorship. In addition to music, sharp editing, and deft camera work, the display of the products often exhibits strong aesthetic qualities. The bread/buns spectacle has strong pictorial and symbolic qualities. Its final sequence is a reversing, rising crane shot that reveals that the packaged products have been arranged to depict an American flag waving in the wind. The signification of this product-flag is polysemic. Read ironically, the product-flag suggests consumption constitutes the nation, the symbolism of the stars and stripes replaced by consumer products. Read through the lens of consumerist ideology, the product-flag conveys that consumption is a metonym for the nation and its chief values: freedom and democracy. Potential connotations multiply if the audience attends to the fact the bread loaves are Wonder Bread (one of many visible product placements in the program). In the beer spectacle symmetry and form are the focus. Its final sequence shows cups of beer organized around a large, outdoor water fountain. The cups and their arrangement are analyzed through a series of close and medium shots with reversing and circling movement of the camera. Our gaze comes to a rest above, revealing its totality: the cups of beer organized

symmetrically outward from the fountain, mirroring its hexagonal shape with the liquid contents of both mirroring one another.

With the eggs spectacle, the kinetic is emphasized. The spectacle of eggs occurs relatively early (in the first segment, before the first commercial break), and narratively sets up one of the stylistic representations: the aggregate number of eggs is dropped, creating a kinetic performance. These are repeated throughout the program (potatoes, bananas, and oranges). The egg drop is set up with a voiceover describing the aggregate statistics of egg production and consumption in the U.S., which is accompanied by a brisk montage and pleasant, minimalist music. A visual montage of eggs being handled in a factory accompanies the description. Next, the image cuts from factory to an open carton of eggs, and the voiceover describes how many we individually eat. The camera surveys the carton to reveal many more as the voiceover details the eggs we each eat annually. Then the voiceover narrates the ways we consume them—poached, scrambled, fried—signifying the metamorphosis from consumerism to consumption. The next montage shows people loading a bucket loader with eggs. And the music shifts to a light, upbeat, polyrhythmic soundtrack. The voiceover sets up the drop:

To visualize just how many [eggs] that is, we have gathered together the exact amount we each consume. These eggs are about to expire. Once they're loaded into a giant bucket, we'll dump them in order to show you what a lifetime's supply of eggs really looks like. Stand aside for the omelet of a lifetime.

The image shifts to a position in front of and below the bucket loader as the eggs begin to slowly, then quickly drop. The music increases in tempo and complexity as the dropping eggs accelerate, becoming white, vertical streaks. We cut to a shot of the

eggs dropping—as they break their liquid contents spread outward like a swelling river. Shots cut back and forth between the vertical dropping and the rapidly expanding horizontal river of egg. In one shot, egg yolk splatters the lens, signifying realism and our communion with the objects of consumption. The spectacle reaches its coda with the soundtrack fading down and ceasing, and ends with a medium shot showing the edge of the egg river and part of its totality. The voiceover notes the number, 19,826 eggs, which is visually mirrored with text.

*THF's* stylistic feature of these aestheticized spectacles of consumption illustrate overarching characteristics of the program as a discourse. Consumerism as a critical topic for objective engagement is metamorphosed into consumption, an aestheticized spectacle for the consumer gaze. While these segments do contain objective statistics on consumerism, the formal rendering of them in aesthetic displays with commentative music makes them subjectively pleasurable narratives that position viewers as spectatorial consumer subjects. Aggregate statistics are translated into TV realism, undermining the discourse's engagement with consumerism by metamorphosing it into consumption. Their syntagmatic positioning before and after commercial breaks cultivates a consumer gaze that will ideally flow into the commercials, cultivating a consumptive disposition. However, the program, like all media texts, is not monolithic.

### **Translations**

*THF* also translates the aggregate objective data on consumption in ways that facilitate viewer engagement with consumerism. Instead of constructing consumption spectacles that metamorphose consumerism into consumption, these translations preserve elements of consumerism while still making its totality comprehensible as representation. Importantly, these translations are also more realistic, although they are explicitly constructed and therefore counter TV

realism as a practice. In general, these translations are characterized by a reworking of the aggregate data into accessible, non-spectacular objects that are more tangible than the statistics but preserve their totality. They preserve the object-subject relation of the data in that they provide better means to facilitate viewer understanding that consumerism is a collective phenomena that everyone is a part of and subject to. Translation connotes that consumerism is something we have a relationship with, unlike consumption which is something we are engaged in; translation augers reflexivity.

Three of the better examples of translation are the program's segments on trash, cell phones, and sewage. With trash, the segment highlights the number of cans trashed each day, and translates that into an analogy of enough cans to build a roof over New York City each day, accompanied by an illustrative animation. The cell phones' segment offers a breakdown of the component parts and their raw materials, and includes larger context about how one material input (Coltan) is implicated with the political economy of civil strife in the Democratic Republic of Congo.

The sewage segment is notable for its strong connections and its visceral, documentary elements. It is syntagmatically strong as it immediately follows, and is clearly linked with segments on water usage and waste. The segment focuses on the miles of sewer lines (600,000), "running invisibly under our streets," and translates this into an analogy—enough to wrap around the world 24 times. This is accompanied by an animation of pipe wrapping the globe. Afterward, it cuts to images of fouled water in a treatment plant, accompanied by a voiceover detailing that we each send 20 gallons through the sewage system daily, then yearly figures, and statistics on the number of treatment plants. The images detail this unsparingly—we see brown water and soiled tissue paper piled up, and are paradigmatically strong. The preceding segments on water usage were visually cheerful—youngsters

swimming in pristine pools, showering and grooming in tidy, middle-class bathrooms. The visual contrasts and strong connections convey the import of trash and sewage as externalities of consumerism. And in contrast with the consumption spectacles that convey communion with the objects of consumption via TV realism, this segment connotes an intercourse that we, collectively and with the environment, are implicated in.

These translations illustrate the limitations and possibilities of commercial television as a signifying system and bear on the medium's prospects for critical debate on consumerism and the environment. Translating something for TV is not the same as translating something verbally. The basic element of TV's signifying system are indexical signs where the signifier and signified are nearly identical (Monaco, 2000). Translating information into television's system of realism often means metamorphosing it into representations that effectively preclude seeing them as signifying or representing something. The translations described, in eschewing the choice of realism facilitate better viewer comprehension, as well as preserve consumerism as a totality because they advance seeing the products and their inputs in relations. This cultivates a critical, objective position whereby viewers can see the parts, relations, and the whole. They are not positioned as subjects who are promised direct communion with the products, as is the case with narrative realism or the consumption spectacles. Although less common and thus less significant to the text as a discourse, these translations are significant for three reasons. First, they underscore how the aestheticized consumption spectacles are paradigmatic choices; the producers could have constructed different representations. Second, they highlight that the stylistic choice of consumption spectacles produces different formal representations that undermine the show as a potentially critical discourse on consumerism and the environment. Third, the use of particular types of translation points toward more

viable ways of representing consumerism as a problematic collective formation via television. The ideological discourse of consumption advanced through *THF* is constitutive of maintaining consumerism as a collective social force while making it culturally palatable as a pseudo-individualistic one through TV realism, codes and conventions, narrative, and style. TV as Flow

The third and final reason in support of the claim that commercial TV and *THF* facilitate consumerism and render it into an ideological discourse of consumption concerns TV's chief formal characteristic: flow. Rather than considering TV as a series of discrete programs, Williams (2003) argues that TV is better understood as flow, with no discrete separations between programs and commercials. Likewise, TV's flow complements atomization in capitalist culture and serves to gather and hold subjects in the valuable form of a commodity audience that is sold to advertisers (Budd et. al., 1999). TV as flow facilitates consumerism as consumption because it is homologous to capitalist culture, functions to aggregate valuable audiences, and facilitates the integration of content, commercials, and audiences. I will concentrate on the last two aspects of TV flow, specifically as they are manifested in the profiling of subjects as commodity audiences and the integration of advertising.

### **Profiling Subjects as Audiences**

For a TV audience to be a valuable commodity to advertisers, it needs to comprise subjects with desirable demographic and psychographic characteristics, which are in part codes for their capacity and propensity toward certain types of consumption. It is not only the characteristics but what they can be used to reveal toward enhancing persuasion. Demographic and psychographic information is becoming ever more detailed owing to new techniques enabled by Internet architecture and Web 2.0 applications. Partly because of such structural resources, NatGeo is able to

synergistically leverage *THF* by tapping into profiling information on targeted audiences. NatGeo is a vertically and horizontally integrated media conglomerate. The network is part of and draws brand signification from National Geographic, and is a joint partnership of National Geographic Television and Film and Fox Cable Networks, which is part of the News Corporation conglomerate. Its *Green Guide Media Kit 2008* details demographics, such as: gender, age, education, income, children at home, and household income (National Geographic, 2008, p. 2). More importantly, it combines this with profiles of buying behavior: "The Green Guide reader buys: recycled paper goods 82%; least toxic cleaning products 79%; organic produce 75%; reusable plastic containers 72%" (Ibid.). Such information illustrates that NatGeo not only has a valuable commodity audience to sell to advertisers, but the constituents of that value: subjects who buy green products. The potential commodity audience is already invested in consumer sustainability in practice and ideologically, therefore the program can serve to efficiently gather it and articulate it with micro-targeted advertisements.

### **Advertisements**

The commercials of the chief advertisers in *THF*—Honda, Dow, and Waste Management—suggest how this commodity audience gathers subjects with the right consumerist characteristics. Honda and Dow were "presenting sponsors," and had 7 and 5 commercials respectively; Waste Management had 5. While the particulars of their persuasion differ, all three overtly address and presuppose "green" consumer subjects.

Honda's commercials suggest its persuasion was aimed at burnishing its connotation as a "green" business, which is predicated upon its production of hybrid and fuel-efficient cars, as well as previous advertisements heralding such credentials. Thus, Honda taps potential flow from other advertising and branding efforts, and from within the parameters of *THF*. In one

commercial Honda features a hydrogen fuel cell vehicle. As the car is unavailable, the message is about Honda as a “green” company that is technologically innovative. This same unobtainable vehicle appears in another Honda ad in the program that stresses technology. And it’s not just technology, but teleology that is implied—a sense of linear progress these corporations labor to convey. Dow’s ads most closely suggest teleological processes. Unlike Honda, Dow has a much larger task in coloring its image a progressive hue of green, courtesy of napalm, Agent Orange, and silicone breast implants. Indeed, such messages may spark critical flow. Its *THF* commercials therefore attempt syntagmatically to articulate “the story of a planet where chemistry embraces humanity.” Despite beautiful production values, and sweeping, pretentious rhetoric, nothing of substance is conveyed rhetorically. The ads are largely poetic not logical (Dansei, 2008). Importantly, they repeat Dow’s slogan, “the human element,” which is employed in its sustainability PR on its Web site, and intersects with this program’s title, thus ideally contributing to a flow of messages among the program, Web site, and audience consciousness.

Waste Management’s commercials likewise seem aimed at cultivating a green corporate ethos. Indeed, in the one commercial repeated 4 times in the broadcast, the company characterizes itself as an “environmental partner” that is involved “from everyday collection to environmental protection.” The commercial’s slogan commands viewers to “Think green, think Waste Management.” While it may seem incongruous to brand a company dependent upon waste as green, the message is quite compatible from the standpoint of consumerism. “The society of consumers is unthinkable without a thriving waste-disposal industry. Consumers are not expected to swear loyalty to the objects they obtain with the intention to consume” (Bauman, 2007, p. 21). Indeed, Waste Management’s commercials and services assuage the conscience of consumers

through removal of the necessary externality of waste, and thus implicitly license continued profligate consumerism; a partner indeed.

Like Dow’s efforts, Waste Management links its green branding with the show through sponsored association, but it aims to integrate its persuasion more seamlessly with the program’s flow in one ad. Following a segment in the program where sewage, trash, containers, and cans are discussed, and Waste Management trucks are shown dumping or “managing” waste, its ad offers a quiz at the beginning of the commercial break, and provides an answer at the end. The first part begins, “So, we’ve seen how much waste we generate. If you recycled just the soda cans in your human footprint, it would save enough energy to power a TV, but for how long?” The accompanying images first show a Waste Management worker picking up trash, then shots of trash, before ending with the fictional boy shown turning on a TV and sitting down on the couch. In both the beginning and end of this quiz ad, footage and music from the program are used, as well as a green Waste Management truck. In the end we learn: “enough energy to power a television for 130,000 hours, or well over 14 years. That’s a lot of TV.” The ad ends with the fictional family watching TV, mirroring the audience in a reverse shot—the camera/audience gazes upon the family from the perspective of the family’s TV. The ad stresses recycling and its benefits in terms of consumer spectatorship, offering a rhetorical pat on the backs of viewers courtesy of Waste Management and the program. More fundamentally, the ad mirrors the metamorphosis of the program—rendering consumerism as consumption. Consumerism is initially invoked—soda cans, waste—but it is metamorphosed into “green” consumption of the TV environment. The ad complements a larger ideological message that the program forwards: environmental problems are not linked with consumerism, but rather consumption, which can be managed through the “greening” of

consumption. Put another way, collective problems become individual ones that can be solved by individual consumers via market-based solutions.

The distinct commercials of all 3 companies belie a strategy of confidently addressing green consumer subjects, and framing their companies, products, and services within the discourse of green consumption. The persuasion is therefore much more refined than traditional broadcast ads in that it is aimed at selling or reinforcing the idea that these companies share the consumer subjects' values. The ads are less persuasion than an attempt at communion, possible because the commodity audience gathered and mobilized has been effectively educated, and NatGeo and their advertisers are privy to the specific codes of their characteristics. These ads, as well as many of the others in the program, also are effectively intertwined with the program's interpellation of the audience as consumer subjects, and exhibit televisual realism codes and conventions. Therefore, there is a rather seamless flow between the program, commercials, and ideally the audience. The audience is already educated in consumer sustainability and thus refined in terms of their disposition to the sophisticated persuasion exemplified in the ads. The program's producers can confidently offer an audience that has a certain type of commodified subjectivity that can be gathered and mobilized as a commodity audience through the program as flow.

#### **Coda**

TV as a political economic apparatus structured toward fomenting consumerism and representing it ideologically as consumption warrants a critical approach to the medium. TV is at cross-purposes with critical discourses on consumption and the environment, but it is also its own environment. Considering TV as an environment rather than simply a means will help activists and policy-makers understand its formal characteristics. Practically this means careful consideration of how to

#### **References**

frame, shape, and control, as much as possible, TV representations of consumption and environmental discourses. The sorts of translations identified in this paper likewise suggest prospects for representing critical aggregate information in ways that cultivates its thoughtful understanding and consideration. This paper also suggest the import of understanding that TV is a constitutive part of a larger socio-cultural field characterized by subjectivity fetishism, consumption rather than consumerism, and powerful ideologies that connote consumerism as freedom. And finally, given the structural limitations to commercial television and its homologous practices, activists and policy makers should consider joining forces with media reform activists. The medium is the message, and without changing the former our capacity to shape the latter is limited.

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## Struggling For Ideological Integrity In The Framing Process Of U.S. Animal Rights Organization Food Campaigns

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### Abstract

*Counter-hegemonic social movement organizers might agree ideologically but disagree strategically over how critical, ideological, or altruistic their frames should be versus how moderate, utilitarian, or self-interested. For example, animal rights organizations (AROs) struggle over whether to use more mainstream welfare-oriented frames or “radical” rights-oriented frames that are more authentic to their ideology of combating speciesism. How can AROs construct transformational non-speciesist frames that resonate with a largely speciesist American public? To study the role of ideology and ethics in the ARO framing process, I analyze print and electronic advocacy materials and interview leaders of five U.S. AROs in their campaigns on behalf of farmed animals and veganism. I examine the extent to which AROs appeal to altruism, both for nonhuman animals (NHAs) and humans, versus human self-interest, including emphasizing one or the other in environmental frames and how self-interest and altruism overlap in moral integrity frames. ARO leader rationales are categorized into two communication ethics approaches of deontological (ideological authenticity) and utilitarian (what works for the greater good). Leaders explain their motivations for choosing welfare (reform/reduction) versus rights (abolition/justice) appeals and self-interest versus altruistic appeals. Finally, framing recommendations are made in support of ideological integrity and frame transformation.*

I

Social movement scholars suggest social movement organizations (SMOs) take advantage of political opportunities, successfully mobilize and build resources, and frame issues in ways that are meaningful and resonate with the public (McAdam, McCarthy, & Zald, 1996). But for those who seek fundamental changes to the status quo, it can be a struggle to determine how best to frame these counter-hegemonic ideas in hegemonic culture. Internally, SMO leaders might agree *ideologically* but disagree *strategically* over how to frame issues externally for the public. The determinate of the “right” communication approach depends on if one’s version of right is more teleological or more deontological. Teleological (utilitarian), or ends-oriented, approaches, emphasize whatever means is most effective at creating the desired behavioral changes for the greater good. Deontological approaches emphasize messages that are most

authentic to and compatible with the SMO’s ideology and values, which is related to the broader principle of ensuring one’s communication means are truthful (Bivins, 2004).

For example, in fighting widespread discrimination, a counter-hegemonic SMO can choose an expedient approach (utilitarian) that waters down the radical aspects of its message or even partially contradicts and ignores its non-discriminatory values by appropriating hegemonic discourse but resonates with many people to encourage reforms. Or an SMO can choose a more ideologically authentic rhetorical approach (deontological) that openly challenges discrimination and does not compromise its values but risks being marginalized. Ideally, the best approach would be both effective and, at the same time, congruent with the SMO’s values and vision.

An example of a counter-hegemonic movement struggling over the best framing



approach is the animal rights movement, particularly regarding the ideological distinctions between rights and welfare. Animal *welfare* can be defined as a mainstream Western philosophy that regulates animal exploitation to reduce the suffering of NHAs under human control (Francione, 1996; Hall, 2006a). Animal *rights* can be defined as a deontological ethic that grants nonhuman animals (NHAs) the right to privacy and freedom from human intrusion, seeking an end to the domestication, enslavement, and exploitation of NHAs (Francione, 1996; Hall, 2006a; Regan, 1983). The animal rights movement seeks a deconstruction of the human/animal dualism, transforming to a worldview that conceives of other animals as inherently valuable subjects with interests that deserve respect, similar to how humans respect each other as subjects (Francione, 1996; Regan, 2003; Singer, 1990). Animal rights organizations (AROs) often struggle over whether to use a *welfare*-oriented frame that is more mainstream and less threatening to human's moral status or a *rights*-oriented frame that is more "radical" but authentic to the ARO's justice philosophy of directly combating the species discrimination, or speciesism (Singer, 1990), common in Western society (Francione, 1996; Hall, 2006a).

As an animal activist and scholar, I am interested in the role of ideology and ethics in the framing process of the animal rights movement. By analyzing activist advocacy materials and interviewing ARO leaders, I study framing choices and motivations of five U.S. AROs in their food-related campaigns on behalf of farmed animals. Factory farming and meat-eating have become an increasing focus of ARO campaigns over the last few decades, and, of all animal issues, food is more ubiquitous or pertinent to most Americans than is hunting, fur, or vivisection.

These food-related animal advocacy materials, such as vegetarian booklets and slaughterhouse videos, reach millions of people annually in an attempt to make

production and consumption of animal-products an ethical issue, representing an important challenge not only to mainstream food industry discourse but also to American social norms and worldviews about who it is morally acceptable to kill and who pays the cost for America's food choices. The topic of mass communication related to animal farming and a meat-based diet is understudied in communication research, yet it has profound real-world effects on the billions of NHAs killed annually in the food industry, cultural acceptance for the rights and welfare of *all* NHAs, promotion of anti-instrumental and altruistic moral values in society, equitable global food distribution and human health, and environmental protection, including the critical issue of global warming (FAO, 2006; Singer & Mason, 2006; World Watch, 2004).

While this study focuses on the communication challenges facing AROs, the findings can be abstracted to apply to the common dilemma of many counter-hegemonic SMOs in balancing ideological integrity and a moral vision with utilitarian concerns about what appeals works.

## **LITERATURE REVIEW**

A constructivist view on communication could bolster the argument that for animal rights advocacy to have integrity, it should connect theory and practice, content and form, by connecting animal ethics (its identifying theoretical truth) with communication ethics (truthful communicative practices); these truths overlap because communication is not just a transmissional vehicle that can be separated from the communicator or the culturally-grounded meaning he/she creates (Carey, 1989; Chandler, 2002; Hall, 1997). As a system of representation in the struggle over meaning, Foucault's notion of a historically and culturally-situated discourse embeds language with a naturalized power to guide ways of talking or acting on a topic, aligning truth with the discursive power to produce it (Hall, 1997). Counter-hegemonic movements are challenged to discredit the "truth" of

hegemonic discourse, which relies on the power of naturalization to conceal subjectivity and make dominant, constructed meanings appear as objective and fixed common sense notions (Hall, 1997).

As a specific type of discourse, ideologies are a guiding political language that signify a normative commitment or orientation (McGee, 1980). Counter-hegemonic SMOs seek ideological transformation in a culture, which requires a frame alignment process (Snow et al., 1986). Frames and ideology are related but not identical; Oliver & Johnston (2005) conceived of frames as reductionist presentation strategies, or recruiting tools, of a larger ideological belief system. Similar to discourse, ideologies serve as both a constraint and a resource to the framing process, and the resulting frames help scholars empirically observe ideology at work (Snow & Benford, 2005).

Communication scholars apply Goffman's (1974) ideas on interpretive schemas to explain how communicators strategically package their ideas through frames in an attempt to manage how audiences make meaning. Gitlin (2003) described the importance of framing to meaning-making by stating: "Frames are principles of selection, emphasis, and presentation composed of little tacit theories about what exists, what happens, and what matters" (p. 6). SMO frames must align with public values through processes of bridging (connecting relevant adherents with issues), amplification (clarifying the relevancy of existing values to an issue), extension (linking to other related causes), and transformation (re-framing and creating new meanings and discourses) (Snow et al., 1986).

Lakoff (2004) noted the centrality of framing to enacting social change, as change cannot occur without issues being strategically *re-framed*: "Re-framing is changing the way the public sees the world. It is changing what counts as common sense. Because language activates frames, new language is required for new frames.

Thinking differently requires speaking differently" (p. xv). Lakoff advised communicators engaged in re-framing to emphasize their own worldview and values, not their opponent's. In support of authentic communication, Lakoff suggested groups "say what they idealistically believe" (p. 20). Lakoff recommended advocacy organizations avoid talking primarily in terms of policy, facts, or negations and, instead, talk in terms of a clear set of simple *values* that accurately reflect what the organization stands for and express its "moral vision" (p. 74). Similarly, Foucault (2000) suggested that discursive transformations rely on criticism of the status quo: "For a transformation that would remain within the same mode of thought, a transformation that would only be a certain way of better adjusting the same thought to the reality of things, would only be a superficial transformation" (p. 457). Transformation requires people to have "trouble thinking things the way they have been thought" (p. 457).

In pursuit of ideological transformation, Cox (2006) acknowledged a key communication dilemma. Society pressures SMOs to use socially acceptable language in order to be heard as credible and reasonable, but it is difficult to appeal to values embedded within the very system SMOs are challenging. In deciding levels of critique for the status quo, Gitlin (2003) noted that SMOs walk a line between being assimilated and "blunted" (p. 290) if they are too moderate and being marginalized and trivialized if they are too critical. Similarly, Tarrow (1998) noted the symbolic dilemma over using *familiar* frames that resonate versus *new* frames that are "electrifying" (p. 107) but are too unfamiliar, as both extremes can result in inaction. Cox (2006) explained that the dominant paradigm of anthropocentric environmentalism claims the realm of common sense to gain legitimacy and portrays more radical environmentalists as unreasonable people who are outside of "symbolic legitimacy boundaries" (p. 61).

Related to this debate over how critical SMO messages should be, SMOs must decide whether to base appeals on the public's individual self-interest or on altruism/morality (Cox, 2006). This question is particularly relevant to movements that work on behalf of other species. Evernden (1985) argued that altruistic, non-anthropocentric appeals are necessary to win long-term support for the environment because appeals to the public's self-interest are ultimately just unproductive short-term strategies that reinforce a view of nature as a resource. Similarly, Francione (1996) advocates that AROs should control the discourse so it remains focused on NHAs and moral issues instead of human self-interest. But Cox (2006) distinguished between the pragmatism and short-term focus of *campaign* rhetoric and the long-term goals of *critical* rhetoric. The former often benefit from self-interested, reasonable appeals, while the latter are meant to more broadly challenge existing values to envision new worldviews.

Rhetoricians Campbell (1989) and Bormann (1971) distinguished between more and less critical, or ideological, framing approaches in historical U.S. rights campaigns. Campbell (1989) identified two major contradictory rhetorical choices made by women suffragists. *Ideologically pure* rhetoric used a more "radical" argument that women deserved natural rights based on the equality guaranteed to citizens via the constitution. *Political expediency* rhetoric used a more utilitarian/moderate approach asking for suffrage because it would be socially beneficial if women could spread their innate moral virtues to the public sphere, better facilitating their domestic caretaking roles. Similarly, Bormann (1971) identified rhetorical styles of *agitator* versus *conversionist* abolitionist speakers. The agitation style seems more radical and aggressive, in content and delivery, than its feminist counterpart, ideological purity, as agitators were more revolutionary in their critique of U.S. institutions. The preferred framing approach is a mix of the two styles. SMO communicators should promote strong

moral values and be uncompromising on rights like the agitators and ideological purists, but they should situate themselves as reformers within American culture and possibly use a softer sell to be more appealing and make progress like the conversionists and political expedients.

In this paper I equate ideologically authentic frames with deontology and expedient frames with utilitarianism, inspired by those two ethical dichotomies within Western philosophy. Public relations ethics literature often favors deontological communication for persuasive communicators for fear that utilitarian choices allow the audience to be disadvantaged or harmed in order to benefit the communicating organization (Fitzpatrick & Gauthier, 2001). Deontological persuasion supports respectful, harm-reducing, equitable, sincere, and truthful communicative means (Baker & Martinson, 2001).

While truthful persuasion requires the message to be both accurate and complete/contextualized (Bivins, 2004), another, often overlooked, component is communicator *authenticity*. Authenticity aligns the communicator and message, requiring the communicator to be true to herself and the audience (Baker & Martinson, 2001; Taylor, 1991). Baker and Martinson (2001) related communication authenticity to virtue ethics, requiring the communicator to be of good character and demonstrate personal virtue in both action and motivation. Authenticity involves virtues such as: integrity, loyalty to stated causes and institutions, and sincerity and genuineness. Authors said persuaders should sincerely believe that the idea they are promoting has the positive attributes they are touting and will be socially beneficial.

Some animal rights scholars and activists argue that AROs should align ideology with strategy for increased ideological authenticity (Francione, 1996; Hall, 2006a, 2006b; LaVeck, 2006a, 2006b). Yet Hall (2006a) noted that few animal protection organizations, even radical direct

action groups, actually promote rights. Francione (1996) critiqued AROs who aren't candid because "it allows animal exploiters to respond that animal advocates are not honest or that they have some 'secret,' agenda, which is arguably harmful to the overall credibility of the movement" (p. 117).

Regarding animal food issues, ARO debates center on promoting rights (veganism and farming abolition) versus welfare (meat reduction or farming reform). LaVeck (2006b) claimed that through promoting farming reforms, activists are sending mixed messages, counter-productively radicalizing veganism, and introducing "moral ambiguity into situations where the boundaries between right and wrong must never be allowed to blur" (p. 23). Yet other activists and scholars disagree, citing utilitarian reasons for favoring farming welfare reforms, such as: raises greater public awareness, drives up meat prices, and incrementally leads to abolition (Park, 2006; Singer & Friedrich, 2006).

A dietary attitudes study (HRC, 2007) suggested that a meat *reduction* appeal is more effective than promoting vegetarianism. Yet, it found that the animal suffering/moral rationale, more so than a health or environmental rationale, is most effective at motivating people to *eliminate* meat (HRC, 2007). Maurer (2002) suggested the vegetarianism, as opposed to just meat reduction, will not start growing unless the movement proves that meat is either dangerous to one's health or immoral.

## **METHODOLOGY**

### *Research Questions*

The first question is inspired by dilemmas over whether SMOs should appeal to human self-interest or public interest (Cox, 2006; Evernden, 1985; Francione, 1996).

1. How and to what extent do frames appeal either to self-interest or to altruism and social responsibility (toward humans and/or nonhumans)?

The second question explores feedback from my interviews with ARO leaders, discovering their motivations and communication strategy considerations. I am particularly interested in whether they are more influenced by deontological or utilitarian principles. This relates to RQ1's categorization of appeals into altruistic, which are likely to be more deontological, versus self-interested, which are likely to be more utilitarian.

2. How do organization leaders explain their framing choices, particularly in terms of ethics and ideology?

### *Criteria for Inclusion*

To be comparable and relevant, AROs selected for this study had to fit the following criteria: (1) have an animal rights mission in contrast to a more moderate welfare mission, (2) have significant focus on ending exploitation of NHAs for human food, such as with campaigns promoting veganism, (3) have campaigns providing a variety of print and electronic advocacy pieces aimed at the public, and (4) be headquartered within the U.S. with at least a national presence.

The following five organizations, listed from largest to smallest, most fully met the inclusion criteria:

1. People for the Ethical Treatment of Animals (PETA): PETA was founded over 25 years ago in Washington, DC. Now headquartered in Norfolk, VA, PETA has expanded to become the largest animal rights group in the world, with international offices and more than 1.8 million members and supporters (About PETA, n.d.). In 2005, PETA had revenues of over \$31 million, employed more than 150 full-time paid staff, had more than 37 million people visit its Web sites, and filled over 650,000 requests for vegetarian starter kits (About PETA Financial Report, 2005). PETA says it "operates under the simple principle that animals are not ours to eat, wear, experiment on, or use for entertainment" (About PETA History, n.d.).

2. Farm Sanctuary (FS): FS was founded in 1986 and has grown into the largest farmed animal rescue organization in the nation, operating sanctuaries in NY and CA, with more than 100,000 members, 75 paid staff, and revenues of over \$5 million (FS Financial, 2006). Its new mission as of 2008 is: "Farm Sanctuary works to end cruelty to farm animals and promotes compassionate living through rescue, education and advocacy." (FS Home Page, 2008)
3. Farm Animal Rights Movement (FARM): Located in Bethesda, Maryland, FARM claims to be the oldest animal rights group dedicated to farmed animal issues, starting in the early 1970s. It has seven paid staff and annual revenues of over \$400,000 (FARM Financial, 2006). FARM defines itself as a "public-interest organization advocating plant-based (vegan) diets to save animals, protect the environment, and improve health" (About FARM, n.d.).
4. Compassion Over Killing (COK): Founded in 1995 as a high school group in Washington, D.C., COK now has six paid, full-time staff and a budget of under \$500,000 (COK Financial, 2006). It has grown to include approximately 17,000 supporters and sends out an estimated quarter million materials a year (Erica Meier, personal communication, November, 14, 2007). Its mission statement says, "COK focuses on cruelty to animals in agriculture and promotes vegetarian eating as a way to build a kinder world for all of us, both human and nonhuman" (COK Home Page, n.d.).
5. Vegan Outreach (VO): VO is a highly focused group which began in 1993 (VO History, 2007). It primarily operates from Tucson, AZ with just three paid staff members and posted

annual revenues of just over \$400,000 (VO Financial, 2007). VO describes itself as "promoting a vegan lifestyle," and "working to expose and end cruelty to animals through the widespread distribution of our illustrated booklets" (About VO, n.d.). More than five million vegetarian booklets have been distributed, the vast majority on North American college campuses (VO History, 2007).

#### *Textual Analysis*

I analyzed electronic and print advocacy materials directly related to "food animal" issues, prioritizing messages designed for direct communication with the public or the organization's members, as opposed to the media, as these messages are more open to being candid rather than tempered by a need to meet newsworthiness criteria. The definition of "food" advocacy includes vegetarian or vegan materials, but it also more broadly includes material addressing the human practice of farming NHAs or fishing them to use for food.

I analyzed both electronic and print advocacy materials being used as of January, 2008. Electronic materials included Web pages and self-produced video footage (including advertisements and animal cruelty footage). Print materials included food-related advocacy for mass distribution, such as vegetarian starter guides, pamphlets, print advertisements, and collateral pieces, including stickers, clothing, buttons, and posters.

#### *Interviewing*

Interviews with organization leaders provide historical context for framing strategies over time and insight into message motivations and intentions. Using an interview schedule of open-ended questions with an informal structure, I conducted phone interviews in early 2008 with the executive directors or presidents at each ARO. The five ARO leaders I interviewed were: Erica Meier (COK), Alex Hershaft (FARM), Gene Baur (FS), Bruce Friedrich (PETA), and Matt Ball (VO). As

founders, Alex, Gene, and Matt have intimate knowledge of organizational history. An exception was made regarding who was interviewed at PETA because its founder and President, Ingrid Newkirk, was traveling abroad and unavailable. As VP of International Campaigns, Bruce was a fitting replacement since he has worked at PETA for over a decade, heading up many food campaigns.

## **FINDINGS**

*Research Question One: How and to What Extent Do Frames Appeal either to Self-Interest or to Altruism and Social Responsibility (toward Humans and/or Nonhumans)?*

I found ARO advocacy frames appeal to concerns over animal suffering and commodification/cruelty, unnecessary killing, human health, and environmentalism. While some mention meat reduction, they all promote vegetarianism as a preferred solution to proposed problems with meat and agribusiness, but based on what type of appeals? The AROs' primary purpose is the altruistic protection of NHAs, so to what extent do AROs emphasize a concern for NHAs and fellow humans (others) rather than human self-interest?

*(RQ1) Emphasis on NHA Altruism versus Human Self-Interest*

All AROs put an emphasis on promoting an altruistic concern for farmed animals, primarily through dedicating much space to the topic and displaying farmed animal photos throughout. VO and COK put the largest proportion of emphasis on NHA issues, while FARM may be said to put the least. Alex (FARM) admitted that his organization mainly promotes vegetarian foods based on human self-interest. FS and PETA have the resources to rhetorically branch out, but they still spend the majority of their space promoting NHA-centric values rather than anthropocentric values.

Each VO booklet cover features photos of farmed animals, not humans, and uses the word "suffering" or "cruelty," to emphasize welfare. Approximately 13 of 16

pages of its two most popular booklets are focused on NHA altruism, with the self-interested health and food-oriented pages toward the back. COK's *Vegetarian Starter Guide* dedicates just over a quarter of its pages to farmed animals. While the farmed animal section is twice as long as health or environmental sections, it is positioned after the health section. Similarly, FS's *Guide to Veg Living* puts the NHA section after health, with the exception of the opening page focusing on famous vegetarians' altruistic rationales. One quarter of the guide is dedicated to NHA altruism, with the cover featuring cows, not humans.

PETA probably appeals to human self-interest slightly more often than most AROs in this study, with the possible exception of FARM. Anthropocentrism is evidenced, in part, by PETA's greater use of celebrity images (who serve as the only beings on its veg starter kit) along with its greater emphasis on the value of health and attractiveness (including sex appeal and weight-loss). But PETA's extensive goveg.com site lists "cruelty to animals" and "amazing animals" as the top links under the "Why Vegetarian?" section. And PETA's popular *Chew on This* DVD lists thirty reasons to go vegetarian, nearly two-thirds of which focus on farmed animals (yet health issues get more prominent placement).

*(RQ1) Environmental Messages, both Altruistic and Self-Interested*

Each ARO includes messages dedicated to environmental values, with VO using this appeal the least. Because of humans' ecological interdependence with the natural world, environmental values are considered both self-interested and altruistic, yet either aspect can still be emphasized. For example, PETA's online "what you can do" section portrays this altruistic message, among others: "Switching to a vegetarian diet reduces your 'ecological footprint,' allowing you to tread lightly on the planet and be compassionate to its inhabitants." However, PETA's teen booklet appeals more to self-interest by placing a visual emphasis on risk by

featuring toxic icons and a polluted stream. It also shows a gas pump, which signifies expense and security in today's political climate.

FS's environmental section of its vegetarian guide emphasizes the urgency of the need for dietary change based on the largely self-interested reason that otherwise "the valuable resources on which our lives depend will continue to be eroded, depleted and polluted beyond repair," but most of the messages following this highlight risks to *both* human and nonhuman populations. COK's vegetarian guide's environmental section is evenly split between self-interest (avoid pollution and toxins) and altruism (increase energy and resource efficiency and ocean biodiversity).

*(RQ1) Anthropocentric Altruism*

Of all AROs, PETA puts the most emphasis on altruism toward other humans in its extensive goveg.com site that discusses rural communities, workers, and human hunger. But these issues are not highlighted elsewhere, such as in PETA's print pieces. FS has a small section on rural communities in the factory farming section of its Web page and occasionally mentions hunger and worker issues in other materials. FARM is the only ARO to dedicate a whole campaign to human hunger, but it does not have a domestic focus on rural communities or worker issues. When considering all ARO messages as a whole, anthropocentric altruism is dwarfed in comparison to the emphasis on NHA altruism and even, to a lesser degree, human self-interest.

*(RQ1) Mental Health and Morality: How Self-Interest Overlaps with Altruism*

The idea of altruism is not always devoid of self-interest. For example, Matt (VO) called the choice between self-interested and altruistic appeals a "false choice" because, by appealing to people's ethics, you *are* appealing to people's own self-interest. He said being vegetarian "can really add to the meaning of their life – to their ethical satisfaction – to their fulfillment as a person." In basic terms, doing good makes you feel good, and AROs often

mention this mental benefit to the public in conjunction with moral messages about how their vegetarianism prevents animal cruelty or environmental devastation. For example, they emphasize altruistic values such as "making a difference" and experiencing "moral integrity," indicating a sense of pride in one's choice to go vegetarian for ethical reasons.

*Research Question Two: How Do Organization Leaders Explain Their Framing Choices,*

*Particularly in Terms of Ethics and Ideology?*

Here ARO leader responses from interviews are categorized into two communication ethics approaches of deontological (authenticity in representing animal rights ideology and concerns) and utilitarian (what works to most help NHAs), which are not always mutually exclusive. This section first discusses leader motivations for choosing NHA-centric appeals versus anthropocentric appeals. Then, their decision-making rationales within the NHA-centric appeals are discussed, including their choice of visuals and welfare versus rights appeals.

*(RQ2) Motivations for AROs in Choosing Whether to Appeal to Concerns for NHA Altruism or Human Self-Interest*

VO and FARM are admittedly the most utilitarian in communication choices, even though they use different messages in pursuit of the same end result of encouraging veganism or reduced animal consumption. Matt (VO) believes that many people, especially collegiate youth, care about animal suffering, so VO emphasizes a cruelty message with this target group because he believes this message is "strong" enough to inspire some readers to change their diets. Matt thinks a self-interested health or environmental message may initially create more "agreement" about the need to change or greater willingness to "consider" the message, but it is ultimately not "strong" or compelling enough to spark such a significant lifestyle change for most.

Of all ARO leaders, Alex (FARM) had the most utilitarian viewpoint. He

believes that most Americans think of other animals as “resources,” with some exceptions for companion animals. Therefore, Alex thinks animal suffering frames are less influential at getting most Americans to change their diets than higher priority, self-interested reasons such as the “availability, taste, cost, and ease of preparation of meat and dairy alternatives,” health concerns, and environmental concerns (listed in order of how Alex perceives their motivating influence). He says FARM emphasizes self-interested reasons such as the “attractiveness of vegan foods” over more altruistic reasons because appeals to self-interest are more likely to work when asking consumers to make a change as “fundamental as what they consume three times a day.”

No other ARO leader said his/her group used primarily self-interested appeals, as the rest prioritized animal cruelty messages. Gene (FS) did admit he thought the health argument was probably the most convincing at getting people to go vegetarian. Yet, despite this belief, FS still uses concern for farmed animals, not health, as its main message because FS is trying to appeal to people’s “hearts.” Therefore, even though the end result of FS and VO is similar in their choice to emphasize NHAs, FS’s choice is more influenced by deontological or ideological concerns than is VO’s.

*(RQ2) Motivations for ARO Choices Made within NHA-Centric Messages*

*Choosing to emphasize welfare or rights.* Despite FS’s deontological motivations, Gene (FS) claimed that FS “marries” ideology and utility in its overall message strategy. For example, within the spectrum of NHA-altruism appeals, FS, like most AROs, is more utilitarian in its communication decision to reach people “where they are;” Gene (FS) believes most people already care about animal welfare, so he does not seek to move them to animal rights but rather asks them to simply “evolve” to expand their welfare concerns out from companion animals to farmed animals. Gene (FS) said, “I don’t think

there’s a conflict, really, between the values that we’re promoting and the values that most people hold,” which he described as “humane” and “compassionate.”

Similarly, every ARO rarely challenges people’s basic speciesist worldviews and chooses simply to appeal to people’s existing, mainstream animal welfare concerns over animal suffering and cruelty. Bruce explained PETA’s choice to tap into the public’s existing desire not to cause cruelty to animals:

Everybody I’ve encountered in my speaking with people about animal issues is opposed to cruelty, so it’s really just a matter of helping them to understand that their own food choices, if they are eating meat, are out of integrity or out of compliance with their basic values.

Most ARO leaders use the word “evolve” or “extend” to suggest that the main change in attitude that needed to happen was for Americans to transfer their existing animal welfare concerns about companion animals over to animals who are used for food.

To accomplish this, most AROs seek to raise public awareness that farmed animals *can* experience suffering while informing people that farmed animals *are* suffering greatly, especially in factory farms. Gene (FS) explained:

In order to protect something or somebody, it is very helpful to know and understand that something or somebody. A big part of FS’s message is that these are living, feeling beings and they suffer just like your cats or your dogs might suffer. So we try to make it *relevant* for people that way. That they are currently being abused in mass and it’s just, just, just ... wrong.

*Choosing visuals of NHAs.* FS, COK, PETA, and VO emphasize sentience and suffering using two types of visuals (1) happy photos of contented animals



displaying their “personality” (per Gene) and just being “who they are” (per Erica), and (2) sad or graphic photos of suffering in factory farms. For the former “non-abuse” visuals, Erica (COK), Gene (FS), and Bruce (PETA) all said that they chose photos that allowed viewers to look into the faces, and particularly the eyes, of the farmed animal. In an attempt to create a connection in viewers’ minds between the similar sentience of farmed animals and companion animals, Matt explained that VO likes to use photos that show people interacting with or petting farm animals, so “people can see pictures of people in a way that looks like a person with their cat or a person with their dog, but it’s with an animal that they are generally used to eating.”

When choosing factory farm photos, Bruce (PETA) emphasized “empathy” while Gene said he wants the photos to “touch people viscerally” and “to, I don’t want to say shock but, to expose the realities of factory farming.” Erica said COK uses confinement photos more than slaughter photos because the public can better “relate” to confinement than killing, and it might facilitate people “putting themselves in that situation or seeing their dog or cat” in a crate. Matt said VO makes utilitarian decisions about using factory farm photos that are “powerful” enough to be affecting without being so “gory” that people will avoid reading the booklet:

We don’t want to pick the goriest pictures to give people more of an excuse to write it off as propaganda, but we don’t want to tone down our message so much that even the people that say “I can’t look at that” will look at it because it takes away too much of the power of the message – the reality of what goes on in factory farms. We are trying to be somewhere in the middle that will influence the most number of people.

While all AROs believe they are showing the public the “reality” and “truth” of

what goes on in factory farms, Bruce (PETA), Alex (FARM), and Matt (VO) specifically mentioned visual honesty in the interview. Bruce said PETA’s images are “a *representative* sample of the abuses that are standard.” Alex said FARM used, “whatever works. I mean as long as it doesn’t distort the *truth*. We focus on whatever we feel would catch us more attention.” So, FARM’s utilitarian visual strategy is tempered by the deontological concern of truthfulness. Matt (VO) emphasized truth more than drama so that no one thinks it is sensationalized propaganda.

*Choosing whether to compare human and nonhuman animals.* All of the ARO leaders believe humans are animals, but when each ARO leader was asked whether promoting similarity between humans and other animals was part of their strategy, only Bruce (PETA) and Gene (FS) said it was. Bruce (PETA) said, “For the same reason you wouldn’t eat a human being, you shouldn’t be eating a dog or a cat or a pig or a fish.” Gene (FS) said, “Inherent to our message and to our mission is the recognition that the other animals have feelings and value and interest in their own right.” Alex said FARM only “tangentially” promotes similarity by conveying that we all have the right to have our basic needs met, and “the most fundamental need is the need to live.” Yet, none of the AROs actively promote or privilege a direct similarity between humans and other animals in their advocacy materials.

*Simplifying animal rights ideology.* Overall, AROs, especially COK, FS, and PETA, often simplify their deeper animal ethics philosophies to create communication strategies based on more shallow or popular ethical sentiments. Despite being a rights organization, FS’s messages tend to avoid using the word *rights* in favor of the word *compassion* because the latter represents a convergence between animal rights and welfare:

The word “compassion,” I think, is very important in the animal movement and we need to, in my view, it is a strong word and it embodies what our movement should be about. And it’s not divisive within our movement like rights versus welfare has become.

Similarly, Bruce explained that PETA prefers to focus on promoting compassion and to “stay out of the more academic utilitarian versus deontological versus whatever you want to call Gary Francione’s ethic discussion.” While Bruce thinks all animal rights groups agree with the basic premise of PETA’s mission that “animals are not ours” to use as resources, the focus of the ARO’s work and messages should be on the “issues.” He said, “PETA tries very hard to focus on ‘brass tacks’ issues rather than to get mired in any sort of philosophical disputes.”

COK also simplifies philosophy by making the popular idea of being compassionate toward NHAs easy for the public to practice by “simply” going vegetarian. Erica said COK’s goal is to “make the idea of not eating animals a mainstream issue – to bring it to the forefront, make it a household term, make it *accessible* to people, make them realize how *easy* it is to simply stop eating animals.” She said: “We are now trying to offer the general public a pragmatic view of *how* they can take steps to help animals. We try and offer tools, not just providing them with *reasons* why they should be vegetarian or vegan.”

*Separating animal rights ideology from strategic communication.* Rather than simplifying ideology, some AROs separate their ethical philosophies, to some extent, from their communication strategies to focus on whatever works best. The latter is especially true for FARM’s and VO’s utilitarian strategies. Alex explained that FARM’s motives differ from its strategies: “Well, our message strategy is always determined by our audience ... But our motives are to – those of bringing justice

and fairness to the rest of the animal kingdom that we have been exploiting so ruthlessly.” He admitted that the two are separate with the statement: “If we appeal to their self-centered interests by talking about the desirability of vegan foods, it has nothing to do with their view of animals.” Even though Alex is an avid animal rights advocate, he pragmatically explained, “We feel that that’s too difficult an issue for a small organization to tackle. So we really don’t try to change American values *visa vi* animals.”

Another utilitarian, Matt (VO), explained that the differing animal ethics philosophies of he and his co-founder, Jack, do not have to perfectly synchronize in all aspects, as VO focuses on where they “converge” with each other and with the views of the public – on the issue of suffering. Matt explained:

We don’t have to come to an agreement of what animal rights or animal liberation is between us because the bottom line is that there is so much suffering that it doesn’t really matter if you’re a deontologist or a utilitarian.

Matt said VO does not present information to the public “in terms of animal rights” nor is it “based on philosophy.” “We’re not trying to have people agree with Tom Regan or Peter Singer,” he explained. “We’re trying to reduce the amount of suffering as much as possible.” In support of his utilitarian emphasis, Matt’s message is “based on what we’ve found over the years that has been effective at creating the most amount of change in people’s habits.” Essentially, VO does not feel it needs to *persuade* people about ethics but rather “Our message is more a matter of *presenting information* – the reality of factory farms – to people so that they can see these things and make an *informed choice*.”

## **DISCUSSION**

*RQ1: Self-Interested versus Altruistic Values*

All of the AROs, with the exception of FARM, prioritized altruistic values toward NHAs over anthropocentric or self-interested values. For ideological integrity, AROs should list altruistic appeals toward NHAs first in all communication pieces that include a variety of rationales for veganism. While deontological, this emphasis on altruistic values fits with the Humane Research Council's (HRC, 2007) finding that animal suffering frames are effective and Maurer's (2002) theory that emphasizing the immorality of meat-eating is essential to increasing the number of vegetarians, as opposed to just encouraging meat reduction.

Appeals to the self-interest of health can simultaneously promote altruism by including the mental health benefits, such as consonance and pride, that vegans may experience from acting compassionately and making a difference. FARM was the ARO who prioritized health and food attractiveness frames based largely on human self-interest. In fact, Alex from FARM spoke in the interview as if he saw himself more as a marketer of vegan food *products* than a marketer of a social *cause*. However, similar to Evernden (1985) and Francione (1996), I argue that prioritizing altruism over human self-interest more authentically reflects the AROs' primary commitment to NHAs, specifically, and social justice, generally.

To further reflect this dedication to NHA protection in support of overall animal rights, AROs should place greater emphasis in environmental frames on the negative effects of animal agriculture on wild animal species and their habitats. General discussions of pollution are open to interpretation to be perceived in terms of altruistic or self-interested concerns. This ambiguity can serve the utilitarian purpose of widening its appeal to a variety of readers who have different interests, but it lacks the deontological and transformational purpose of explicitly advocating for the inherent value of nonhuman species.

Overall, most AROs followed Evernden's (1985) recommendation to use

altruistic, non-anthropocentric appeals. However, because AROs placed higher emphasis on problematizing animal suffering (welfare) rather than on the injustice of enslavement and killing (rights), they did not significantly work toward Evernden's suggestion of pursuing a long-term strategy that challenges instrumental worldviews toward NHAs. To the extent that frames were less critical, they could claim to be following Cox's (2006) recommendations for the pragmatism of short-term *campaign* rhetoric. But I argue that many of these ARO communication pieces did not fully take the opportunity to function as *critical* rhetoric meant to more broadly challenge existing values and worldviews, even though they were designed for direct distribution to the general public and not as moderate, reform materials aimed at the news media, legislators, or industry.

#### *RQ2: Ethics and Strategy in Communication Decision-Making*

Most ARO leaders used a blend of deontological and utilitarian approaches to communication decision-making. All AROs except FARM were more deontological in their overall choice to be more NHA-centric than anthropocentric, but within the spectrum of these NHA-centric appeals, all AROs often leaned more toward utilitarianism in their choice to privilege animal *welfare* frames over animal rights frames, as the former is more widely-accepted. AROs frequently asked people to broaden their existing animal welfare concerns out from companion animals to farmed animals. To put this approach in terms of the frame alignment process, it is an example of frame bridging but not an evolution in taking people from welfare to rights, which would be closer to ideological frame transformation (Snow et al., 1986).

In this frame bridging process, AROs tended to use a two-pronged strategy of getting people to recognize 1) farmed animals as sentient beings, like dogs and cats and 2) farmed animal suffering in agribusiness. Approach one is more aligned with an animal rights perspective to see farmed animals as fellow subjects, but the

frame could become transformational by including more direct comparisons to the *human* animal to deconstruct the human/animal dualism. Approach two is more aligned with a welfare perspective to emphasize a *cruelty or suffering* frame instead of putting these within the context of an overall *injustice* frame critiquing the ownership, breeding, and exploitation of the bodies of fellow subjects. In deciding which visuals to use to highlight the animal cruelty frame, all AROs were deontological in choosing images that are truthful and reflective of standard agribusiness practices, but they were utilitarian in seeking pictures that would emotionally affect people enough to inspire change without repelling them.

Regarding the connection between animal ideology and the AROs' message strategy, AROs either separated the two or simplified deeper philosophies to gain greater consensus at a shallower level. FARM, and VO, to an extent, tended to take the former route of selecting strategies largely based on utilitarian concerns for what works best to get people to go vegan or to reduce consumption of animal products rather than privileging messages that best promote animal rights ideology. On the other hand, COK, FS, and PETA were more deontological but still ultimately utilitarian in their preference for simplifying animal rights ideology in their messages to appeal to more widely-accepted aspects of animal ethics, such as compassion and welfare. VO did this too, but Matt was overtly utilitarian in his admissions that (1) he knew VO's focused behavioral messages were limited to helping only *farmed* animals and not animals in other exploitative situations, and (2) he might be willing to discredit animal rights if it would get more people to stop eating animals. This illustrates how an ARO can emphasize animal cruelty, an ethical issue, in support of an animal rights goal, veganism, yet not be committed to promoting the kind of animal ethics framing that is authentic to animal rights ideology and serves the

broader, long-term goals of the animal rights movement.

Regarding the AROs' tendency to embrace popular values and consensus, many ARO leaders seemed to see their message strategy as more *informative* than persuasive, as they often described their messages as providing "facts" and "reality" and appealing to animal welfare values the public already holds. I concluded that ARO communication messages could be conceptualized as a more progressive version of journalism that is largely providing a different and untold perspective on agriculture so as to enable consumers to make more informed choices in the marketplace. While the public needs to be educated regarding problems with an animal-based diet, AROs should not shy away from taking Lakoff's (2004) advice and embracing a more openly persuasive role in reframing ideologies and accurately expressing their moral vision in support of frame transformation (Snow et al., 1986) rather than just consumer behavior changes.

I conclude that AROs' common use of animal *welfare* values is moderate enough to keep them within "symbolic legitimacy boundaries," (Cox, 2006) yet the sheer magnitude of the animal suffering they expose on factory farms is powerful enough to keep even this moderate welfare message from being blunted (Gitlin, 2003). However, this suffering frame runs the risk that industry can counter-frame itself as solving the problem through humane reform, however misleading that may be, thereby assimilating the issue. Therefore, AROs should frame exploitation and unnecessary killing as the primary problem, within a meta-frame of justice, so their messages retain a critical and ideologically-authentic edge.

ARO in this study loosely followed Bormann's (1971) and Campbell's (1989) rhetorical advice by often using a moral message and having it be culturally resonant, positive, nonthreatening to the republic, and sometimes even patriotic. However, AROs emphasized expediency in

their choice to moderate this moral rhetoric, constraining it to welfare appeals rather than more openly appealing to more ideologically authentic concepts like rights and justice. AROs often used animal *welfare* ideology to achieve animal *rights* solutions. If frames can be perceived as a recruiting tool for ideologies (Oliver & Johnston, 2005), then these AROs are recruiting based on an expanded notion of animal welfare ideology more so than rights.

If AROs are to follow in the footsteps of now celebrated human rights leaders, they need to use messages that maintain ideological integrity by unabashedly asking for rights based on a consistent and fair application of the principles of justice and freedom that resonate within American culture. This ideological integrity in social movement discourse can enact a *true* transformation, conceptually not just behaviorally, only if it successfully results in people having “trouble thinking things the way they have been thought” (Foucault, 2000, p. 457).

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## **A Scenic Landscape or Devastating Catastrophe: Risk Communication through the Eyes of Photography**

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### **Abstract**

*Environmental photography, an effective form of risk communication, can transcend linguistic boundaries and convey realistic implications of an environmental crisis to a global audience. Because of the capacity for direct impact from emotionally charged images, photographs depicting environmental damage can either objectively inform an audience of implications and threats, or subjectively slant the image to advance a particular agenda. For this reason, a viewer's ethical responsibility to understand the framing of the photograph in relation to the context of the larger environmental crisis is important for deciphering the level of truth in the image. This paper threads the theoretical frameworks of Aristotle's appeals to persuasion, Mikhail Bakhtin's ideological chain, and Kenneth Burke's terministic screens throughout the discussion of ethical environmental risk communication to highlight the value of photography within this discipline. Through a visual analysis of two contemporary photography projects, The Canary Project and Subhankar Banerjee, this paper will demonstrate the importance of viewers as "ethical agents" and illustrate the necessity for critical examination of photographs portraying environmental crisis.*

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Risk communication poses a challenge for environmental scientists for two main reasons:

- (1) A scientist's clear understandings of complex risks do not always convert over to their non-scientific audience, and
- (2) Because risks forecast, and are thus not based in reality, conceptualizing the magnitude of their implications is especially difficult. Crisis communication often shows the aftermath of the implications, and can be helpful in demonstrating the harmful effects. However, by that time, environmental risks are much harder to reverse.

According to William Leiss and Alan Powell, "Good risk communication practice seeks to bridge [the scientific and unscientific] divide by ensuring that the meaning of scientific risk assessments is presented in understandable terms to the public" (Leiss & Powell, 1997, p. 4). Although graphs and charts condense complicated scientific text

and present information in a format that illustrates conclusive connections, this mode of presentation has major oversights. "If the aim of risk communication is to persuade and initiate behavior change," states Isaac Lipkus, of the Duke University Medical Center, "then it will become important, from a theoretical perspective, to disentangle these effects" (Lipkus, 1990, p. 160).

Environmental photography performs a vital role in risk communication because it has the unparalleled ability to "affect risk perceptions by making a hazard easier to imagine" (Lipkus, 1999, p. 150) and directly portraying risk implications. Although reading scientific data or seeing a graph with numerical information can offer helpful insight on specific details concerning the risk, photographs leave a lasting impression in a viewer's mind. In fact, research estimates that we receive 75% of our daily information through vision (Berger, 1989, p. 18), thus exemplifying the significance of visuals on our perception



and comprehension of the magnitude of environmental risks.

Lipkus predicts that “visual displays of risk will become increasingly important as communication aids, especially with the accumulating evidence that a significant proportion of people have difficulty grasping and using numerical risk” (Lipkus, 1999, p. 149). Numerical data and scientific facts do not vividly communicate implications of a risk as effectively as do photographs, which “attract and hold people’s attention [by] display[ing] information in concrete, visual terms” (Paulos, 1990, p. 149).

### **Move to Action**

Photographs, the most powerful persuasive means of environmental risk communication, expressively portray realistic implications. Chad Monfreda writes: “Unless perhaps you’re a scientist, charts and graphs alone are emotionally vapid. Art, however, picks up where science leaves off by emotionally sensitizing us to what otherwise would be mere data” (Monfreda, 2006). Photographers who capture realistic effects on compromised ecosystems in one shot can powerfully influence a larger range of audiences than can multiple pages of highly scientific text, which reaches the understanding of a very small range of audiences.

In her discussion on the necessity for public concern of environmental risks, Denise Tillery states: “A critical understanding of science is becoming increasingly important for the public to remain engaged in the democratic process and develop informed opinions on technical issues” (Tillery, 2006, p. 325). Because a collective public response to environmental risks are necessary for averting environmental crisis, the means by which risks are communicated must be as explicit and descriptive as possible. While environmental communicators struggle to effectively convey scientific information of specialized terms to a vast range of unspecialized audiences, photography transcends the challenges of “translating” information.

As far back as the fourth century, Greek philosopher, Aristotle, insisted that messages with direct and unambiguous meanings would reach the widest range of audiences. He asserted that information persuasively conveyed through appropriate modes of communication were “charismatic vessels,” by which audiences would be inspired to take to action in response to the message delivered (Aristotle, 1991, p. 277). While uncertainties of environmental risks actually occurring makes clear communication through texts and graphs rather challenging, photographs have the ability to place potential implications within frames of reality. This charismatic vessel of communication enables viewers to understand consequences of risk, and to see how easily local risks can escalate into a global environment crisis. Visual images universalize the message, add clarity to otherwise technical and scientific implications, and make the potential of an imminent risk more concrete.

Lundgren and McMakin maintain that the “ideal model of risk communication is the social constructionist model” (Lundgren & McMakin, 1998, p. 143). By using a picture as a transferable lens to show the tangibility of an otherwise abstract environmental risk, photographers can construct a slice of reality for people who may not have the means to travel to affected geographic locations. This model can be especially beneficial in offering valuable insight into the realities of environmental risks. Richard Jurin said it best when he stated: “Even though you’ve never been to the Amazon rainforest, the Siberian Steppe, or Antarctica, you probably still have some idea what each place looks like and the environmental issues that affect these places” through what you have seen in photographs (Jurin, 2000, p. 17). Each photographer subjectively constructs a social reality in each location based on what they choose to depict in their photographic frame.

Kenneth Burke asserts that reality can only be perceived through frames, or “terministic screens.” These screens orient

us to “see certain things, some aspects of the world, and not others” because as a particular part of reality is *selected*, another part of reality inevitably becomes *deflected* (Burke, 1966, p. 56). By traveling to locations like the Amazon rainforest, the Siberian Steppe, or Antarctica, photographers hold the power to capture and share a selected visual reality, or terministic screen, in order to propagate the truth of environmental risks. Ethical boundaries are crossed, however, when a photographer *selects* one, focused element within the larger picture, which thereby *deflects* from, and possibly skews, the whole reality.

While taking pictures in Antarctica, for example, a photographer may draw attention to the intricate details of an ice particle in the forefront of the shot, while still accounting for the vast depth of the arctic landscape in the background (see figure 1).



Figure 1. Tim Gasperak's 2006 Environmental Photography Invitational Photograph.

Alternatively, a photographer who, hypothetically, visits the same site within only a few hours of the first photographer may instead choose to capture a feeble polar bear (see figure 2). From the frame of the photograph, with no evidence to the contrary, this picture may objectively appear to depict a drowning polar bear, on the brink of extinction, struggling to grasp hold of a quickly melting piece of ice. Outside of that frame, there could, in fact, be a huge mountain of ice only inches away from the polar bear's back paw, from which the small piece of ice became detached.



Figure 2. John Christensen's 2004 photograph Nansen Fjord.

To a viewer who knows little to nothing about Antarctica, and whose social reality is constructed by either figure 1 or figure 2 and their supporting texts, their impressions and knowledge of the same arctic area will be drastically different. Thus, deciphering the placement of the terministic screen in relation to the larger landscape remains an integral part to understanding the amount of truth in the photograph. If the photographer of figure 2 captures the polar bear in order to promote extinction and ice melting without taking into account the huge mountain of ice in the background, emotional appeals dominate the persuasion in the photograph. Considering the difficulties risk communicators face in motivating their audience to change environmental conditions leading to crisis, photographers are tempted to overpower images with emotionally stimulating images in order to promote a particular agenda.

### **Ethos, Pathos and Logos**

Aristotle's three appeals to persuasion play a crucial role in how photographers influence and shape their viewers' perception of risks affecting the environment. Pathos, or pathological appeals, plays on audience emotions, as was reflected in the previous example of figure 1 and 2. Feeding into this, a photographer's credibility, or ethos, remains especially important in a viewer's decision to either credit or discount the framing of reality in the image.

Environmental photographers have an ethical oath to deliver unbiased information. Since they are constructing a social reality for their audience, capturing pure reflections of risk should be an environmental photographer's main priority. While many photographers follow ethical practices when sharing their images, there are others who unethically defect and inappropriately misrepresent reality with the aid of technological tools, such as Photoshop, which they use to embellish or alter images. Consequently, a photographer's ethos plays a crucial role in whether viewers regard their photographs as truth. This might explain a viewer's possible preference to look at the work of a photographer with credible reputation, built upon a history of consistently objective and unadulterated photographs reflecting reality, over a newspaper that may convey the same information about the same issue, but with a much more complicated and technical approach.

Logos is the last appeal to persuasion that must be examined in photographic consideration. If the caption accompanying the photograph with the despairing polar bear in figure 2 notifies viewers that the depiction is not indicative of the universal conditions within the area, it gives justification to the otherwise disproportioned frame. Supporting text helps to provide depth and to shape meaning not otherwise depicted within the frame.

**And Now These Three Remain: Logos, Pathos and Ethos.**

**But the Greatest of These Is Ethos.**

Denise Tillery asserts that, in addition to emotional appeals, experts also need "to understand the role of the author's character in convincing an audience," since it serves as the controlling factor in persuasion. "To project a trustworthy character," instructs Tillery, "a speaker must demonstrate three qualities: practical wisdom, virtue, and goodwill towards the audience" (Tillery, 2006, p. 326). A delicate balance between these three attributes,

which are most effectively established by the reputation of the photographer or their organization, determines how legitimate a viewer should consider a photograph.

**A Cooperative Effort: Ethical Responsibility of the Viewer**

Ethical responsibilities for deciphering reality not only affect the photographer, but also the viewer. Mary Hocks, who writes about a "balanced rhetorical approach" asserts that a photographer's ethical responsibility to objectively and accurately portray the implications of a risk should be met by the viewer's ethical duty to gain the necessary knowledge for appropriate action in response to the risk (Hocks, 2003, p. 644). At the point where the photographer's means of galvanizing their audience to action through realistic terministic screens ends, the prerogative of the viewer to determine the parameters and positioning of the terministic screen begins.

Although emotionally charged images depicting environmental devastations are meant to induce strong reactions as a means to inspire action, viewers must be sensible in appropriately measuring their emotions and deciphering the truth in images. Since environmental photography depicts a frame into environmental circumstances throughout the world, it remains crucially important that a viewer understand the larger picture beyond the framed image to evaluate the accuracy and reality of the situation in its entirety. While many environmental photographers aim to depict the truthful portrayal of particular environmental situations with an unbiased approach, the response each viewer brings to an image becomes influenced by the subjective emotions each person carries with them. Robert Cox asserts: "Ethical orientations themselves emerge from a complex array of social and communicative influences" (Cox, 2007, p.16).

These social and communicative influences correlate with Mikhail Bakhtin's theory of the ideological chain, which

“stretches from individual consciousness to individual consciousness, connecting them together” (Bizzell & Herzberg, 2000, p. 1212). Impressionable individual consciousnesses become filled, and thereby shaped, by socialized images. These socialized images become the links which then connect individual consciousness to individual consciousness. When a viewer sees a photograph, they will understand it in relation to their preexisting knowledge, which is based on their socialized consciousness.

In the same way, the persuasive use of pathetic appeals in environmental photography can stimulate viewers’ emotions based on how humans psychologically respond to images. When the terministic screen of a photograph only captures the emotionally stimulating image, it drives audiences to respond to risks based on their feelings rather than rational reason. Audiences viewing the photograph of a struggling polar bear (figure 2) will likely have the same sympathetic emotional reaction as did the photographer who captured the shot based on the linking psychological consciousness chain. The level of sympathy a viewer has for a vulnerable animal will determine how strongly they react and respond to the environmental risk at hand.

Circling back, Burke expands on Bahktin’s ideological chain theory with his “ubiquity of ratios” idea. He writes that ambiguous interpretations of individuals can arise depending upon when and where the viewer sees the photograph (Burke, 1969, p. 11). Although photographs depict reality, interpretations vary depending upon the social stratification of the viewer, which commands one’s consciousness. A photographer, bundled in a thick winter jacket, capturing a first-hand landscape view of the arctic will attach a different type of value to the photograph than would a New York City socialite at the gallery opening for the collection, who remains physically and mentally distanced from the reality depicted. While the photographer was able to see the frame of the photograph

in relation to the larger landscape, the visitor to the art gallery will understand the image exclusively through that one frame.

Photographs, which are a type of nonverbal rhetoric, have the unique ability to persuade and stimulate action because of their capacity to evoke strong emotions (Kennedy, 1991, p. 172). Burke stipulates that the success of persuasion relies on photographers’ abilities to cater an image to the understanding of their audience. As Aristotle more tersely stated: “You persuade a man only insofar as you can talk his language by speech, image, attitude, *identifying* your way with his” (Kennedy, 1991, p. 55). Because each person attaches a variety of feelings to the same object, a viewer may not necessarily have the exact reaction as did the photographer at the time they took the picture. The following visual analysis will illustrate the importance for both photographers and viewers of honoring their ethical responsibilities for environmental communication.

### **The Canary Project & Subhanker Banerjee**

Two distinguished environmental photography projects, aimed at unveiling the truth of perilous environmental situations and alerting of risk implications, have gained widespread acclaim within the past decade. The convergence of art and science within both projects “convey[s] dynamic truths about their subjects,” and translates the ambiguity of technical science into immediate, emotional realities (Monfreda, 2006).

### **Banerjee’s Muffled Truth: Sabotaging the Communication of Risk**

Subhanker Banerjee, a photographer who traveled through the arctic for fourteen months, released a collection of photographs in 2001, entitled “Seasons of Life and Land,” in which he aimed to “educate the public about threats to the future of Alaska’s remote refuge” (Banerjee, 2008). The candor of his shots startled and shocked many viewers who

were unprepared to face the politically concealed truths regarding environmental catastrophes, which were blatantly exposed in his photographs and revealing captions. This was poignantly evidenced by the actions of staunch museum curators at the Smithsonian Institute, who substituted Banerjee's initially lengthy photo explanations with muted captions, which they claimed to have done for "artistic reasons." Later evidence revealed that bribes from the Republican Senator of Alaska, Ted Stevens, served as the primary motivation for the Smithsonian curators' caption alterations.

The captions had not actually condensed unnecessarily lengthy "quotations describing his 14-month-long photographic quest" in order to make the text more focused, as the original justification for the alternation had been (Olson, 2008). Instead, the curators had purposely extracted information vital to understanding the magnitude of the scientific risks, without which the photographs were incomplete. In her article concerning the relationship between ethics and visual images, Nancy Allen states: "To get the 'whole picture,' a viewer must take the time to read the fine print" (Allen, 1996, p. 95). By modifying the logos element of Banerjee's presentation, the 'whole picture' became seriously impaired. Additionally, Banerjee's main intention of alerting the public to the level of severity in environmental degradation and revealing the "vast, irreparable [human] damage" inflicted on the environment was ruthlessly spoiled when the Smithsonian stifled the integrity of the photographs (Attfield, 1994, p. 61).

In her discussion on visual ethics, Nancy Allen points out: "We hold different expectations and standards for visuals intended to report information. We distinguish between 'art,' which by definition is 'created,' and views of places and information that purport to be 'real,' that is, to be accurate presentations of reality" (Allen, 1996, p. 88). Blurring the boundary between art and news, Banerjee's exhibit

served as an important turning point for the field of environmental communication.

### **A Toxic Haze**

One of Banerjee's most controversial photographs, entitled "Muskox in Arctic Haze," (figure 3) created feelings of rousing discomfort within many viewers. The photograph with the muskox silhouetted by the brilliant vibrant sunset stratum in the sky appears to be a straightforward promotion of the preservation of nature's aesthetic beauty. As their eyes drifted to the caption accompanying the image, the reaction of many viewers became one of dismay and anxiety, as they realized that what lay before them was not a result of nature's beauty, but rather, a disguised example of environmental deterioration.



Figure 3. Subhanker Banerjee's 2002 photograph *Muskox in a Toxic North*.

The commentary succinctly explained that the "toxic pollutants" generating the "intense color" pattern were produced by "almost every pollution element found in the midlatitudes, [including] sulfates, graphitic carbon, mercury, lead, and vanadium." Originating from either a "local source like the Prudhoe Bay oil development complex" or possibly the 4-month occurrence of Arctic Haze, this seemingly beautiful sunset possessed a mean "acidification [which] could prove devastating for arctic ecology" due to the limited amount of "alkaline ions [available] in the environment to neutralize" the pollutants (Banerjee, 2008).

Although “Arctic Haze” had been studied by only a small handful of scientists, many people were enraged that no prior knowledge had been provided regarding a pollution issue that stretched across a skyline the size of North America. As a result, many environmental activists became dedicated to researching the risk and its damaging effects across ecosystems. While Banerjee did his part to convey the implications of the harmful effects of Arctic Haze, he provided just enough information to foster a “balanced rhetorical approach,” in which viewers were motivated by their initial emotional reactions to the photograph to learn more about the risk.

This photograph demonstrates a prime example of the powerful effect successful risk communication should have on an audience. If he had simply described the effect of the chemicals and had not included the photograph, Banerjee’s point would not have left nearly the same impression. The photograph enriched the meanings of the words with which they interacted, and effectively added “layers of meaning to [the] text” (Willerton, 2005, p. 4). The pathos of the photograph was given definition by the accompanying logos of the caption, and vice versa.

German sociologist, Klaus Eder, maintains that “the methods of communicating [about] environmental [risks], and not the state of deterioration itself” gives definition to the issue (Eder, 1996, p. 209). The coupling effects of text and visual image made a statement not just about the detrimental quality of Arctic Haze, but also made people realize the importance for critical evaluation of visual images. The initial impression of what a picture confers does not always correlate with its deeper implications. More simply stated: Things are not always what they seem.

### **The Canary Project**

Since its inception in 2006, The Canary Project has captured photographs from around the world, thus accumulating a

collection of “visual media and artwork that builds public understanding of human-induced climate change [focused on] energiz[ing] a commitment to solutions” (The Canary Project, 2008). Bolstered by its straightforward depiction of extreme calamities caused by global warming, photography captured by The Canary Project has established an ethos dedicated to uncompromised scientific integrity.

By fostering collaborative discussions with “appropriate scientists on a variety of issues,” Edward Morris and Susannah Sayler, the co-founders of the project, diligently work to “draw connections between given impacts and locations” (The Canary Project, 2008). From there, they travel to the locations most affected by climate change in order to spread tangibly obvious effects of this otherwise abstract environmental risk. This project is an especially accessible and pervasive mode of communication because the access to information through environmental photography can serve as a powerful persuasive device, which must consider the “rhetorical and practical dimensions of access” (Tillery, 2006, p. 333). In addition to the rhetorical appeal of photography, this project also provides a simple and direct frame into remote environmental problems otherwise complicated by dense, scientific language.

The honest and forthright approach has built the ethos of the Canary Project. Eric Katz states: “We value [a photograph] in part because of the fact that a particular artist, a human individual, created the work at a precise moment in historical time” (Katz, 1997, p. 96). Sayler and Morris’s photographs do not rely on fancy photographic techniques; they depict factual truths, which require no embellishment due to the sheer weight that the content of the photograph holds.

### **Rising Tide, Sinking World**

In the photograph entitled “Rising Sea Level” (figure 4), the accompanying caption tersely describes the impacts of rising sea levels on one of the most



susceptible cities in the world: Venice, Italy. The dangerous height of the water level in relation to the graves explicitly shows the magnitude of the global warming crisis. Although consequences suggested within the photograph remain explicitly clear, the caption serves as a helpful tool in prompting the viewer to action.



Figure 4. The Canary Project's 2006 photograph  
*Rising Sea Level: San Michele Cemetery. Venice, Italy.*

The incorporation of one, short statistic from the American Association for the Advancement of Science serves two purposes: It reinforces the scale of the implications in the picture, and it also adds depth of meaning to an otherwise technical statistic. At the conclusion of the caption, Sayler and Morris offer the name of Carole Fletcher's book, *The Science of Saving Venice*, in order to prompt the viewer to expand their understanding on the risk. In concert with the picture, the text informs and enlightens viewers, making the scientific information much more consequential.

### **What Can be Said At All Can be Said Clearly**

In the photograph of Gansu Province, China (figure 5), the illustration of camel tracks across the sandy terrain of the desert appears naturally sound and biologically unperturbed.



Figure 5. The Canary Project's 2007 photograph  
*Drought and Fires: Gansu Province. China.*

This image seems completely unaffected by global warming, and without the inclusion of the caption, it seems displaced within a collection devoted to the adverse affects of a calamitous risk. Within just two short sentences, Sayler and Morris reveal an entire biological devastation known as desertification, caused by two interconnected attributions: human activity and climatic variations. The caption of this photograph has a similar effect as that of Banerjee's "Muskox in Arctic Haze" because it reveals the negative effects not initially apparent in the image. This sense of surprise helps viewers remember the image, and more importantly, the negative significance of the risk. Hamilton and Zanna assert: "Negative reactance to losses or risks suggest negative information is weighed more heavily than positive information"<sup>21</sup>. The resonating truth that global warming negatively affects the most unsuspecting environments leaves the greatest impact on viewers. It creates discord between environmental security and instability, and conjures up feelings of apprehension concerning environments previously unaffected by the blight of global warming. On a more personalized level: this photograph ingrained doubt into the minds of many, presenting the unavoidable truth that global warming affects even the most unsuspecting of environments.

### **Self-Educating Prophecy: Filling in the Gaps of Interpretation**

Because environmental photography has the ability to either objectively convey, or subjectively slant, reality, photographers hold great power over how viewers perceive, and thereby react to,

<sup>21</sup> D. L. Hamilton & M. P. Zanna. Differential weighting of favorable and unfavorable attributes in impression formation. Unpublished manuscript, Yale University, 1972 (p. 208).

environmental risks. Although photographers provide valuable insight onto the realities of environmental risks, equally essential on the part of a viewer is the obligation to critically examine the deeper implications in the image.

In Kirk Hallahan's discussion of the framing paradigm, he writes about the simultaneous photographer-viewer relationship with the photograph. A photographer's construction of messages within the images, writes Hallahan, is met with the "underlying psychological processes that [viewers] use to examine [photographs], to make judgments, and to draw inferences about the world around them" (Hallahan, 1999, p. 206). Sufficient knowledge of an environmental risk is necessary for proper and effective action; thus, the photograph must be powerful enough to motivate the viewer first to learn about the risk, and then appropriately change the circumstances paving the path towards the impending crisis.

In a study conducted by Carolyn Rude, she found that scientific data by itself is not sufficient to persuade a skeptical audience because a model of risk communication that relies on one-way communication from experts to the general public often proves unsuccessful (Rude, 2004, p. 275). A photographer's depiction of the implications of a risk can plant a seed enticing a strong emotional reaction, but the viewer must meet the efforts halfway, and germinate the seed by investigating the calamity of the risk beyond simply its implications. In Stanley Fish's model of "interpretive communities," he asserts that audiences must be "informed" and educated" in order to discover truth (Fish, 2007, p. 175).

### **Conclusion**

Environmental photography serves as the most effective tool in conveying environmental risks to both specialized and non-specialized audiences. The immediacy of information and lasting impression photographs leave in a viewer's memory has the unrivaled capacity to stimulate

action as compared with text. As Ludwig Wittgenstein aptly asserts: "What can be shown cannot be said" (Umphrey, 2002, p. 93). Photographs depicting the environmental implications of risk alert audiences of actual occurrences around the world, and show the pattern of interconnectedness of risks. Although clean water and healthy air may exist on one part of the earth, they could be a commodity for people in another part of the world. Environmental risks are especially important to recognize and respond to because, due to the interconnectedness of the world, these risks will eventually affect us all.



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## **Participant Visual Ethnography: The Experience of Environmental Art**

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### **Abstract**

*This study combines participant observation and photovoice documentation to examine the experience of site-specific, nature-based art. Twenty-four participants generated 70 pages of written narrative and 139 photographs during 72 collective hours at the South Carolina Botanical Garden. The sculpture program's stated goal of producing unique, extra-ordinary experiences for garden visitors is evaluated through analyses of the participants' observations and photographs. The authors argue that participants' initial reactions are marked through tensions created when the site specific, nature-based characteristics of the artwork fail to meet with expectations for orderly arrangement and comprehensible utility. However, the tension generated through the apparent failure to generate immediate comprehension and appreciation is found to be ultimately resolved through contemplative engagement. The unexpected encounter with an unmarked formation, deliberate yet naturalized, offers the viewer an experience beyond the order and utility that generally define our world.*

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*"The scientific mind is a feat of evolution. The creative mind emerged from a primitive quest for understanding" – Mia Hanak, Founding Executive Director, Natural World Museum (2007, p. 170)*

*"Natural space [is] experienced through hearing, seeing, smelling, tasting and touching. By means of the smallest possible interventions, living three-dimensional natural space is re-organized, unlocked and put under tension" – Nils-Udo, nature-based artist, Towards Nature (2002, p. 174)*

Spread over 300 acres, the 15 nature-based sculptures of the South Carolina Botanical Garden (SCBG) are creative interventions developed with local, natural materials to suit their separate, unique sites. For example, the series of red clay cubes that make up Karen McCoy's (1999) *Invisible Operations* are spread inconspicuously amongst the trees bordering a wildflower meadow. Yolanda Gutierrez's (2003) *The Devotion of the Sunflower* fills the open space near the SCBG visitor's center with geometric spirals of arcing platforms, flowers, and herbs. Cast unevenly across the grounds, the SCBG

sculptures are especially unique as public artwork for a complete absence of demarcation. The obligatory artist name, sculpture title, year of production, and construction materials are available only through sparse documentation located in the visitors' center. Even the garden's road and trail signage excludes any reference to the artworks. Rather, most sculptures are remotely tucked away along forested walking paths or unidentified clearings, and are therefore discovered by visitors like found objects—unexpected encounters. The moss-covered stone and earth dome of Herb Parker's (1995) *Crucible*, for example, is built unobtrusively into a trailside knoll. *Crucible's* entrance is darkened, and only through curious investigation do passers-by discover the smooth interior floor, spiraling out from a spring-fed pool illuminated by an opening at the structure's apex. Alfio Bonanno's (1997) *Natural Dialogue* rests streamside deep in the garden's forest. The sculpture, which resembles ancient ceremonial spaces, remotely awaits visitors' discovery—this despite the massive cranes necessary to create the megalithic stone formation. Nils-Udo's (2005) *Clemson Clay Nest* once a massive wreath of pine logs

and bamboo cane nearly 15 feet high, has evolved to become a crater-like bowl, a smooth indentation nearly 50 feet in diameter. Udo's "intervention," the "living, three dimensional space" creates the tension he describes within the experience of its viewers (Udo 2002, p.174). This essay considers how viewers' of the SCBG nature-based sculptures experience and resolve such tensions. Through an examination of field notes and photographs, we argue that the common characteristics of the sculptures produce tensions which resolve themselves only through reflective engagement, a process affirming the "primitive quest for understanding" described by Hanak (Natural World Museum, 2007, p. 170).

The sculptures examined in this study make up one of the world's largest and longest-running displays of site-specific, nature-based art (Grande 2008). The SCBG's celebrated sculpture program emerged as a result of the garden's earnest commitment to its motto: "Where nature and culture meet." As a result of this commitment, the conventional display gardens and horticultural education which define the mission of most botanical gardens are supplemented at with a distinct and active Cultural Program. Ernie Denny, the Cultural Program's founding director, coordinates community gatherings, workshops, and university courses in addition to the widely acclaimed sculpture program. Since its inception in 1995, the SCBG's sculpture program has worked with artists of national and international prominence to create 15 nature-based, site-specific sculptures. Funding for the program, including a series of grants from the National Endowment for the Arts, also maintains and cultivates the changing characteristics of the sculptures. Made exclusively of natural materials, including incorporation of living plant material, the sculptures are subject to decay as well as growth in relationship with their placement in the landscape. Thus, the nature-based label references both the materials incorporated and the setting of the artworks.

Similarly, the site-specific label refers not only to the development of an artwork within a particular space, but also the necessity of the viewer to experience the art in that specific setting. Denny echoes Udo as he describes site-specific as referring to "sculptures that 'need to be installed' and that are reliant on the viewer's multi-sensory experience to realize the purpose and meaning of the art" (personal communication, May 21, 2009). The SCBG sculpture program's philosophy has shaped a set of works which simultaneously fit within as well as creatively reinterpret their natural setting.

Part of a movement variously described as ephemeral, nature-based, eco-art, land art, earth art, landscape art and a host of other terms, the SCBG nature-based sculpture program has gained wide recognition for its exceptional quality. John Beardsley, for example, describes the SCBG artworks as "a rich visual, perceptual, and educational experience" (1999, p. 1). Similarly, John Grande, the most prolific writer on the subject of nature-based art, describes SCBG's program as the world model for "ephemeral sculpture," noting that "In an ephemeral sculpture garden, links are established between human culture and the culture of nature" (2008, p. 115). Grande further extols the program's place in contemporary sculpture collections, writing:

The South Carolina Botanical Garden (SCBG) is one of the largest permanent sites devoted to art in the land in eastern North America. It is a living laboratory of natural and human-built structures, supporting "extended ephemeral" projects. The structures evolve, integrate into, and gradually return to nature. The art is site specific but exists in a general garden framework. SCBG offers a prime example of the ephemeral sculpture garden. (p. 116)

Featured in publications as varied as *Smithsonian*, *Sculpture*, *Landscape Architecture*, *Southern Living*, *Elle (Italian)*, *The Daily Telegraph (London)*, and *Public*

*Garden*, the SCBG sculpture program is also modestly unobtrusive in its botanical garden setting. In contrast to the botanical garden norm, the SCBG grounds are not wholly cultivated; rather, nearly half of its 300 acres exist as minimally managed, native forest. Placed in various terrains, without explanation, visitors to the garden experience art out of the expected context of gallery or museum space. The nature-base and site-specificity function to blur distinctions between nature and culture and disrupt the presuppositions attached to public spaces, natural spaces, and artistic expression. The unexpected encounter with an unmarked formation, deliberate yet naturalized, offers the SCBG visitor an experience beyond the order and utility that generally define our world.

#### *The Experience of Nature-based Art*

It is the experience of an unexpected encounter that is both the stated objective of the sculpture program as well as its most enigmatic characteristic. For Denny, the sculptures create the opportunity for garden visitors to have a “non-ordinary experience” (Denny, Wolfe, Dryden and Wang, 2009, n.p.) It is the unexpected encounter with the moss-covered mounds of Trudi Entwistle’s (2000) *Space In Between* or the woven trees and rammed-earth obelisks of Chris Drury’s (2002) *Time Capsule* that can, in Denny’s words, “take a person out of their normal frame of reference” (Denny et al., n.p.). Noting that “industrial cultures do not have mystics, they have artists,” Denny explains the sculpture program’s philosophy as experiential: “whenever you’re taken out of your normal frame of reference, you have an opportunity for that which we refer to as the sacred to speak, leave a mark, bubble up, whatever you want to call it” (Denny et al., n.p.). Similarly, the garden’s commissioned artists identify experience as the central characteristic of SCBG artworks. Alfio Bonanno wrote of his SCBG sculpture that the “key” was “for others who are willing to participate and share this experience...I hope a situation is created for experiencing” (1997, para. 4). Further, just as B&B<sup>1</sup> see their *Stream Path* as “not a lesson but a

proposition” (1998, para. 2) Trudi Entwistle describes not a viewer but a “participant” who can “meditate upon” the work and its space (2000, para. 1), and Brian Rust speaks of how “curiosity draws them” to the art (1996, para. 2), so does Yolanda Gutierrez neatly summarize the program, writing that “The artistic work that we have created in The South Carolina Botanical Garden is intended to invite guests to experience a portion of the landscape” (2003, para 3).

In his robust examination of “contemporary art in the landscape” Beardsley argues that in a world “afflicted with a profound ambivalence toward nature” natural sculptures like those of the SCBG “reveal the world to us anew” (1998, pp. 9-10). Although he questions the potential of artist intervention “compared to the magnitude of the problems” (p. 164) he ultimately concludes that the works of Daugherty, McCoy, and other current nature-based artists provide “one of the primary forms of cultural expression” (p. 201). Additionally, Beardsley writes that:

Every work that engages the landscape underscores the crucial connections between nature and culture and helps to revitalize—and, with any luck, improve—that relationship...[They] can help us decode our multiple, often conflicting attitudes toward nature, reviving old myths when appropriate and shaping new paradigms when necessary. (p. 201)

Beardsley’s optimism, however, is predicated not on the deliberate infusion of ecological politics into the artworks, but on the form of art in the landscape. While Grande defines the program as “proactive,” writing that “the South Carolina Botanical Garden provides bio-specific prototypes of creativity that...embody an ethic” (2004, p. 51), most assessments focus on non-

specific, experiential qualities. Hammatt, for example, describes the SCBG sculptures as “artistic creations that provide garden visitors with experiences beyond that of conventional plants and habitats” (2001, p. 38), as well as “works that can be continually reinterpreted by garden visitors” (2000, p. 16).

In the art community, nature-based artists vary considerably in their claims to politically infusing their works (Tufnell, 2006; Harper and Moyer, 2008). The SCBG, however, simply presents the sculptures as “anomalies in the landscape,” opportunities for “non-ordinary experience” (Denny et. al., 2009, n.p.). SCBG participating artist Chris Drury, for example, says that he has “nothing to communicate, either consciously or unconsciously; the work simply reflects the moving from moment to moment in the world as it is, and so it is nature itself that communicates” (quoted in Malpas, 2007, p. 189). The SCBG’s “Artist Commission and Contract” is even more explicit:

The sculptural design is to intend evoking a sense of curiosity, wonder, and awe of Nature, and is not to intend communicating personal, social or political ‘commentary’. As such, the guest’s experience of the piece/space is allowed to evoke purpose and meaning (2003, Artist’s Design and Installation Responsibilities no. 6).

The question that drove this study then was not of artistic politics or meaning, but of the experience of the viewer: What is the experience of nature-based sculpture? Or, in Denny’s phrasing, what is it that “bubbles up?” Comprehending participants’ experiences of the SCBG’s nature-based sculpture program is the central purpose of this project. The program’s own focus on generating unique experiences, as well as the characteristics of the nature-based, site-specific works, calls for centering on viewers’ reactions to the sculptures. Therefore, in this essay, we move towards understanding how visitors go about

experiencing the nature-based sculpture program at the SCBG. In the following section, we discuss the research methods employed in this project. Following that, we present the visual and written observations of the participants’ experiences. Finally, we finish the essay by highlighting the implications of our findings for nature-based artists, its purveyors, and visual communication.

### **Documenting and Analyzing Participant Experience**

The visual essence of sculpture, in concert with the experiential basis of our research question, required an approach that combined visual and participatory methods. Thus, in the following section of our essay we proceed with a brief discussion of the process we used to illuminate the experience of viewing SCBG sculptures. An introduction to the study’s participants is followed by an outline of the two methods, participant observation and photovoice, that informed our own process. Prior to presenting the data and our interpretations, we also discuss our analytic procedures.

#### *Participants*

This essay stems from collaboration between Clemson University and the SCBG, located adjacent to Clemson University’s campus. In the spring of 2008, 44 students participated in a broad service-learning research project for the SCBG. Students self-selected into one of four research teams: website analysis, video analysis, survey production, and visual analysis. Twenty-four of the 40 students chose to participate on the visual analysis team and their efforts, and data, are the fundament of this essay. Two training sessions were completed for the students participating in this portion of the collaborative project. These sessions provided background on the SCBG, a discussion of the methodologies, and training on how to record their observations.

#### *Visual Ethnography*

Visual ethnography (Pink, 2004, 2007) most broadly captures the spirit

embedded in this project's ethos. Pink notes that ethnographic research has generated a number of fruitful twists that usefully focus on the visual: "Reflexivity, collaboration, new approaches to ethics and new technologies...in visual ethnography texts...invite new ways of working with people, words and images with an emphasis on the processes of research and representation" (2004, p. 3). Thus, Pink argues, "Visual images, objects, and descriptions should be incorporated when it is appropriate, opportune or enlightening to do so" (2007, p. 6). Given the visual basis of the objects under study, incorporation of visual data seemed not only appropriate, but also faithful to the experiences of the participants. A visual experience calls for visual research. Our concern with centering the visual results in a hybrid approach of participant observation and photovoice. The resulting collection of data provided us not only with written expressions of our participants' visual experiences but also with their own visual expressions.

*Participant observation.* Participant observation is a foundational method for any type of understanding focusing on lived experiences and practices and was thus an obvious choice given the experiential focus of this project. As this project is guided by ethnographic principles, we felt it necessary to compel students, and ourselves, to get to the particulars of the social setting in question (Emerson, Fretz, & Shaw, 1995; Lincoln & Guba, 1985; Lindlof & Taylor, 2002; Lofland & Lofland, 1995). In the best sense, participant observation is research by doing. By "looking and listening, watching and asking," participant observers learn the setting in which they are entrenched (Lofland & Lofland, 1995, p. 19). Participant observation functions as a practical methodology because its use generates descriptions of "the here and now of everyday life" (Jorgenson, 1989, p. 15). In other words, participant observation gives us a glimpse into how people experience the world, in this case, the nature-based sculptures at the SCBG. In this project, the authors stake out a collaborative stance

with the participants of this project. Our students, informed by our lessons, yet destined to explore the world on their own, generate the data for this study and contribute to the analyses.

Student participants were required to spend a minimum of three hours exploring the artistic components of the SCBG specifically, and the experience of the garden, generally. Participants recorded field notes of their experiences at the garden, but were not required to write a minimum amount. Students were encouraged to capture their thoughts, emotions, reflections and criticisms of and about the garden and the art while in the field and after leaving the field. The 24 participants generated a total of 70 pages of single-spaced field notes from nearly 72 collective hours in the field. These written observations were supplemented with photographic documentation employing a variation of what is often referred to as photovoice.

*Photovoice.* A practice grounded in community action through visual representation, Photovoice has traditionally called for researches to empower participants to generate images about their world (Wang and Burris 1997; Wang 2003). Photovoice participants are encouraged to take photographs of lived experiences that the researcher is not (or could not be) aware of. For this project, however, students were given a general framework in which they should operate (i.e., take pictures related to the environmental art at the SCBG and the general experience of the SCBG). Thus, the participatory approach and the photovoice approach were combined in a way that acted interdependently, with the photographic documentation prescribed to the subject of participation and the participatory data impacted by the focus on visual representation.

Concurrent with their field note taking, each participant was required to take a minimum of 6 pictures of the garden art sculptures at the SCBG. In addition, students were instructed to remain on the



lookout for interesting objects, events, places and people that could represent their experience of the SCBG generally, and nature-based sculpture, specifically. Students were required to use a digital camera to capture their photographs, and cameras were made available to those who needed them. Twenty-four students took a total of 139 photographs related to the SCBG and the garden art project. Added to the written observations, we found this hybridity of focused participation and photographic documentation allowed for a rich collaboration between the participants and researchers.

#### *Analytic Procedures*

In order to fulfill the collaborative ethos of this project, the analysis of the generated field notes and images occurs on two levels. On the first level, the notes and images generated by participants in the project contribute equally in the analysis of the SCBG sculptures. The authors join their voices with the experiences of the students who walked the woods and explored the garden. In traditional qualitative research, the data resulting from a study functions as a representation of the world rather than a reflection on that representation. In this project, it is our aim to use the participants' data to reflect on nature-based art, and not merely represent it. On another level, the notes and images generated by the participants are texts upon which we apply a critical lens to elucidate deeper meaning about people's experiences with nature-based sculpture. In the remainder of this essay, it is our aim to include the voices and images of the participants and critique those voices and images in the hopes of providing insight about the function and experience of nature-based sculpture.

The results from the data collected for this project are presented as two principal themes. First, participants' initial reactions to the artworks were expressed largely through a set of commonly experienced tensions. These reactions are organized below by taking closer looks at the participants' expectations for orderly arrangement and comprehensible utility, as

well as the subsequent tensions aroused when experiences fail to meet expectations. The second principal theme discusses how the participants' field notes and photographs illuminate a process of engagement where these tensions are resolved.

#### *Exploring the SCBG: Immediate Reactions*

As discussed earlier, the overarching philosophic motivation of the SCBG sculpture program is positioned by the coordinators and artists as an opportunity for "experiencing," for visitors to be "taken out of their normal frame," and to "evoke a sense of curiosity, wonder, and awe of Nature" (Denny et al., 2009, n.p.). Vastly different from walking through the conventionally ordered space of an art museum, the SCBG strives to generate a "non-ordinary experience" for its visitors vis-à-vis the nature based sculpture program. The SCBG also contrasts itself to more common "plop art" garden programs which place traditional sculptures in a formalized garden setting (e.g., DeCordova Museum and Sculpture Park in Lincoln, MA, Storm King Art Center in Mountainville, NY, Brookgreen Gardens in Murrells Inlet, SC.). Denny notes that, "Sculpture parks are like theme parks. [The SCBG] is an outdoor experience. It's a trail system...[the sculptures are] anomaly in the landscape, asking people to have some repair and repose in the garden. The artists liked the idea because it set their unique creation off in a unique area that was not going to be piggybacked on some other artistic experience." (Denny et al., n.p.). The unsystematic location of the sculptures, their natural infusion and incorporation into the landscape, present garden visitors with artifacts that are at once deeply contextual and out of the ordinary. As the participants of this study set out, documentations reveal a process of tense encounter and engaged discovery.

Although no specific instructions for field notes were given, all of the participants followed the same general model for written documentation. First, they described the process of locating the artwork. Second, they offered a general, initial reaction. Third,

they provided a physical description, often including shape, materials, and color. Fourth, they offered an interpretation of the sculpture's meaning. The following is a typical narrative:

The first sculpture I came to find was that of the Crucible. It was around 5:00 in the evening, yet it seemed much earlier in the day because of the hot sun blazing and the quiet sounds of the breeze blowing through the trees. I came across this sculpture from the backside, so the first thing I noticed was the way in which the bricks were lined and stacked upon each other. They were stacked symmetrically, but the bricks were all different shapes and sizes, so it appeared as though someone tried to piece them together so that they would fit, like a puzzle. I then traveled down the hard stone steps around to the front of the Crucible. As soon as I viewed it from this angle, I thought of it as a small cave in the middle of the forest someone could use for meditation. Inside, the water pit at the bottom seemed as though it should have been a fire pit, where the smoke would raise through the hole at the top of the sculpture- a perfect place to relax in and roast marshmallows with family or friends. It is definitely a site to see and enjoy.

The field-notes provided us with two means of approaching the data. First, because there was such uniformity in the elements of the narrative, we could draw generalizations about their experience in whole. Second, since the notes are narrative in structure, we can consider how the participants were

specifically experiencing the artworks. Each of these approaches is significantly enhanced by incorporating the images participants chose to include with their narratives. Although the photographs were taken and selected by the participants, in many cases, properties of the images such as angle, framing, and distance provided substantive depth to their voices.

Surprisingly, the initial reactions to the SCBG nature-based sculptures were fairly consistent in that the sculptures, and the search for them, created tensions and anxieties. These tensions were subsequently expressed in photographs and field notes as confusion and irritation. Participant documentation shows that viewer expectations conflicted with the central characteristics of the sculpture program—site-specific and nature-based.

#### *Order and Experience*

One area of tension expressed by participants arose as expectations for order conflicted with the irregularity of site-specific art. SCBG sculptures are neither labeled nor provided direction through trial signage. Explained as an extension of the commitment to site-specific work, program literature advocates a "pioneering spirit" to locating the scattered sculptures, stating:

While it may be easier to find the pieces if they were clearly marked, the sculpture program does not intend to present works in a traditional 'quick find' gallery fashion. The majority of participating artists and program administrators agree that the sculptures should be discovered, 'happened upon,' to accentuate their presentation in a natural setting. (South Carolina Botanical Garden, 2007)

Many participants commented on the lack of signage and labels for identifying and naming the sculptures in the garden. Experiencing the sculpture program at the garden showed to be markedly different than participants' presuppositions of artistic display—where artifact titles, artists, medium, and canvas are clearly presented

and neatly organized in museum or gallery space. In the most extreme cases, some participants were unable to locate or discern some of the sculptures at all. One student returned to their notes and photographs to discover that what he had perceived as *Natural Dialogue*, actually, was something altogether different. Labeling their photograph “Outdoor Christmas Tree” (Figure 1), they wrote:

Turns out this isn't Natural Dialogue at all...and when I figured out it wasn't Natural Dialogue, I was disappointed. Again a sign would have been VERY helpful, especially since what I thought I was seeing wasn't what I was seeing at all!

Another participant commented similarly,

I wasn't sure what to expect because the map was weak and I soon found out nothing was labeled. To my dismay, I soon began to appreciate the idea of nothing but plants having labels, after all, it is the South Carolina Botanical Garden.

Signage in the garden, the labeling of the sculptures, and thus, the prescribing of subjective experiences was a central tension for these participants. In addition to an image of a small, underdeveloped plant and its label (Figure 2), a participant wrote:

I took this picture because it best conveys the suggestion that the Botanical Gardens should label its nature-based sculptures. There are labels on everything else, including this small plant; that may look insignificant to some, but there are not any types of labels on any of the sculptures. Simply having the names on the sculptures would still leave a lot of room for the visitors of the Botanical Gardens to create their own interpretations of what the sculptures mean to them (which is

clear from the field notes that I have gathered).

This participant, like many, clearly desires labels and names for the sculptures in the garden. Although they note that labels would “leave a lot of room...to create their own interpretations” the notion embedded in these comments is the desire for guidance toward a “true” interpretation of the art. The image of an “insignificant” plant tellingly places the label at the center, obscuring the plant itself.

Similarly, the map of the SCBG and its features was almost universally maligned by the participants. Consider the excerpt from a participant's field notes: “On my way, I saw the first and only map of the gardens. Unfortunately, it was equally inexact as the one already in my hand lacking a proper identification of trails and sculptures.” Several of the sculptures were specifically difficult for participants to locate, leading to expressions of anger and disappointment. The following excerpts were typical:

The actual location of Time Capsule did not seem to be the same location on the map...I became rather frustrated at this point and wished we had been given a clearer, larger, and more detailed map.

and:

Unfortunately, we had a hard time finding this sculpture...After looking at the map and placing ourselves in the location we thought the sculpture should be, we were slightly confused because we still could not find the sculpture.

Although the SCBG encourages garden visitors to “walk outside,” to use their “pioneering spirit” to discover and locate the sculptures, participants clearly experienced tension. Emphatic demands for labels, signs and maps expressed the dissonance between the experience participants expected and the experience they

encountered. A desire for a theme park, plop-art, archetypal museum experience obviously impressed upon the encounters. *Utility and experience.*

While general impressions focused on the tension created by unanticipated disorder, a second tension is evident in participant's initial reaction to the perceived utility of individual sculptures. Participants persistently sought to make sense of the sculptures they encountered. Meaning, for them, was as crucial to document as the objects themselves. Common elements of the written responses substantiate this point. Certainly, we were not surprised that the participants sought to understand the meaning of the sculptures; there is little in the world people will not approach and desire meaning. Rather, what intrigued us was the clearly evident tension between expectations of utility and the abstraction of nature-based art, a tension that appeared as soon as participants encountered each sculpture.

The most obvious trend across the notes emerged from statements of affinity and dislike. Participants' initial reactions were intractably and often emotionally tied to the perceived function of each sculpture. Where a clear utility could be perceived, field notes consistently reported an initial affinity for the artwork. For example, there was widespread agreement among participants that *Earthen Bridge* was an appealing sculpture. The appeal, however, was clearly tied to its obvious function as a bridge. Typical of this sentiment was the comment that *Earthen Bridge* "was one of my favorite sculptures. I enjoyed the fact that the sculpture actually served a purpose. My first impression of the bridge was positive." Similarly, photographs of *Earthen Bridge* tended to favor angles that highlighted the bridge's connection to the nearby stairs or pathway (Figures 3 and 4). Although the bridge's most distinct artistic feature is the geologic impression given by its profile view, none of the participant photographs highlight this perspective.

While *Earthen Bridge* was predominantly well-received, initial reactions

to most sculptures depended on each participant's attempt at determining utility. One participant remarked appreciatively that the size and visibility of *Devotion of the Sunflower* made it useful as a navigational landmark throughout the gardens, while another found that because it accents the Welcome Center, the sculpture was "appropriate" as a "welcoming statement for the entire Botanical Gardens." These reactions run counter to those who did not perceive utility in the size and placement, but, rather, believed *Devotion* to be "lackluster" as "its close proximity to the house seemed to take away both the mystery and naturalness of the piece."

When no function could be identified, expressions of anger and frustrated dismissal were frequent, with several participants going so far as to question the validity of the pieces as art or sculpture. A number of descriptions of *Devotion* reasoned that since they "did not understand why it was identified as a sculpture," they "felt confused and disappointed." In fact, the level of initial displeasure commonly showed direct relationship to the amount of difficulty they reported in determining a function. Many echoed sentiments like: "This was one of my least favorite sculptures. I could see very little rhyme or reason to its parts." These narratives variously described different sculptures as "a bunch of rocks scattered about," "boring," "something a third grader could make," or "not very exciting."

### **Engaging the Sculptures: The Experience of Resolving Tension**

The initial impressions of the participants certainly call into question the stated goal of the SCBG sculpture program to produce meaningful experiences in garden visitors. Engagement with the artworks is complicated by the participants' affinity for clarity, utility, and definition. The nature-base of the sculptures seems to confound the viewers, while the abstraction of site-specificity challenged their expectations of art. The results represent a disconnect between the desired outcomes

of the SCBG and the reported experiences of garden visitors. However, in this section, we argue that a deeper look into the words and images of the participants reveals that it is precisely this disconnect that leads to the kinds of “non-ordinary experiences” sought by the program. In short, the apparent failure to generate immediate comprehension and appreciation produces a tension that is ultimately resolved through deeper, contemplative engagement.

The focus on function over form in participants’ initial reactions provide a general narrative that utilitarian artwork is the most appealing. However, these first impressions did not necessarily reverberate through participants’ complete experiences. When utility was obscure, the participant’s need to interpret the sculpture’s meaning necessitated an alternative sense-making lens. In this case, the most readily available alternative was personal engagement with the sculpture. In addition, the more difficulty participants had in identifying a purpose for the sculpture, the more detailed and engaged their complete experience turned out to be. Participants’ shift of focus from utility to engagement ultimately led to more enriching experiences.

Descriptions of *Sittin’ Pretty* (Dougherty, 1996) typified the process of initial tension shifting to engaged experience. Several participants noted that on initial contact with the inexplicable “group of intertwined trees and vines” they were “disappointed,” “surprised,” or “not very impressed with the sculpture.” The same participants, however, go on to describe how they engaged with the artwork to seek out further interpretation. One of several initially “disappointed” participants wrote: “as I continued to take many pictures from many different angles, I began to see the beauty...Spring was approaching and the two trees in the middle were beginning to bloom, which made me realize that this would soon be a beautiful structure even though it was not exactly what we expected to see.” Another, initially “surprised,” participant wrote:

It took me a couple of minutes to realize how fascinating *Sittin’ Pretty* really is...This group of trees, which includes an inner and outer connected circle, is very unique. I really like the woven look of the branches that unites them...This figure represents unity to me. It reminds me of some sort of small devoted group who is spiritually very close to one another. The interlocking branches almost appear as people putting their arms around each other.

Similarly, a participant who was, at first, “not very impressed” spent more time experiencing the artwork they “started to see the beauty, uniqueness, and meaning,” interpreting that:

The shorter trees are interconnected and depend on one another for support and strength to support the taller trees. Since it was still breezy outside, the taller trees swayed from side to side in the wind, but the shorter trees remained grounded and never moved. Their solid state in the ground represents their role as protectors.

*Proximity and engagement.* While these comments represent the bulk of participant experiences, reflection and engagement were not always a given outcome. Some participants did not further engage sculptures they deemed uninteresting. Two participants’ narratives for *Sittin’ Pretty*, for example, conclude only that they were “incredibly disappointed” or left feeling “confusion and dissatisfaction with the sculpture.” Neither of these participants appears to have spent any time contemplating the sculpture, to the extent that one provides no physical description whatsoever, while the other took their photo from across a roadway they don’t seem to have crossed. In fact, the photographs provided with these narratives are strikingly similar (Figures 5 and 6). Although each

picture is taken from opposing viewpoints, they are both taken at an equally considerable distance. The photographs suggest that it is this distance from the sculptures that results in a lack of engagement. Indeed, atypical narratives like these occurred only in reference to sculptures which could be seen and photographed from a significant distance.

The implication that proximity is tied to engagement is one made explicit by the words and images of other participants. One narrative, for example, first describes being “underwhelmed” by *Sittin’ Pretty*, writing that “For me it was nothing more than a circle of trees.” Their photograph is nearly identical in its framing and distance to the ones described above. However, this narrative continues:

In taking a closer look and admittedly a bit of time pondering its purpose, I came to take note of its detail. As this close-up image of one of the arches conveys [Figure 7], the sculpture is at once chaos and order, art and nature...It seems that this piece can only be appreciated after seeing the complexity that composes the outwardly simplistic whole.

Another participant similarly described the intricacy of *Sittin’ Pretty*, detailing patterns of branch and root growth. Their description is virtually opposite to the passing dismissal of those who viewed the artwork only from a distance. The image they provided, taken from inside the “circle of trees,” is just as stark in its contrast (Figure 8).

Participant narratives repeatedly expressed the value of closeness in their experiences. Of *Chameleon Meadow* (Dede & Inoue, 2001), one narrative begins “My first impression of the Chameleon Meadow is that it was boring” but concludes “you need to get up close and into it to see the detail.” As evidence, the participant included a photograph they believed was a “representation of the feeling I got when I was there” (Figure 9).

Participants’ photographs show with remarkable clarity how the process of engagement provided insights. In cases where utility was offered as the primary meaning of a sculpture, the corresponding photographs were consistently stale documentations. Wide angles framing the entirety of a sculpture were often taken from identical viewing positions across several participants. However, narratives where utility was replaced or supplemented with personal reflection were dependably accompanied with images that highlighted shape, texture, lighting, relationships, contrast, and other elements of the artwork. One participant expressed their personal experience with *Chameleon Meadow* by offering a set of four photographs rather than the single image required by the guidelines. Noting, “I obviously took quite a liking to this sculpture,” the narrative includes discussion of childhood memories, emotional lifts and falls, whales, teepees, secret doors, prisons, and shadows. The photographs included imagery meant to convey further these ideas (Figures 10 and 11). Variations in the extent of engagement, it should be noted, were not participant dependent. In other words, it wasn’t that some participants reflected more and produced more engaged photographs than others; rather, each participant varied their written and photographic engagement across sculptures depending on their perception of utility.

When the participants sought meaning outside the frame of utility, their engagements rarely left them with simple, predictable, or banal reflections. One interpretation of *Spaces In-Between* generated this elaborate visual analogy: “The rocks reminded me of lily pads in a pond. Just as lily pads always seem to be floating gently and freely across a pond, the rocks in this sculpture appear as if they are floating across the earth’s surface. The leaves surrounding the rocks represent the water in the pond.” Another interpretation of the same sculpture considered that it:

...could be from the movie *Charlie and the Chocolate Factory*. The mounds popping up from the ground almost look like all of the candy that is seen growing in the movie. It is somewhat odd that something that is so natural such as this sculpture could remind me of something so unnatural such as a chocolate factory. However, it is also amusing what these sculptures somehow sometimes remind me of!

One participant's experience with *Time Capsule* led to a series of reflections, concluding that "When people have more than one pet, like the pet mice my roommate has, the two pets are communicating in their own distinct way. As a child I thought while watching Disney movies like *Bambi* about the way that nature actually communicates. This sculpture is a display of the communication of nature." Childhood memories were only one of several recurring themes in the reflections participants provided. One particularly prevalent theme was that of secrecy and hiding. Participants reported feeling "secluded, like I was hiding and no one could see me," or a "sense of mystery." More often, the sculptures were described through secrets, referencing a variety of the sculptures as "a secret door," "a doorway to a secret path," "a secretive location," "an escape," "secret and hidden," "a secret gateway," and, in two separate occasions, reminding them of the film *The Secret Garden*.

What did not occur, however, was consistency in the description of each individual sculpture. For example, while some participants connected *Natural Dialogue* to its monolithic precursor Stonehenge, others saw "Roman Architecture," "a mote surrounding a castle," "a stadium" or "a necklace." Similarly, *Crucible* was imagined as "volcano," "cave," "secret getaway or fortress" and "the shell of a snail" in just one participant's narrative. Other sculptures were "beehives," "anthills," "freshly dug graves," "Dalmatian,"

"Chinese," "omniscient," and "the face of an elderly man...[with] hands that are placed together as if in a meditative state" (Figure 12).

The inconsistency, even eccentricity of the interpretations ultimately supports the SCBG program's desire to stimulate individual experiences. Even when participants faulted the sculptures for lack of transparent utility, many of their narratives concluded that their experience with the sculpture was, in the end, "the point." For example, although one participant begins their narrative by declaring their "extreme disappointment" with *Spaces In Between*, poignant reflections on "the way in which we go through life" are followed by the revelation that "Even if this was not the intent of the artist, this is the great aspect of art; it allows you to be subjective!" Another comment summarized the general experience expressed by many participants: "I understood these sculptures to be impossible to immediately comprehend meaning from. Upon reflection, I understand that this may be the very aim of the botanical garden art pieces."

### **Conclusion**

The focused participation and photographic documentation discussed in this essay suggest that the nature-based, site-specific sculptures of the SCBG are experienced as a tense, yet engaged interaction between expectations for order and utility and unexpected encounters with enigmatic artworks. Participant experiences of the garden indicate that the common characteristics of the SCBG sculptures do advance the program's philosophy of generating meaningful, out of the ordinary, experiences. Field notes and photographs portray the art most often as difficult to grasp, particularly without descriptive labeling or clear utilitarian value. These properties create dissonance and struggle for the participants. However, the tensions between expectations and encounter also most often produced personal engagement based on an inner drive for understanding. In addition, nearly all of the participants

expressed appreciation for most of the individual sculptures as well as the experience of the garden in whole.

The process of shifting from tension to engagement, where garden visitors frequently express frustration, confusion, or anger before they begin to reflect upon the artworks, is certainly more complicated an experience than what the SCBG, the artists, or previous analyses of the program had presented. Perhaps the most intriguing notion of this study is that the site-specific, nature-based characteristics underpinning the sculptures are the source of both struggle and engagement, disdain and appreciation. Because the art is not labeled, because one must trek through the woods to locate the sculpture, and because the meaning of the artwork is not readily apparent, the garden visitors are confronted with enigmatic, out-of-place, objects that oblige contemplation.

We believe the experiences of participants echo the overall philosophy of the SCBG sculpture project and the artists: to produce extra-ordinary experience. Additionally, the wide variance within the interpretations of the sculptures supports the SCBG's claim that the artworks are not explicitly motivated by environmental politics. However, it is important to point out that the act of engagement with nature-based artwork functions as an implicit environmental act. Moreover, due to the

non-political, abstract nature of the artwork, and because the participants had to engage with the artwork to generate meaning, the rhetorical function of the nature-based sculptures functions more powerfully than if the participants were provided a list of artists, artworks, titles, meanings, and political purposes. Determining for themselves notions of natural integration, harmony, and other interpretations, was the basis for the depth of experiences expressed in the narratives and photographs.

Finally, this essay moves towards understanding the participant experiences of the artistic setting via the image and word. Rather than asking questions of program philosophy, artistic intent or viewer reception, we encouraged participants to document their *experiences*. This project moves to understand experience via the visual. That is, how do people visually engage the setting and the artwork? Based on the documentation produced by participant experiences, we believe that the philosophy and execution of the nature-based sculpture project at the South Carolina Botanical Gardens invites engagement, reflection, and thought about "where nature and culture meet" and encourage participants to reflect on art, nature, themselves, and the world.



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### Footnotes

1. Gilles Bruni and Marc Bararit are collaborative artists who operate under the single title, B & B.

## **Powering Our Energy: Conceptions of Energy in Contemporary Oil Company Advertising**

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### **Abstract**

*In this paper, I offer a rhetorical analysis of oil companies' advertisements and the tools they employ in the current context of Peak Oil and volatile oil prices. I argue that the corporations respond to increased public scrutiny by combining their product and creative ingenuity under the same term: energy. First I offer the rhetorical exigencies faced by these corporations. Next I describe the metaphorical analysis applied. I highlight the types of energy—potential, kinetic, and centrifugal force—that structure the oil companies' assertions that they mobilize their own innovative capacity, as well as that of humanity, in order to keep the supply of energy expanding with increased demand. In analyzing the case studies—campaigns of Shell, ExxonMobil, and Chevron—I explore these three themes: the mobilization of the oil companies' innovative capacity; developing the potential and supplying the needs of the child, which symbolizes the solutions we need for today and tomorrow; and the constructed equivalence between humanity's energetic spirit and Chevron's energetic spirit and, in turn, the identification of oil as humanity's spirit and Chevron as its justifiable supplier. The conclusion explores the implications of foregrounding the creative ingenuity of an oil company. This focus shades the production costs on marginalized groups as well as water resources. Reconsidering how we understand "energy" can account for these shaded costs.*

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In the Frontline documentary, The Persuaders (2004), the film introduces the audience to political and marketing analyst Frank Luntz with this following testimony: "I got a rule," Luntz states, "which is cab drivers and antique dealers know more about America than anybody else. And when the cab drivers feel a certain way, I know I need to listen." One night during the summer of 2008, I took a taxi ride that got me listening. Amid record gasoline prices, the cab driver vented his frustrations. He argued that there is something wrong with this country when the oil corporations make record profits while gasoline prices skyrocket. When the economy crashed and oil prices subsequently declined, the large price fluctuations reflected the underlying issue: volatility. As oil prices remain volatile, so too do oil companies find themselves in a volatile rhetorical situation. In this paper, I offer a rhetorical analysis of the major oil companies contemporary advertisements—Royal Dutch Shell's "Real

Energy" and their nine-minute advert "Eureka," ExxonMobil's "Energy Solutions" and their Masters' Golf Tournament commercial "Bernard Harris Summer Science Camps," and ChevronTexaco's campaign "Human Energy"—that attempt to respond to public concerns. I will argue that the corporations respond to increased public scrutiny by combining their product and their personified, creative and physical potential under the same term: energy. This energetic spirit, they hope, will ease all of the public's fears.

### **Rhetorical Exigencies: Economic Scrutiny Amplifies Concerns Around the Oil Industry**

In the 1990s and through about 2005, the national average price of gasoline remained quite consistent (EIA, 2008). During this relative price stability, oil corporations could more easily respond to environmental concerns in isolation, dissociating their environmental impacts

from their true essence as a responsible business that supplies their customers with a cheap, affordable product. The subsequent rise in prices, however, amplified those environmental concerns as well as other worries, particularly Peak Oil and political instability.

I offer a few examples of oil corporation responses in the 1990s to environmental criticism. The Exxon Valdez incident—in which Exxon's oil tanker, *The Valdez*, spilled 240,000 barrels of oil into Alaska's Prince William Sound—became, and remains, a blow to the company's public image. The March 1989 calamity debased nearly 1,100 miles of shoreline. Hearit (1995) offers a rhetorical analysis of the company's poor response to the ensuing public outcry resulting from its incompetence. However, while the spill left a permanent stain on the company's image, Exxon could still supply a cheap, readily available product. Chevron's "People Do" campaign, as another illustration, highlighted the company's various environmental stewardship efforts. Many of the commercials' illustrated practices made mandatory by external regulation (Corbett, 2006). Nevertheless, the campaigns seemed to work, according to public opinion polls and preferences at the pump (Bruno and Karliner, 2002). The campaign addressed environmental concerns by publicizing efforts forced upon them. As long as gasoline remained cheap and deeper environmental concerns remained hidden, such rhetorical efforts remained more or less successful.

A campaign that more ambitiously attempted to address environmental concerns received mixed feedback. In 1997, Sir John Browne, CEO of British Petroleum, gave a speech in which he explicitly stated that his company had an obligation to the environment because, as a member of society, they must take seriously society's growing concern over global warming. British Petroleum's green marketing campaign would detail steps the company was taking to help diminish their impacts on a much broader scale. In 2000,

Browne's company, British Petroleum, began referring to themselves as Beyond Petroleum, or BP for short. However, in the previous year, a few days after BP bought Solarex for \$45 million to become the world's leading solar energy producer (Bruno & Karliner, 2002), they strengthened their oil reserves by buying ARCO for \$26.8 billion (Oil and Gas Journal, 1999). Their marketing campaign reflects a potential desire to enact positive environmental reform, yet a desire overshadowed by the need to meet economic requirements (Llewellyn, 2007). In reaction, public concern has turned against the campaign on account of their inability to come through on their promise of alternatives, though not on their promise of cheap gasoline.

However, similar public concerns would only escalate as gasoline prices and company profits increased. These concerns heightened the public's suspicion that oil corporations can no longer meet their environmental expectations, nor their economic expectations. To the latter, the Enron scandal, for instance, reflected an attack on energy companies' basic business framework (Lubick, 2005). But Enron was not an isolated incident and merely reflected larger anger toward energy distribution and questions of their economic solvency, often directed at the main haulers of that system, the oil companies. The war in Iraq, for instance, incited numerous criticisms as a war for oil. As corporations grew wealthy off of citizens going to war (see Briody, 2004), oil prices increased beyond inflation: beginning in 2004, escalating in the summer of 2005, and soaring in the first half of 2008 (EIA, 2008). During this period, oil corporations saw record profits (Mouawad, February 2008). Additionally, fears over peak oil materialized (Lazarus, 2005). Peak Oil refers to the moment when the supply of oil, a finite, non-renewable resource, becomes outpaced by demand. The environmental limitations to finding oil, coupled with political limitations to access to oil (as seen with Venezuela and Chavez [Romero, 2009]), increased fears that the companies would not be able to meet

demand. All the while, environmental concerns intensified. The documentary An Inconvenient Truth (2006) increased widespread awareness of and alarm over climate change. The oil corporations found themselves in a situation where not only did the public's environmental concerns pose potential threats to the essence of their business practices, but so too did their economic concerns.

In this context, the public presently calls for alternative solutions to the crude oil model. Chevron, in particular, anticipated this cumulative effect. In the summer of 2005—the same summer they began their advertising campaign, “Human Energy”—the company stated that “we can wait until a crisis forces us to do something” (“Trillion Barrels”), or we can act. Chevron identifies the need to *move*, or to address the bubbling desire for alternative solutions. Chevron recognizes that the oil companies, the self-proclaimed engines of our economic vitality, must continue pushing forward and seek solutions to these problems.

### **“Energy” Companies: Metaphor and Types of Energy**

In this paper, I argue that, in order to address these various concerns, the oil corporations' advertising campaigns shift the discourse by using the term “energy” as a metaphor and claiming that, instead of understanding their practices as extracting a harmful product, they more fundamentally harness human potential. All of the problems we face now—expanding populations and increased demand, peak oil and decreased supply, rising prices, global warming, corporate greed, and political obstacles—are manageable in the hands of the Oil Company that harnesses our human potential and adapts to the changing climate (both literally and figuratively).

I offer a close analysis of the metaphors used in the contemporary advertisements of Shell, ExxonMobil, and Chevron. A long list of scholars, from Nietzsche (1972) to Lakoff and Johnson (1980) to Postman (1999), highlight the importance of metaphor in how we

understand the world. Indeed, instead of the long-standing view that metaphor merely reflects ornamental language, all language is metaphorical, or attempts to explain the world symbolically (Postman, 1999). Additionally, advertisements, as tightly constructed messages, function through a consistent use of metaphor, or conceptual linkages tying the meaning of the message to the audience, or the actual audience to an ideal audience (Goldman, 1992). Advertising campaigns in general use metaphor to structure how we think about the world and the corporation's place in it, as well as its relation to us. I examine the metaphors used in contemporary oil company advertising in order to demonstrate how this discourse seems to function in relation to an audience that presents a difficult rhetorical situation.

Gozzi (1999), influenced by Lakoff and Johnson (1980), offers a framework for doing a metaphorical analysis: identify the deep metaphor in order to frame the numerous, surface metaphors employed; explore its implications; suggest alternatives; and question how the metaphors are used and by whom. Gozzi's investigation of deep metaphors and surface metaphors comes from Lakoff and Johnson's (1980) analysis on the systematicity of metaphors. A surface metaphor, or a turn of phrase such as “time flies,” congregates around an (often) implicit deep metaphor that reveals a certain worldview. The discourse, in other words, shapes the surface, mini-metaphors around a master-metaphor (Gozzi, 1999, p 70). Identifying the deep metaphor can help examine the implications of mixing surface metaphors, some alternatives that offer different cognitive links, and who are the users of the discourse and what these deep metaphors do for them.

I follow these steps as a general framework for analysis. The deep metaphor present in the campaigns combines energy as an extractive resource, such as oil and other fossil fuels, and energy as human potential, or our creative spirit and determination. Next, I examine the energy

metaphors that constitute the communication tools available to these corporations. Indeed, these companies are not merely “oil companies,” per se, but “energy companies.” They contain the energy found within themselves to find energy supplies and supply the world its movement. In this way, they are capable of sustaining our way of life, amid shifting contexts and into an ever-evolving future.

In defining energy in terms of this harnessed potential and the corporations’ ability to find solutions for now and the future, three conceptions of energy are central: potential energy, kinetic energy, and centrifugal force. An object has potential energy, capable of producing energy, because of its position. That is, because of its context, an object can have the potential for movement. The example of a rock next to a cliff demonstrates the potential energy in the rock. A force that pushes the rock would ignite that energy and cause it to move; as it falls down the cliff, the rock exhibits kinetic energy, or the energy of its movement. The advertisement campaigns tell the audience not to worry, no matter the challenges before us, since they, the Oil Company, still have the potential to maintain supply and keep production moving. Similarly, children symbolize potential energy, since they are positioned to grow and develop. The oil company, by invoking the child symbolically, will harness their potential energy, and the potential energy within us all, in order to maintain the kinetic energy of a way of life propelled through the diffusion of energy. Challenges will always exist, threatening to halt this movement. But so too, the potential energy of oil companies will always be there, because it is the same potential energy as that of humanity. The difference: theirs is focused, contained in the adaptive technologies of a corporation. In turn, they are the center point that transmits this power outwardly to everyone.

While centripetal force refers to a force that acts upon an object, such as gravity that keeps a satellite revolving around a planet, a centrifugal force comes

from within the object and enacts its force outward. To illustrate centrifugal force, imagine a bike ride at an amusement park. The contraption spins upon an axis, igniting an outward force that causes the suspended bikes, connected to the center by metal chains, to twirl around the axis. The amusement park participant sits in the bike and, from the central motion of the axis, moves in a circle around the center point. This illustration resembles the model promoted in the advertising campaigns. In Chevron’s commercial, “New Frontiers,” the narration includes a call/response: “How do we find [energy]?/We’re trying to find answers....” In between the question and answer, the visual scene cuts to a science classroom in which students stare at what can most clearly be defined as a centrifugal force experiment. The “we” that looks for answers refers to Chevron’s efforts, but the company is interconnected with the humanity of the world, just as the bike ride does not merely exist as the spinning axis but as the paying customers in the seats. The center moves the periphery, though it is all the same equipment. We must all participate, then, in order to reach our full potential: whether that of the use potential of a bike ride or the use potential of oil and other energy sources. The latter sustains a way of life amid shifting contexts, in which the center, the energy company, guides the continuation of energy and its movement that gives life to civilization.

In order to analyze this rhetorical move, I turn my attention to the current advertising campaigns of three of the four largest oil corporations (BP, discussed earlier, is the third largest). In order, at the time of this writing, these are Shell, ExxonMobil, and Chevron. As of April 2009, according to Forbes’ list “The Global 2000,” each of these corporations were among the top ten ranked companies in any sector (Forbes, 2009). First I turn to the ways in which Shell and ExxonMobil highlight their companies as gathering places of innovation. This move establishes the companies’ ethos, illustrating its creative faculties. Next I turn to each company’s use

of the child in a primarily metaphorical sense. These companies highlight how they support the development of children so that they may both meet their needs today and gain the specialized knowledge necessary in order to supply the next generation with energy and keep production moving. After exploring the child metaphor, I analyze the Chevron campaign's establishment of human demand for energy as both the problem and the solution. Chevron, representing the best of humanity's energetic spirit, illustrates its role as a leader in humanity's ever-evolving quest for satisfying our energy needs.

The case studies, therefore, examine Gozzi's fourth step: who uses these metaphors and how they use them. In the conclusion, I turn my attention to the implications. Namely, the negative impacts of our energy production, such as the physical labor and water resources that are necessary in the extraction and distribution process, are left unaccounted. Calls for alternative sources often ignore the ways in which energy production externalizes costs, and the discourse perpetuates these costs' concealment. In addition to exploring these implications, I suggest an alternative way to look at energy production, shifting "energy" to define fundamental processes such as our water resources.

### **Generating Innovation: Shell's "Real Energy" and ExxonMobil's "Energy Solutions"**

Both Shell and ExxonMobil define the company ethos in terms of a gathering spot of innovation. Each combines its oil product and its creative potential, defining both as its embodied "energy." The Shell campaign "Real Energy" centers around a website ([realenergy.shell.us](http://realenergy.shell.us)) with an interactive model that discusses different ways in which the company powers modern civilization. Below I discuss the print advertisements available for download. ExxonMobil's "Energy Solutions" includes a collection of commercials available on its corporate website ([exxonmobil.com](http://exxonmobil.com)).

Shell illustrates the great potential to find solutions found within its workers. The print advertisement "Chemistry" illustrates all of the intricate mechanisms that generate gas-to-liquids (GTL) fuel, meant to decrease sooty emissions. The product, not simply an outcome of Shell's scientific calculations, also illustrates its creative energy: "When we develop a new fuel we don't just apply chemistry and engineering, but also a special kind of creative thinking." "Creative Mind" specifies how human "power" develops through exercising its intelligence: "To tackle the world's energy challenges, from oil and gas power to biofuel power, just takes brain power." Shell focuses on "real energy solutions for the real world," as each of their print advertisements end. Shell utilizes its creative ingenuity, or its "brain power," to "power" our lives.

In the campaign, the company personifies its identity by demonstrating its pooled labor, or its capacity to work (a physics definition of energy but applicable here). This focus on "labor-power" reflects Marx's metaphors of creative energy if ignores his criticism of exploited physical labor. Marx critiques the capitalist form on account of the wage-worker selling one's body to the capitalist in order to live. The capitalist receives the energy—the "living labor" (Ch 5, ¶15)—of the commodified body, or the "labor, the *productive activity* of the laborer, the *creative force* by which the worker not only replaces what he consumes, but also gives to the accumulated labor a greater value than it previously possessed" (Ch 6, ¶2, emphasis added). However, unlike Marx's assertion that creativity would diminish as productivity expanded, Shell asserts that their "creative force"—their "brain power" in "Creative Mind"—*allows for* their "productive activity." The advertisement "Handwritten," for example, tells the story of the unknown terrain Shell entered when they invested in Canadian oil sands in the 1950s. Nonetheless, as time, technology, and creativity progressed forward, so too did their productive activity: "All it took was the

right technology, a bit of imagination and a lot of determination.”

Miller and Halloran (1993), in an analysis of *The Spandrels of San Marcos*, state that authors Gould and Lewontin’s adopted ethos is that of “the personal role of the speaker as advocate, interpreter, and story-teller” (p 121). Expanding upon Shell’s narrative story in “Handwritten,” the commercials in ExxonMobil’s “Energy Solutions” feature workers of the company—leading analysts, geoscientists, and engineers—thereby humanizing the company and highlighting its pooled labor resources and, in particular, its pooled *intellectual* energy. To return to Marx’s analysis that the capitalist harnesses the laborer’s “productive activity” and “creative force,” the “creative force” of ExxonMobil’s workers reflects energy in terms of their intellectual capacity that sustains supply amid challenges. ExxonMobil’s scientists embody such capacity. This scientific, intellectual capacity produces their supply for our consumption.

The commercials attempt to demonstrate the company’s scientific endeavors towards finding solutions. Not only do the workers’ intellectual energy represent this expertise, but the commercials’ visual symbols reflect this scientific capacity as well. For instance, the main visual motif, a computerized image of a molecular structure, invokes the company’s creative energy through chemistry. The model is cyclohexane, a solvent used more in Europe than in the United States. The use here is largely symbolic. Often used in organic chemistry courses to demonstrate principles, the model is popular merely because of its interesting shape. Most likely, ExxonMobil does not use this solvent in its business practices. The campaign’s dubious scientific claims are less ambiguous when discussing lithium-ion batteries in “Clean Energy.” Here, ExxonMobil uses a completely nonsensical equation that only resembles anything pertinent to the narration in that it includes “Li,” the symbol for lithium. Otherwise, the equation uses

molecules that do not exist, the combined molecule with lithium would be so water sensitive it would explode, and the arrow used to denote equal measures is in itself not a chemistry symbol. In essence, then, the symbols are superficial, rely on an ignorant audience, and signal the same thing as the scientists in the commercials and nothing more: trust in us because, through our pooled, energetic capacity, we know more than you.

To return to Miller and Halloran (1993), the authors critique the unfounded assertions in Gould and Lewontin’s architectural history, from which the scientists take the term “spandrel.” However, Miller and Halloran add that this historical inclusion remains successful in demonstrating, to a scientific audience that would not know otherwise, Gould and Lewontin’s broad knowledge. Thus, their ethos remains the same. Similarly, because they have the technological infrastructure to contain their energy and harness it for productive purposes, ExxonMobil’s scientific knowledge, beyond the audience’s understanding, must lead the way and solve our energy challenges. ExxonMobil’s creative capacity and knowledge represents the frontiers to which our human intelligence extends, suggesting the company’s authority to tackle the world’s energy challenges.

#### **Children: Present Needs and Future Solutions in “Eureka,” “Bernard Harris,” and Chevron**

Children in all three campaigns represent the needs for continued energy exploration as well as the boundless energy that, if guided through the correct channels, can develop into the creative ingenuity that will discover energy solutions for the next generation. Below I look at Shell’s “Eureka,” ExxonMobil’s “Bernard Harris,” and Chevron’s “Human Energy.” *Eureka! I’ve got it! Thanks, son!*

“Eureka,” Shell’s nine-minute online commercial, extends the company’s main theme—that Shell maintains our way of life through intelligently managing our extraction



methods—while extending the energy metaphor by linking Shell's creative spirit with that of youthful energy. The commercial narrates a story of the man who invented the snake well, a type of drill that decreases the need for multiple rigs. In the story, the man's rebellious yet loving teenage son criticizes his father's work. The father states that he does not want to hear that nonsense again; after all, without the oil he supplies, his son could not consume the soda in his hands, for the trucks that transported that soda would no longer function. Later that day, when finishing a milkshake, the son gives his father the idea for the snake well by bending his straw to get at leftover foam stuck to the glass. It turns out the son is a pragmatist as well, and he illustrates how our intelligence can afford our idealized way of life: embodied in the food the child eats, transported through the power of oil.

Furthermore, Shell has the capacity to harness the energy found within humanity: both in its workers and, here in "Eureka," in its workers' children. The son in the commercial embodies that restless, energetic spirit—that uncontained rebelliousness—found in youth. The adult father worries about his son but assumes that, eventually, the teenager will harness his potential energy toward practical solutions and, indeed, with the milkshake, the father sees that the son is already growing into a pragmatic, full-fledged human. Through this story, Shell implies that they know how to harness energy toward practical solutions, or "real solutions for the real world." Here we see a theme continued in ExxonMobil's Masters Golf Tournament advertisements and Chevron's "Human Energy": harnessing the power of nature's resources by tapping into humanity's innovative potential, metaphorically defined as youthful energy.

*"They just need a little push"*

ExxonMobil was one of three commercial sponsors of the 2009 Masters Golf Tournament. Its campaign featured four commercials promoting the company's

investments in math and science education programs for youth and their teachers: "Math and Science," "NMSI" (National Math and Science Initiative), and two showcasing science education programs spearheaded by prominent figures, Astronaut Bernard Harris' "Bernard Harris Summer Science Camps" and Golfer Phil Mickelson's "sendmyteacher.com." In the following analysis of the Bernard Harris commercial, I highlight three points evident in each commercial: children need development to fulfill their potential; ExxonMobil supports this development; and the company asserts that we all must make sure that we meet future challenges by preparing the children of today.

Within the child exists boundless curiosity. Their name, assumed title, and often their childhood play identify each child in the Masters' commercials. The titles embody the children's curious spirit; "Bernard Harris Summer Science Camps" begins with "Noah: Master of Tinkering." ExxonMobil scribbles each child's name, as if the child wrote their names themselves, and adds their title below in block print. Childhood innocence infuses with their "official" titles, visibly represented in the print writing; for instance, "Samuel" is the "Chief Figure-Outerer." Hendershot (2004), in an analysis of Nickelodeon's *Spongebob Squarepants*, explains how not only is there no such thing as "children's" (mass) media, in that adults create the messages, but also, adults are often the target audience in "children's" media. Here, ExxonMobil exhibits a similar approach. The style of the names and the diction of the titles signal to the adult viewer, not the child, the capacity of innovation within each child. That capacity needs development. Harris ("M.D."), a "former tinkerer" himself, "knows just how far math and science," or the education offered by adult figures, "can take you."

"We" have a lot of bright children, Harris tells the adult audience, but "they" need direction. The commercial illustrates how ExxonMobil supports both America's economic development and childhood

development. That is, as an “energy” company, ExxonMobil invests in humanity’s growth and in finding energy supplies, and so they invest in educating the energetic workers of tomorrow. The narration, offered by Harris, opens: “America *really* needs to prepare more young people for engineering and science careers.” The solution is present in the present moment: “we already have lots of bright, curious kids right here.” Adults develop this curiosity: “[Curious kids] just need a little push.” The camera’s movement visually illustrates this development. The commercial’s point of view progresses along a tracking shot, in which the audience sees, sequentially, three children and their titles. After the third child, the camera stops at Harris’ chest; once Harris calls for that “push,” the camera pans up to his face. After Harris defines this need as the reason for his partnership with ExxonMobil and the implementation of his camps, the camera moves again, tracking away from his face. The camp promises to turn “today’s tinkerers into tomorrow’s innovators.” On the word “tomorrow,” the camera reaches the plane of the next child, “Jhanai: Future Aerospace Engineer,” but hovers above her head; the camera must pan back down to reach the level of the child’s face. After the spoken word “innovation,” Jhanai’s projected title, “Future Aerospace Engineer,” appears next to her current title.

The camera acts as an embodiment of the audience’s gaze. It first surveys a series of childhood invention potential. Once it reaches Harris, however, it realizes that we have reached a developed person; this person is *physically* more developed, and so the camera must pan up to reach his embodied growth. Harris, present astronaut and past tinkerer, represents the promise of science and technology. ExxonMobil, as his partner, promotes the development of science and technology for the development of children and, interlinked, our economy. The adult’s role, as a fully developed human (or a personified corporation), makes sure that the curiosity of children today progresses into innovation tomorrow. And

where is this child, metaphorically defined as “tomorrow”? Oh yes: she is not yet physically developed, and so the camera must pan back down. Nevertheless, let us watch “how far math and science can take you,” as Jhanai projects her future title and throws her paper airplane back towards Harris and into the future.

ExxonMobil is positioned to maintain the kinetic energy of our oil consumption. Similarly, children symbolize potential energy, since they are positioned to grow and develop into adults and future workers. When Jhanai, who has potential energy (the kid’s got potential!), throws her paper airplane, she enacts kinetic energy. Childhood’s boundless, energetic movement gets harnessed, or contained, through ExxonMobil. Through the child, in turn, we see the company’s energetic spirit: optimistic, enthusiastic, expending power, and determined. It is also physically capable, because it has fully developed infrastructure that continuously improves upon itself as the company’s workers’ creative potential advances. In comparison to the kids in the commercial, Bernard Harris’ physical development embodies the children’s future, developed growth. ExxonMobil enacts the necessary investments—such as the Bernard Harris camps, which give them “a little push”—that powers childhood intellect and America’s economic future, and in turn, metaphorically speaking, keeps the rock rolling down the hill. ExxonMobil remains in motion, producing oil and supporting economic and childhood development through the present and into the future.

Schor (2004), in an examination of the commercialization of American youth, particularly indicts the corporatization of our schools. The trepidation points to the feeling that education is more or less sacred space that should not be co-opted. The Bernard Harris camps, which promote middle-school education in science, technology, engineering, and mathematics (STEM), finds itself in the same context as Channel One, schools sponsored by Pepsi and not allowing Coca-Cola on the

premises, and advertising researchers such as James U. McNeal telling corporations to keep at it (McNeal, 1999). The camps, sponsored by ExxonMobil, may make some cringe at their corporate sponsorship and others defer to the fact that the program teaches children important skills. Furthermore, Bernard Harris, a former astronaut, offers a trustworthy testimonial. While traditional advertising philosophy believes that celebrities do not sell products well because it is obvious that they are paid to offer disingenuous claims about the product (Ogilvy 1983), Harris both puts his name to the product and, it seems, celebrities can better sell to adults the idea of educational development for their kids<sup>xxviii</sup>. I am doing this out of respect for children and their future growth.

#### *Chevron and the Foreseeable Future*

In Chevron's "Human Energy," the simultaneous moment of present and future comes about with the metaphor of the child; the child stands in between time frames, representing both the needs of today and the development of tomorrow. As with ExxonMobil, the child metaphor symbolizes the future trajectory, in which Chevron will employ its creative energy and its infrastructure in order to maintain levels of energy use. In addition, the child represents that worth sustaining in the present and future; highly dependent, children look to adults to satisfy their energy needs. Chevron consistently uses the metaphor of the child to highlight both the potential for energetic capacity and the dependency on the continuous exploration of energy. Below I analyze how Chevron, in its commercials, uses the image of the child to visually represent the future, the energy needs of today, and Chevron's role in development of children's, and the economy's, future growth.

The narration sometimes explicitly invokes the future. In these scenes, the child does not look at the camera. Invoking the terms invokes the metaphorical child: not staring at us but merely existing in the space, trying to grow and trying to engage

in their family activities. In addition, these children exist as the "foreseeable future" ("Untapped Energy"). When Campbell Scott narrates that, "for the foreseeable future/our lives demand/oil," three moments and two shots structure the scene; in the first moment a boy on the coast looks down into the water; in the second moment, the camera pans up as the boy looks up and out at the water; the third moment cuts to an oil tanker. The oil is the present and foreseeable future, the object of the boy's gaze. The boy both sees the future and represents the future, and the trajectory of that foreseeable future acknowledges the importance of oil.

In the commercial "Renewable Energy," when the narrator says that some people merely "talk of the future," a child looks out the car window; in the next scene, before any additional narration, a close-up of a baby highlights the child's dependency on adults for its development. The real future is a foreseeable future that both supplies the energy needed today for this baby and into the extended future, as the baby will continue to look to the world for its development, just like the girl who looks out her car window. The child enacts a double role: they represent the future needs, but they also exist in the present and so remind us that we cannot only think of the future but must also address our current energy needs.

The baby taking its first steps at the very end of "Untapped Energy" looks to us to catch its fall and allow it to continue to develop. This scene epitomizes the advertising image of "the family circle tableau" in advertisements that Marchand (1985) studied from the 1920s–30s (p. 248). Marchand defines social tableaux in advertising discourse as captured moments of an idealized setting. In a quaint living room setting, the family scene of a baby attempting to walk captures the idealized moment of early parenthood. Such a family scene metaphorically represents valuable moments worth sustaining throughout the commercials, symbolizing the audience's idealized activities—be it looking at one's

newborn (“Untapped Energy”) or adjusting a baby over one’s shoulder at the kitchen table (“Renewable Energy”). The narration for these scenes often questions the future and asks “you” to join “us.” Children are most often evoked in a family scene when the narration raises questions, addressing the ideal adult viewer who inscribes meaning onto the image of the child and the family scene.

The answers, then, both speak to the parent-child relationship and to Chevron’s technology. To the latter, “New Frontiers” answers how to find energy through the company’s own search to find the answer, as kids stare amazed at an in-class demonstration: the centrifugal force experiment. Transfixed by technology, these children stare at their own future: both what will power them and their own futures as scientists toward supplying energy. These kids are finding the answer in the technology that powers the(ir) future. When children are depicted in a group, they are shown in educational scenes—whether it is “trying to answer” questions by understanding technology (“New Frontiers”) or dressed in elementary school graduation garb (“It’s a human issue,” “Conservation”). Through education, we will develop the child: by way of science, technology, and figuring out how to progress sustainably. Chevron, too, embodies the teachers that “power the new explorer” and the student “trying to answer those questions.” Education develops children’s intellectual growth and develops Chevron’s ability to work, advancing the knowledge of the geologists and engineers of the future. These instances combine the social desire for strong educational goals with the ethos of the knowledgeable scientist in Miller and Halloran (1993). Each campaign, through the image of the child, illustrates the companies’ ability to contain the energy of the present and develop it in order to meet future demand. Metaphorically and literally, kids develop their potential energy in order to learn how to supply energy to the next generation, focusing their potential energy

and keeping the kinetic force of energy supply moving.

### **Chevron: The Most Developed Leads Our Communal Future**

Through the invocation of the child, Chevron’s “Human Energy” campaign develops its motifs. The preciousness of humanity, defined through the child, symbolizes the “power of human energy,” as its first four commercials end. Chevron structures its campaign around the theme that, within humanity, we will discover our energy solutions and meet our energy needs. The fragile children need more developed humans to supply their nurturance. Such developed humans include those that make up the energy company, who embody an energetic spirit and have the supply that powers these children’s development. Indeed, the “problem” of children’s development needs are solved through more developed humanity, or through the adult provider.<sup>xxix</sup> Like the perpetual shifts in how we find energy, such as those initiated by Peak Oil, so too will children perpetually need energy, and those that can pool our energetic efforts towards finding solutions must do so. In the meantime, the kids develop their potential energy in order to learn how to supply energy to the next generation, focusing their potential energy and keeping the kinetic force of energy supply moving.

Below, I follow three steps: first, I describe how Chevron structures the motif that the problem of growing demand also supplies the answer in the form of more energetic humans; two, I offer illustrations of how Chevron personifies its human spirit of innovation; and three, I conclude with how Chevron uses the equivalence of itself and humanity to illustrate why the company should lead the energy future.

#### *“The problem...becomes the solution”*

The print advertisement, “Trillion Barrels,” begins with the following statement/question: “It took us 125 years to use the first trillion barrels of oil. We’ll use the next trillion in 30. So why should you

care?" Each print and billboard advertisement from 2005–2007 begins similarly; the campaign lays out a problem with oil supply and then asks a personalized question, before offering the answer, either by directing the audience to their website, [willyoujoinus.com](http://willyoujoinus.com), in the airport ads or to the lengthy copy in the (at least) two-page print ads.

Chevron answers these questions: our collective energy will meet this demand. As Chevron puts it, we will face these challenges, ultimately, once we pool all of our energies together and "consider every viable energy source at hand...to meet the world's needs" ("Natural Gas"). Our sheer numbers, the energy of all humanity, will figure out how to supply energy to a rising global population. The 2007 commercials each progress from the problem of meeting the world's energy needs to Chevron finding our solutions in its ability "to find newer ways, cleaner ways to power the world" ("Untapped Energy"). While the three contemporaneous commercials focus on the challenges Chevron tackles, "Untapped Energy" more directly lays out the problem in finding available energy sources: "the debate rages," "it leaves no one untouched," and how, even with a rising population, "everyone of us will need energy to live."

Each commercial's visual and aural form illustrates its narrative structure from problem to solution. Lucaites' (1997) describes the "Sonata Form," in an analysis of *Let Us Now Praise Famous Men*, as a dialectical arrangement in which one theme develops, a contrasting theme in a different key follows, and the two are harmonized in the reiteration of the first. Here, form and musical accompaniment combine to create a similar structure. The overall arrangement—through the visuals and the auditory narrative and music—works in tandem to rhetorically frame the problem and lead the viewer to the solution, concluding with a return to the opening scene, reinvented. Each commercial follows a circular construction: "New Frontiers" begins with black-and-white stock footage of arctic explorers and ends with

children as "the new explorers"; "The Impossible" begins with a long pan over a large body of water and ends over the same body of water at sunset; "Renewable Energy" begins with a shot of Earth from outer space and ends with a zoom in on the Earth's atmosphere. After the commercial follows its narrative logic, we return to the beginning made anew and, conclusively, end on Chevron's "Human Energy" logo.

"Untapped Energy," in its two and a half minute duration, has two acts, split between problem and solution. The music, Paul-Leonard Morgan's instrumental "Symbiotic," signals the switch. In its extended running time, the commercial spends the first act in tension. A dissonant, whole tone pedal in the synthesized strings causes tension in the listener's mind. However, once the narrator states, "And every one of us will need energy to live," this tension releases. The dissonance goes away, overshadowed by a major arpeggiation in the piano; that is, the uplifting piano motif takes center-stage. At that moment, we see an extreme close-up of a newborn baby followed by an overwhelmingly proud father resting his head on the hospital glass wall. The final shot, where a baby takes its first steps, answers the challenge to finding the newborn with the energy that allows it to grow.

In addition, the transition to the second act similarly switches from dark tones to lighter tones. After stating that the world will see seventy-three million more people by year's end, the scene cuts to a vast, flat cityscape at night, repeating the nighttime theme. Here, though, no words overlap the scene, a rarity for a 150 second commercial with 91 cuts. The next scene, significantly lighter (and indeed seems artificially light), frames an airplane taking off as the narrator begins the previously stated line, "Every one of us will need energy to live," culminating with soft tones around the newborn's face. "The soft-focus" form encompasses the advertising image of "the family circle tableau" (Marchand, 1985, p. 248). Marchand identifies the soft-focus

around the idyllic family scene, reinforcing the light, soothing associations afforded to the family as the social fiber worth sustaining. The problems of the present are stuck in past practices and contrast with dark images and music. The “end of easy oil” signals increasing demand that needs new solutions. We move through these problems toward the good in our present and that which will guide our future: the birth of the people that signal that very increase in demand.

The idea of the leitmotif in music, utilized in Wagner's operas and later in Prokofiev's *Peter and the Wolf*, refers to a musical instrument standing in for an idea. When the instrument plays a returning theme, the sound of that theme signals the arrival of a character; each character in *Peter and the Wolf*, for instance, has its own leitmotif. In “Untapped Energy,” the piano instrument enacts the leitmotif that signals “Human Energy.” The piano plays in the beginning but does not have the same theme; it plays a prominent role but is sparse. The leitmotif does not come until the moment that defines the solution. The music, therefore, strengthens the campaign's overarching leitmotif, “the problem...becomes the solution.” In instrumental terms, the piano represents the problem and the solution. Always there, it signals the problem's transformation into an optimistic future. Increasing global population, which highlights the problem, becomes the solution with the signal of the newborn.

Also, with the newborn and father we see, in its nascent stage, Marchand's (1985) family tableau, or what Goldman (1992) calls “tightly packaged...scenes of contemporary families in ideal-typical form” (p 94, original emphasis). The “ideal” tableau that symbolizes the development of physical human energy culminates in the final scene and the baby taking its first steps (and the music reaching its crescendo). Therefore, the metaphorical energy, or people's “human energy,” represents the present's positive potential and what will guide us into a future that tackles our

energy problems. This embodied energy defines humanity; our movement (physical energy) and intelligence (creative energy) defines positive associations with humanity. Next I explore the surface metaphors that symbolize this “human energy” as well as those that define Chevron in terms of humanity with an energetic spirit.

### *Humanity's Energy and Chevron's Embodied Energy*

Chevron states that, while some in the audience may have wondered if our energy challenges stem from demand surpassing supply, indeed, increased demand is indicative of the solution. That is, humanity's energy needs brought about the situation we find ourselves in today, but human energy, contained and mobilized to find solutions, will supply the answer. “Human energy,” thus defined, includes idealized scenes of optimism. Marchand's (1985) concept of the social tableau works well again. Chevron illustrates acts of “human energy” by people in ideal settings, as well as acts by their own workers, in order to imply that their product offers these moments.

Surface metaphors abound that represent “human energy” in general, at work and play. In “Untapped Energy,” the scene in between the plane taking off and the newborn's crying face, or the third scene that spans the line, “And every one of us needs energy to live,” shows three people running in the distance of a desert landscape. Running and hiking against a natural backdrop is a recurring theme. Whether it is a hiker in “New Frontiers,” here and the scaling of the mountain in “Untapped Energy,” or people next to a waterfall in “The Impossible,” the natural backdrop hails human physical energy as an uplifting motif. Additionally, in “Conservation,” a man takes a bale of hay off of his truck and carries it with him, exerting physical labor. Slow motion shots of children running (“New Frontiers”) and a child skipping (“Untapped Energy”) emphasize the boundless energy of childhood. The following quote illustrates all

of humanity's ever-present energy: "The only energy we have in abundance: Human Energy™" ("willyoujoinus.com," "FAQS"). Furthermore, "New Frontiers" begins with arctic explorers and a video of man walking on the moon, and soon after shows a cyclist with numerous supplies tied to his bike, signifying self-sufficiency in preparing for a long journey that requires the exertion of much energy. The commercials also have continual scenes of moving crowds, such as a sea of people walking down the street in the opening shot of "Tomorrow." Continuous shots of family scenes, often showing families in kitchen settings, demonstrate human activity through dynamic social relations.

Cheney (1983), explicating Burke's theory on identification in the realm of organizational communication, formalizes three types of identification strategies: the common ground technique, antithesis, and the transcendent "we" pronoun. Chevron establishes these idealized moments in order to implement the common ground technique, in which they illustrate how the company, as a collection of people, also embodies such "human energy," or an energetic spirit to find solutions. Chevron states: we are both defined by our energy: humanity by its energetic spirit, and Chevron by its humanity and its product for sale. Black (1970), after summarizing how the reality of the rhetor often rarely matches the image, or the person's persona, elaborates on the Second Persona, or the implied image of the audience. In advertising discourse, the first persona is the corporation, or the corporate product, and the second persona is the implied viewer embedded in the discourse of the advertisement. These two meet: the discourse implies the ideal audience will meet the embedded meaning of the product. Here, metaphor describes the moment of transference: speaking of one thing (the implied audience, or the second persona) in terms of another (the meaning of the product, and of the "energetic" company). "Energy" defines both the first and second persona. Chevron's energy

product and personified entity is described in terms of "you," the implied audience that embodies humanity and everything good associated with it: development of children, overcoming nature's obstacles, and so on.

"Untapped Energy" highlights the humanity of Chevron by way of an extended metaphor. Campbell Scott describes Chevron as "men and women of vision." The commercial describes the organization in terms of its people, but specifically, in terms of imagined people, as the commercial continues into the extended metaphor: "liberals and conservatives; engineers and scientists; pipe welders and geologists; husbands and wives; part-time poets and coaches." Images of people working for the company or working for their community ("part-time coaches") juxtapose the narration. "Husbands and wives," as well as the final pairing, specifically illustrate the humanity of Chevron. This extended metaphor implies the company's role in society, both as a part of communities and as exercising its human labor-power towards the good of society.

Chevron, therefore, embodies both human energy work and human leisure, or those activities that sustain and that are worth sustaining. The following quote from Chevron's company website demonstrates the surface metaphors that define Chevron as practicing "Energy Work," or the energy industry as deploying the inner energy of its employees:

The potential to meet the world's demand for safe, reliable energy is as infinite as human ingenuity. We believe that finding newer, smarter, cleaner ways to power the world begins with the spirit of discovery and innovation embodied by Chevron's own people.

- "Renewable Energy,"  
Chevron's "Human Energy Stories,"

The front page of Chevron's "Human Energy Stories" details its corporate social responsibility in terms of "Environment," "Community & Society," "Exploration & the

Future,” and “Renewable Energy,” the latter’s description listed above in full (we can then click a hyperlink to “learn more” about “how geothermal energy is produced”). The quote employs many surface metaphors around the deep metaphor, Chevron as embodying human energy. Chevron mobilizes the potential energy of its people and gets that energy to work. The end, in stating that these adjectives are “embodied by Chevron’s own people,” makes explicit this deep metaphor. Chevron identifies “human ingenuity” and our “potential energy” as in limitless supply. Also, Chevron describes its harnessing potential in terms of human ingenuity. “Potential” is a synonym for “capability,” and their capacity to work represent their capable, metaphorical hands. “The spirit of discovery” highlights energetic vitality. Our vitality is limitless, and we need the spirit within humans, and the humans of Chevron, to power the world, or to meet demand by harnessing energy.

In the airport and print advertisements, the accompanying web address “[willyoujoinus.com](http://willyoujoinus.com)” personalizes both Chevron (“us”) and its connection to the audience (“you”). The print advertisements further the third form of identification outlined by Cheney (1983). Chevron uses this personifying method of pronouns when talking about supplying energy: “So where would we get the energy everyone needs” (“Energy Spectrum”)? The use of the personalized pronoun describes the corporation in a way that not only personalizes it but also connects it to the audience. In its lengthy copy on the second page, the first print advertisement, “Trillion Barrels,” more explicitly demonstrates the company’s humanity, as CEO David J. O’Reilly “signs” the bottom of the memo. Chevron, indeed, demonstrates their human energy from the top of its administration to its on-the-scenes geologists and surveyors. The “memo” in “Trillion Barrels” demonstrates the stylistic theme of the print advertisements, in which the main page simulates an office desk. Such representation attempts to further personify

Chevron by demonstrating the human labor that goes into the tireless efforts to discover intelligent solutions to the energy crisis. In each print advertisement, items that resemble things on an office desk surround the main copy: glasses, pens, clocks, napkin notes, coffee mugs, and so on.

“The Power of Human Energy,” in particular, details numerous surface metaphors around the deep metaphor. “When the unique spirit we all possess is allowed to flourish,” Chevron contends, “we” have the capacity to overcome all obstacles. The copy extends the meaning of this “spirit” as “hard work, ingenuity, drive.” We are again asked to “tap” ourselves, that most powerful source of energy; this metaphor of drilling our own energy potential will send the “human race,” racing forward, to new heights. Finally, the content of this advertisement most clearly enhances the form found in each advertisement, in which we can overcome the problems we face by using the human energy we already have in abundant supply. Further metaphorical constructions develop around our “drive to succeed”: “This human energy that drives us to succeed has been there everyday since the beginning. And it will be with us to shape many tomorrows to come.” Chevron, invoking this collective spirit, takes charge in unleashing human potential.

#### *The Power Generator: Chevron Leads the Future*

Because the company embodies our needs and the ability to solve challenges to meeting those needs, Chevron professes that they can lead the future of energy exploration. Chevron asks the audience to “join us,” as its website suggests, “as we tap the greatest source of energy in the world: Ourselves” (“Untapped Energy”). The company invites the audience to move into the future together. To follow Chevron’s lead is to follow the centrifugal force that pushes the rock—the potential in humanity, the potential of children—and allows civilization to move.

To conclude the Chevron analysis, I look at how Chevron invites the audience to



join in this future, under the company's leadership as a fully developed entity. Chevron lays out this framework, asks the audience to join in its efforts, and outlines steps the company has taken to help lead us toward the energy future. In that the company utilizes its own people's energetic determination, and that it has the infrastructure, both in labor-power and technology, "to build this new world" ("Trillion Barrels"), Chevron positions itself as a legitimate leader in this future. Chevron, as Humanity, embodies the potential to find solutions; as an energy company with innovative, evolving infrastructure, Chevron embodies the ability to meet everyone's needs. A number of metaphors stand in for this leadership justification. For instance, as Chevron develops itself as part of the solution in "Untapped Energy," the company describes itself as a provider, providing the demand for oil "intelligently," "efficiently," and "respectfully" as well as providing alternatives (in no disclosed amount): "natural gas, solar, hydrogen, [and] geothermal."

Chevron establishes the tension people have in trying to figure out solutions to the energy crisis, and offers conciliation: "It's time to put aside our differences. Will you be part of the solution" ("Tomorrow")? The associated image of two men walking away from the camera includes the older man putting his hands behind his back. Marchand (1985) describes a theme from the 1920s that reoccurs in advertising discourse: that figures' backs turned to the reader meant they were facing the future (p. 255). To convert Marchand's analysis of print advertisements into television commercials today, the two figures *walk* into the future together. Chevron, most likely meant to resemble the older man, places its hands behind its back as a sign of humility. Chevron positions itself on the same level as its customers; they are only human. Nonetheless, they are a developed, experienced human that knows how to lead and develop our growth and the energy future. Concurrently, the company subtly

derides those who only "talk." Chevron neutralizes the debate by not merely espousing "talk about the future" ("Renewable Energy") but also demonstrations of present solutions. Chevron combines the forces of its "Human Energy" and your human energy, moving potential energy into kinetic energy.

Finally, in order to move forward, Chevron tells its audience that it needs you to "join us." Most of the print advertisements, for instance, end by stating that Chevron has taken steps and now needs you to help out. For instance, "Oil Consumed [print]," almost identical to "Natural Gas," concludes: "Inaction is not an option. But if everyone works together, we can balance this equation. We're taking some of the steps needed to get started, but we need your help to get the rest of the way." Directed to the website, "Will You Join Us," the audience can "join the discussion" by responding to posted, moderated topics or by playing "Energyville," a simulation game created by The Economist Group. Through this invitation, Chevron "encourage(s) us to consider" all available options, and thanks us for joining them by accepting entrance into the discussion.

Chevron invites the audience into the invention-making process. Thrift (2006) argues that this "exteriorization of intelligence" is "indicative" of capitalist developments today (p 282). To return to the image of the centrifugal bike ride, Chevron invites customers to buy the ticket and enjoy the ride in order for the ride to sustain itself. Through Chevron's logical framework, the ride looks like a reasonable one to enter. In the end, Chevron aligns its interests with that of all humanity, leading the way toward figuring out solutions best for us all.

### **Implications and Conclusion**

The advertising discourse in the campaigns offered by Shell, ExxonMobil, and Chevron revolves around their ability to harness invention, or creative energy. Shell states that finding energy solutions "*just*

takes brain power” (“Creative Mind,” emphasis added). The campaigns only demonstrate physical energy in play or in the growth of the child. In Chevron’s “Untapped Energy,” we move from the newborn to the developing growth of a baby’s first steps in the final scene. Bernard Harris, a scientist who has gone into space, represents the culmination of such developed growth (ExxonMobil, “Bernard Harris Summer Science Camps”). However, these companies do not simply harness creativity. In their business practices—when they are busy as an “oil company” and not an “energy company”—they do production work on the environment with harmful consequences for those environments as well as the marginalized people who live there. The discourse functionally handicaps accountability to the environment in the physical strain put on it during energy production.

To return to Shell’s extended commercial “Eureka,” we open in Southeast Asia, where the main character, the soon-to-be inventor of the snake well, cannot enjoy a cultural show because he is hard at work, *thinking* about solutions. Later, a reporter comes to his office to do a story on the energy challenges oil corporations face, to which he replies, “It’s probably best if I *show* you, what we deal with.” Looking down at her high heels, he adds, “You might need a different pair of shoes though.” They hop in his Jeep and drive off-road through a forest, into a helicopter, and survey a body of water with thousands of pockets of oil fields hidden underneath. His job is to figure out how to tap that energy without building rigs for each spot. He is often quiet and pulls back his hair, the intellectual strain taking its toll. The reporter suggests for a change of scene to clear his creative block; he takes her suggestion and, with the help of his son, figures out the solution—a continent away from the source of production. Equations whiz by the screen as the man implements his idea from the comfort of his office. Additionally, the breakthrough allows him to stay closer to his family. His son settles down and applies

himself to the soccer field; the end credits tell us that, as a star on his college team, his physical energy trains regularly.

“Eureka” exemplifies how this discourse functions. Creative energy, detached from the physical labor of energy production, will solve all of our problems. Not only that, the ability to harness our creative energy allows for us to continue to meet our energy needs and to sustain our ways of life. The main character, for instance, harnesses his creative potential in order to spend time with his son. In turn, that bonding family scene, available because of the innovative breakthrough, allows the son to harness his youthful energy into focused, physical exertion.

The commercial accentuates how the campaigns present problems as new challenges that humans face continually. We surmount these challenges by harnessing our potential and our innovative spirits. However, problems with oil production do not just perpetually present themselves and then disappear with the application of creative ingenuity. Overall, the problems with production are not simply new challenges we must face, but recurring problems we must address. “Eureka” ambiguously takes place somewhere in Southeast Asia, but if it took place in Nigeria, for instance, the audience would hear a different story. The Ogoni people of Nigeria receive little in return for the sale of their land’s oil except economic, environmental, and health problems. While local and legal pressure forced Shell to implement more environmentally responsible policies (Livesey and Graham, 2007), the risks inherent in their Nigerian business practices remain, as illustrated in the recently aired pilot episode of the CNN show “Planet in Peril,” which details the land’s poisoned waters, the people’s health hazards, and the brewing anger over such atrocities (CNN, 2008). In defining problems in a way that discovers solutions through technological, imaginative innovation, these advertising campaigns avoid the continuous impacts oil extraction has on marginalized communities.

“Shading costs” refers to the creation of externalities, or the hidden, real costs of business practices for which they are not held accountable (Princen, 2002). These perpetuated, shadowed costs include the waste against marginalized groups and the continued, unsustainable use of resources, specifically water, in the process of energy production.

Additionally, when problems are bracketed into the difficulty found in meeting demand, so too are solutions narrowly bounded. Alternative forms of energy also present problems left unaccounted. When the oil corporation seeks such alternatives in response to Peak Oil, the solution becomes a creative adventure to find new sources of power that will replace diminishing oil supplies. However, broader impacts on the environment are lost in this discourse. In sum, when we assume energy as a bracketed problem that requires a solution on the same level, we forget about its contextual impact on the environment. Instead, energy production must take into account the overall effect of its processes, particularly high levels of water resources needed for extraction.

If alternatively we define energy sources as the power humans take from the environment to provide us with our vitality, then water, as well as food, become types of energy. Indigenous teachings, as well as such writers as Val Plumwood (2008) and Alan Watts (1966), discuss food in this way. Cajete, for instance, defines food as the “transformation of energy in the animal kingdom” (1999, p 9), offering an ecological understanding of food: one animal eating another as transforming the substance of the body. This energetic transference of food sustains life. Indeed, how we think about “energy” and the “energy crisis” ignores other ways to conceptualize the environmental resources that sustain our lives. In treating energy problems perpetually in the future, overcome once they appear before us, we run the risk of tapping our already strained water resources and finding, with water scarcity, a much greater type of “energy” crisis.

We clearly see the perpetuated costs to our water resources in multiple types of alternatives. Oil company advertising campaigns describe their efforts in alternatives by highlighting new forms of innovation. In other words, “alternatives” define new, inventive ways to supply oil. Chevron’s commercial spots use the term to refer to different ways—better ways—Chevron can supply oil, defining investments in oil sands, viscous oil historically difficult to extract, “unconventional” sources. When Chevron refers to actual alternatives to oil production, crude or viscous—such as natural gas, biodeisel plants, geothermal, or hydrogen fuel stations—they give each alternative equal weight regardless of its infeasibility (hydrogen) or the water consumption needed in production. A *New York Times* article details the recent breakthroughs in technology that improve access to large natural gas shale formations in the United States. While such technology provides increased sources of energy for consumption, the article also details the large amounts of water needed to extract the gas during production (Krauss, August 2008). Likewise, an *Alternet* article considers the folly of expanding crop farming for energy production in the arid High Plains of the United States. While the government subsidizes such forms of production, approving an act that requires the country to produce fifteen billion gallons of corn ethanol per year, “We are wasting irreplaceable water in the name of ‘energy independence’” (Cox, March 2008).

Both efforts in alternative energy production strain an already unsustainable situation, in which human use of water increasingly outweighs the water supply. Similarly, in addition to the oil companies’ alternative solutions, other companies promote their sources of alternative energy but often with the same problems. In its waste-to-energy production, Waste Management, for example, reuses waste in order to generate power. The company compares its “source of boundless energy” to the energy potential of a child running

across the screen on its website: “to us, that’s energy to burn” (“Waste-to-Energy”). However, the website also explains how the process converts water into steam by raising the temperature of the furnace boilers up to 2,000°.xxx A supplemental video details the use of water at different points of the process. The EPA, in outlining the water resource use and discharge of such energy production, states that, compared to oil, converting municipal waste into energy requires comparable levels of water in terms of per unit energy generated. After accounting for the scale of the production plants, the removal of water, as well as the discharge of warmer, polluted water back into ecosystems, has a similar impact to that of fossil fuel generation (U.S. Environmental Protection Agency, “Municipal Solid Waste”).

Alternative solutions point to a more fundamental problem in how we conceptualize energy than simply a source of power, replaceable with alternatives. These alternatives have their own production impacts, and alternatives that may work in one location (such as an area with plentiful water) do not work in another (such as a desert). Conceiving humans’ energetic potential in relation to the power sources of oil, or biodiesel, or solar—conceived in relation to energy as simply a resource extracted—masks the broader impact on the environment and marginalized people. Ivie (1994) argues that the literalizing of a metaphor, such as following the “force” trope or enemies defined as savages in prowar discourse, defines reality itself. The ubiquity of the dominant metaphorical trope begins to define it. I have put forth in this paper how oil companies attempt to literalize the creative energy that goes into energy production, at the expense of the physical effects. Additionally, they exercise this metaphor through reliance on the established definition of energy, which is merely a literalized metaphor (or one way to understand energy as embodying our power): energy as an extractive resource. How we discuss energy cuts off other ways

to talk about the term and other ways to understand the energy problem.

The centrifugal force model promoted in the oil company advertising campaigns, in which the company propels movement outward through its continuously replenished supply of power, reflects an analogy in need of revision. In this comparison, humans are loosely attached to the central power source, hanging by a chain and moving simply because of the force acting upon us. The center moves the periphery, though both are a part of the same system. Instead of a model in which the power supply enacts an outward force that propels our energy, an article in *Russia Today* illustrates an example in which the periphery powers the system (Zandri, 2008). The company Saber Technical supplies a merry-go-round that utilizes the energy of kids in order to “harness their energy” (Zandri, 2008). The company develops an electrical generating playground system, in which the playground equipment generates an electric charge when activated. Children’s play on these machines can pump local well water or generate the electricity of the local building by transferring electric currents into the local system.

Karen Cavanaugh, CEO of Saber Technical, recognizes the dangers of child exploitation in such a system: after all, “It’s all about bottling their energy.” In turn, Cavanaugh illustrates the desired intention: “But most of all I want these kids to know that it is their energy that will solve problems.” The human actors in this story produce energy through their physical movement. As opposed to the oil company model, in which human energy simply sees to it that the axis keeps on spinning, this model develops centripetal force, in which humans put their bodies into the production process. The energy gets generated through use. This generation opposes the model of a central source, that of the corporation, that supplies power outwardly and engenders the capacity for its use.

Most importantly, the revised model foregrounds the importance of full-fledged

“human energy,” accounting for our creative potential, our physical potential, and our relations to our environments. By placing our physical energy into the production process, we compel local solutions. Localized connections to energy production foreground our vital needs. Saber Technical’s playground set, for instance, can tap water wells. A New York State teacher sums up the importance of the kids generating running water, often access otherwise difficult to tap: “We’re trying to get the children involved in the project, and where do you start but with the fundamental needs. You start with water because it’s a basic component of life.” This example provides the productive use of energy for water, instead of water for energy. Furthermore, Stibbe (2004), in a special edition of *Language & Ecology*, explores how the health of the body matches up with ecological health. Diverse eating promotes biodiversity just as walking disincentivizes other forms of transportation and mechanical exercise. Local solutions to energy production would include the building of centralized, locally sustaining communities that minimize transportation of our products and our bodies. Solutions would also incorporate our physical, and creative, energy into communal decisions. An edited volume about building natural assets suggests ways to build such communities (Boyce, 2003). Dixon (2003), for example, discusses urban degradation and inner-city efforts to reintegrate abandoned tracts. Community involvement in one’s locality essentially explores the potential for putting the human spirit into community development.

Of course, I do not expect oil corporations to lead, or even participate in such efforts. However, governments should. We need regulation that subsidizes alternative energy production that accounts for water resources by region and foregrounds local solutions, not simply

solutions on the same mass scale that just replaces the engine. Energy contextually envisioned, in which we understand both supplies of energy and supplies of water and food as humanity’s power sources, would mean shifts in society towards local communities, centered around their water resources, and energy production that respects the limited terrain presented by each. In a phrase, these efforts highlight our “human energy” in the energy production process. A shift in metaphors—one that redefines “human energy” and shifts agency to humans in their local environments—can go a long way in assessing our energy problems and leading us into a brighter future.

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#### Notes

xxviii Indeed, take Ogilvy’s (1983) separate assertion: “The Spokesman everyone wants is Walter Cronkite, but he isn’t available at any price” (p 109). Cronkite’s voice-over for *Liberty Kids* (2002-2003), an “educational” television show about America’s patriots originally on PBS and later shown elsewhere, indirectly sells, and should sell well, parental viewing; Cronkite *must be* genuine, parents watch the program, and in turn parents watch the advertisements sold to them. On The Disney Channel, celebrity testimonials sell the same idea. It appears that the celebrity does not sell anything other than support for childhood development, but in reality, just as voice-over actor, and 2008’s Wealthiest Person in the World, Warren Buffet sells American ideology on *Liberty Kids*, so too does Julie Andrews’ testimony sell The Disney brand.

xxix This discourse is highly imperialistic. While unexplored here, the child metaphor, and the full-fledged adult, also symbolizes the “developed” country that must “help” the “developing” country develop economically on a free-market path. See Rostow (1998) for an infamously seminal example of this concept of development moving along a linear path from undeveloped to developed; see also Gronemeyer (1992) on the imperialist metaphor, “helping.”

xxx The website does not specify Fahrenheit or Celsius. I assume they are referring to Fahrenheit since the website is meant for a lay (American) public, not scientists (or essentially the rest of the world) that would use C°. In addition, the absence of specificity in itself likely speaks to their audience assumptions.

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## **Perceptions of Success and the Role of Consensus in Natural Resource Collaboration: A Case Study of an Inactive Collaborative Group**

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### **Abstract**

*Collaboration is emerging as a potential solution to contentious natural resource management issues, but there is a need for deeper investigation of the causes of success and failure in these processes, and specifically the roles of consensus-based decision-making and communication in collaborative processes. To address these gaps, we interviewed participants and analyzed their perceptions of the roles of communication, conflict, science and perceptions of success in the Northwest Colorado Stewardship (NWCOS) group. NWCOS is an inactive collaborative group that did not reach a consensus-based decision with respect to its primary objective, to craft a “community alternative” for the BLM’s Little Snake Resource Management Plan. We assessed participants’ perceptions of the group’s success, and explored the roles of conflict, communication and decision-making in relation to the group’s process and outcomes. We found that participants perceived benefits from the collaborative process, and felt that there were some positive outcomes despite the lack of a consensus decision on the RMP alternatives.*

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### **Introduction**

People in the United States are increasingly rejecting the traditional top-down approaches to natural resource decision-making and are seeking a more significant role in the process (Fisher et al., 1991). Natural resource collaboration has proven to be a possible solution to many natural resource issues and conflict situations (Conley and Moote, 2003, Schuett et al., 2001, Wondolleck and Yaffee, 2000, Daniels and Walker, 2001). In particular, collaboration has been put forth as a means to increase the social legitimacy of decisions (Daniels and Walker, 2001). Agencies have therefore begun to take a more collaborative approach to natural resource management, shifting away from the traditional top-down approach (Cronin and Ostergren, 2007, Daniels and Walker, 2001). There are several areas that require further research, which will be analyzed in this study of the Northwest Colorado Stewardship group

(NWCOS), an inactive collaborative group that did not achieve its major objective. First, there are many lessons to be learned from unsuccessful collaborative groups. Second, snapshot (single point in time) approaches to researching collaborative groups are less comprehensive and are less likely to link process to products. Longitudinal studies of these groups can provide insight on the effectiveness of collaborative natural resource efforts by linking process to outcomes. Third, it is necessary to measure the outputs and outcomes of collaboration. Finally, information is needed to understand how consensus-based decision-making influences collaborative processes, especially communication and conflict within these processes, and its feasibility as a goal for collaborative groups.

The Northwest Colorado Stewardship (NWCOS) is a collaborative, community-based group located in the Bureau of Land Management’s (BLM) Little

Snake Resource Area (LSRA) headquartered in Craig, Colorado. NWCOS was formed in order to alleviate some of the stakeholder conflict over land use and later to provide public input to the BLM for their revision of the Little Snake Resource Area Resource Management Plan (RMP). One key area of conflict in the RMP revision was a proposal for increased oil and gas development permits on BLM land, which would require not only drilling, but also new road development in proposed wilderness areas. Currently, NWCOS is inactive and is an example of an attempt at collaboration that did not meet its primary goal. NWCOS attempted, and was not able to come to consensus on some of the core value-based land management issues for the RMP revision, and the group stopped meeting in 2006.

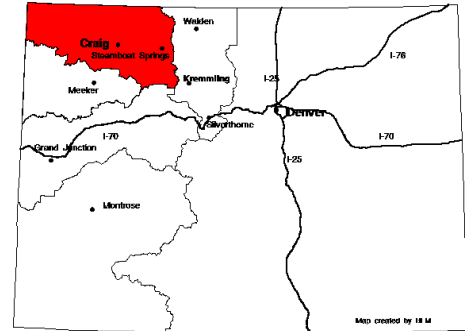
The goal of this paper is to examine how NWCOS participants perceived success and failure, to identify some of the outcomes from collaboration that was unable to reach its goals, and to explore the role of consensus-based decision-making and its relation to the outcomes of this collaborative process. The paper is organized as follows. First we briefly review the literature on definitions of success and consensus-based decision-making in collaborative processes. We then present our research questions, followed by a description of our methodology. We present our findings and interpretations in the following section, and conclude with a brief discussion and conclusions.

### *Success in Collaboration*

Success in collaboration is characterized in a number of ways. Success can be defined in terms of process (e.g. whether it was inclusive, fair, legitimate, etc.), outputs (e.g. activities undertaken, products), and outcomes (changed social and ecological conditions). These definitions of success are used throughout the literature on collaboration. Information is still needed to explore the definitions and criteria for success to promote “successful” collaborative

approaches that meet the group’s goals. Additionally, Leach et al. (2002) state that when measuring success, multiple measures are necessary due to the fact that collaborative partnerships are taking on “multiple goals simultaneously”. Our

purpose in this paper is to explore how participants in the Northwest



est Colorado Stewardship Collaborative partnership conceptualized success, and whether they perceived benefits to participation even though the group’s nominal goal was not achieved.

Success can be defined by whether or not a group is able to reach its goals, or in relation to more general criteria such as improved relationships, communication, social capital or trust. Collaborative processes that do not reach their goals can have other positive long-term effects, such as ‘improved relationships’ and ‘increased understanding’ (Conley and Moote, 2003). Conley and Moote (2003) state that failed collaboration, where goals are not reached, can come at a heavy cost. They say that these costs include effort, time, and potentially social capital that is “...consumed rather than built” (Conley and Moote, 2003, p. 374).

Evaluation of collaborative process, according to Conley and Moote (2003), will potentially help increase our understanding of the limits and the potential of collaboration. However, indicators of a successful process, such as satisfaction, legitimacy of decisions, improved stakeholder relationships and communication, can be difficult to measure. Additionally, to understand what leads to success or failure of collaborative processes, we need to identify and measure the factors that influence success and

analyze the relationship between these factors and the group's success or lack thereof. Research by Leach and Pelkey (2001) showed that local, case-specific factors were important in determining collaborative success, and so the creation of a collaborative procedural protocol would be difficult to construct.

Scholars disagree over the most appropriate measures of success in collaboration. Coliagnese (2003) questions whether satisfaction is an appropriate measure for successful decision-making, arguing that there is no guarantee that satisfaction in decisions will result in the most appropriate decisions. Additionally, he states that satisfied participants represent only a subset of the affected population and not the whole (Coglianese, 2003). Other scholars, however, argue that in stakeholder decision-making processes, participant satisfaction is the closest we are likely to get to understanding and measuring success. Also, participant satisfaction fails to adequately address ecological or broader social outcomes.

This paper attempts to unpack some of the participant perceptions and interpretation of success in NWCOS. Due to the fact that NWCOS was unable to reach its primary goal of creating a community alternative for the BLM's RMP revision, we expected to find that participants viewed NWCOS as a failed attempt at collaboration. However, our analysis revealed that most people perceived the process as successful in some ways.

#### *Consensus-Based Decision-Making*

There are many approaches to collaborative processes, though the collaborative public participation model of decision-making is relatively new to natural resource conflict issues. Debate exists over the types of process that are most effective, and collaborative approaches are particularly difficult to execute when extreme conflict exists between stakeholder groups. NWCOS used the consensus model as a goal in their decision-making, however not all natural resource

collaborative processes utilize consensus-based decision-making. This paper will outline some of the key themes of consensus in natural resource collaboration and will use modified grounded theory to analyze how the consensus model affected the NWCOS process.

Collaboration does not require consensus decision-making in order to engage stakeholders in meaningful and participatory dialog. However, many traditional models of natural resource collaboration use consensus as a goal of the decision-making process. The consensus model is a process where all stakeholders unanimously reach agreement on a decision that they all can live with and which makes every effort to meet the interests of all parties (Susskind, 1999). Consensus decisions, state Susskind et al. (1999), reach more creative solutions and are more readily implementable than those made by non-consensus processes. Peterson et al. (2005) argue that a focus on consensus, rather than promoting change, actually encourages the status quo, reifying power inequalities and relationships as well as stalemate due to veto power of single groups rather than looking to new solutions and perspectives. However, consensus-based decision-making could also potentially further entrench conflict issues and causes an even higher level of polarization among participants. Leach (2006) responds to criticisms of consensus presented by Peterson et al. (2005), asserting that consensus can take a variety of forms and is not necessarily doomed to stalemate or status quo.

Peterson et al. (2005) state that while there are a variety of labels for consensus-based land management, all have a commitment to reach a mutual agreement. These consensus models, they argue, seek win-win solutions while educating participants and promoting community (Peterson et al., 2005). The authors conclude "...that environmental decision making rooted in consensus theory leads to the dilution of socially powerful conservation metaphors and legitimizes

current power relationships rooted in unsustainable social constructions of reality” (Peterson et al., 2005, p. 762). Peterson et al. (2005) argue that in democracy, dissent and conflict are inherent, and they state that decision-making should recognize those differences rather than attempt agreement, masking conflict and giving an ‘illusion of objectivity’. In response to Peterson et al., Leach (2006) argues that while varied, consensus-based decision-making does not necessarily preclude an argument model for decision-making, nor does the goal of consensus necessarily inhibit interdisciplinary deliberation, negotiation, debate or conversations.

There are a variety of opinions regarding consensus-based decision-making in natural resource issues. Some scholars feel that the goal of consensus decision-making is outdated, while others view it as essential to the design of public deliberation. Toker (2004) states that while “...the consensus model [of collaboration] forwards a characterization of stakeholders as active, representative and equal, a narrative of group process in which free and open deliberation leads to a sense of the common good and a guiding goal of rational, authoritative, consensus decision making...” the implementation of such practices have proven to be problematic (p. 180). Leach (2006), however, argues that there is not yet enough empirical evidence to suggest that consensus is an ineffective form decision-making and further research is needed to understand consensus using actual examples. Leach (2006) cites Emerson et al. (2005) in stating that considerably more data is needed in order to validate claims about consensus decision-making. Leach (2006) further cautions that “By dismissing consensus before the evidence is in, we risk missing an opportunity to improve the way society charts its ecological future” (p. 574).

The NWCOS collaborative group used a consensus model for their decision-making. While they were not able to reach their goal of consensus, this research study examines whether the goal of consensus

decision-making affected the collaborative process and the roles of conflict and science. Additionally, research will look to better understand how the goal of consensus affects communication during collaborative decision-making. This research will deepen our understanding of the role of consensus-based decision-making in natural resource collaboration.

#### Research Questions

Two overarching research questions for this paper are: (1) what were the perceptions of success in NWCOS and how did conflict and communication in the group influence success? And (2) how did the goal of consensus-based decision-making affect the process and outcomes of the Northwest Colorado Stewardship collaborative group?

With respect to question one, we wanted to understand how process variables such as perceived inclusiveness, fairness, legitimacy and communication affected participant perceptions of success in NWCOS. We hope to use these indicators of success to help predict success and prevent failure in future collaborative groups. In addressing this question we also explored indicators of failure other than lack of success, and determined how those other indicators of could be identified before or during the process in order to best manage and facilitate productive collaboration.

The goal of consensus-based decision-making potentially can provide a more inclusive and fair process, but also has associated problems. In pursuing question two, we sought to understand effects of attempting consensus on the process and outcomes of a group that was not able to reach a consensus agreement. We recognize that there are many ways to facilitate and encourage conversation in collaborative process. Here, we attempt to increase our understanding of potential impacts incorporated with the goal of consensus-based collaborative process.

#### Methods

Membership in NWCOS included a mailing list of approximately 150 people,

including about 60 members who attended meetings regularly and participated actively in the group. We used semi-structured, in-depth interviews with NWCOS participants for this case study. We interviewed 21 participants (20 of which are used in this analysis) between August 2008 and November 2008. Interviews ranged from 30 minutes to three hours in length and averaged about one hour. Interviews were audio-recorded, transcribed and coded using qualitative data analysis software. Participants were identified using a networking method, and sampling continued until nearly all recommended participants had been interviewed, and at least one participant was interviewed from each stakeholder group. The main interview questions covered a range of topics including communication, conflict, the role of science, social capital, collaborative process and success in NWCOS.

Analysis for this paper focused on respondents' perspectives of success, failure, consensus-based decision-making and the value of the collaborative process. We used a modified grounded theory approach in our analysis. The interviews were broadly coded for general themes, and relevant sections were then selected for further analysis, or axial coding in this paper. Interviews were openly coded for portions of interview responses that were relevant to the research question. They were then coded a second time to make distinctions between perspectives on process, the usefulness of NWCOS and of consensus. Finally, through selective coding, recoding, and constant comparison, themes were created to relate to the overall phenomenon.

During the analysis of interview texts, the first author identified emergent code categories, then compared the interviews to identify themes and variances. Indicators of success and failure and the role of consensus in the collaborative process were compared against existing collaborative literature in order to determine whether this case confirmed or contradicted existing literature, which would either

strengthen existing generalizations or undermine them. Emergent themes throughout the analysis process were assessed based on their applicability and relevance to the research questions.

#### **Findings**

While NWCOS participants were not able to come to a consensus agreement on their primary objective of crafting a community alternative for the BLM's RMP revision, all respondents perceived benefits from the collaborative process. Interview participants referred to success and failure in terms of both reaching goals and for other process outcomes such as changes in communication, trust and conflict. Most participants felt that while NWCOS was unsuccessful by traditional standards of reaching goals, it was still a valuable process, and therefore successful in some respect. Additionally, many participants felt that while consensus may not have been possible for NWCOS on the core issues for the RMP revision, the process of attempting a consensus-based decision was beneficial.

#### *Perceptions of Success*

Interview data suggests two separate ways of thinking about the word "success" in NWCOS. Nearly all participants used both meanings in order to talk about the perceived benefits and outcomes from the NWCOS collaborative process. First, success was used to describe whether or not goals were reached. Second, it was also used to articulate other benefits from the process and highlight a generally shared feeling that a failure to reach goals did not necessarily indicate process failure because the other social and possibly ecological benefits outweighed the costs.

Nearly all interview participants stated that NWCOS was both successful and unsuccessful as a collaborative group. Respondents agreed that NWCOS was unsuccessful in the classic sense of the reaching its goal of crafting a community alternative to the RMP revision. While there was variance in the degree to which respondents felt NWCOS was successful, the perceived benefits and quality of

communication were enough for many participants to state that overall, the collaborative was still a success. Some of these products that indicated success included increased social capacity, social capital, communication and improved relationships, as well as the opportunity to provide input to the BLM and better represent the community and stakeholder interests in a public format, and a more thought-out and informed RMP revision. While some leaned toward the classical use of the word failure and deemed this to be the case for NWCOS, all participants cited benefits from the process and most felt that these benefits were enough to consider NWCOS both a success and failure overall.

Figure 1 is a taxonomy depicting the reasons people felt NWCOS could be considered successful or unsuccessful as a collaborative group. This taxonomy does not represent reasons that led to failure or success, but rather participant justifications for their classification and terminology of the terms success and failure (or unsuccessful).

Participant's use of the word "success" to describe NWCOS in a way that reached beyond the overarching goal of the group was not uncommon. One comment, which was similar to several other interviews and is a good example of how people felt, stated:

I have a positive view of NWCOS and part of that is because I really enjoyed it. And I really enjoyed it because I got to know so many people from so many different backgrounds and interests and values and I really understood, most of the time, where they were coming from. And so from my point of view, I don't know, to me that's successful, that's a success because we did build trust, we did open lines of communication that weren't open before...

While most participants did not share similar sentiments of having particularly *enjoyed*

the process, many felt similarly that the benefits from the conversations and attempts at decision-making in NWCOS were enough to consider the collaborative group a success despite a lack of consensus agreement on the RMP revision. One respondent stated:

But at least, at least I think that we sat around the table, we talked, we got the conversation going, we... expressed everyone's views, we... knew where everyone's coming from... and I think that's a better way of doing business.

This respondent went on to say that a lack of consensus was not necessarily a failure:

...I think that's the thing, you know I just think we're just, we're shooting so high to sky that we're thinking we're going to get 100% consensus and, and if you don't, it's not a failure.

Another participant, in response to a question about whether or not the effort was successful, replied:

I think it was, um, from the standpoint that I don't know of any other time or situation where that many people have continued to talk and work together to discuss issues, um, at the level they were at, um, you know, it's pretty difficult to keep 40 to 60 people coming to meeting on a continuous basis, and they were successful in doing that so, you know whether they accomplished all of the things they wanted to accomplish, no they probably didn't, but was it worth while and therefore successful, yes I think it was.

Another participant, in response to the question 'was NWCOS successful?' replied:

Definitely. I think it made for a better [resource management] plan. I think everyone in that group thinks the RMP is better for that effort. And then I think that the relationships that we built because of... some of the informal, existential type benefits, the stuff that's not all about the plan, which is about relationships and communication and trust and that type of thing. So I think in both those regards they were successful, the only question is whether it was really worth the money.

As indicated in these responses, nearly all participants felt that NWCOS had some successes, most of which related to improved social relationships and communication, or to a better, well-thought-out RMP revision. However, questions of worth also arose. One participant stated:

I think that we, I do think that we've benefited from doing it. Now, was it worth it, well, it's hard to say, you know. In terms of time, in terms of the expense, we put a lot of BLM expense and time into it, other stakeholders and participants put a tremendous amount of time and expense into it. I mean, all the trips and traveling and money spent on that kind of stuff, geeze you know. And I don't know how you measure that. Was it worth it? I don't know. You'll probably get a different answer depending on who you talk to and how frustrated they are with the whole experience.

One criteria for success is learning. A participant stated: "I got a real education

you know, I was, I'm glad I participated." Another participant perceived other benefits:

...everybody ha[d] a better understanding of where different interests [we]re coming from, um, I think everybody came to recognize other people as human beings that were nice people, um, even if you disagree, and I think... the local BLM staff... came away with even more respect, not for the agency, not for the contractor, but for the individual BLM staff in that office, um, who were trying desperately to make some good out of all these endless meetings, so I do think that was a positive...

Increased mutual understanding and respect are aspects of social capital. These findings support earlier research conducted on NWCOS to suggest that the group experienced increased social capital as a result of their collaboration (Wagner, 2006).

Another participant stated that NWCOS was able to come to agreement on many smaller issues, but could not agree when it came down to the few core topics for the RMP revision. They elaborated on the subject of success relative to success in decision-making and consensus:

...But there were three main [issues] that really didn't get consensus, the hardest ones consensus wasn't achieved. So, NWCOS was phenomenally successful at giving BLM upfront opinion[s] on a plan. Hands down, in this nation, there's not a BLM plan that will come out as well vented as this draft does. And... there will be less controversy over this BLM plan's draft, than any other plan in the nation because of it. There are still core areas that we didn't

work through. But the organization is a huge success, because it gave BLM community perspectives on topics that—and it was funny, because there were lots of things that BLM would have never even thought of that this group brought forward, and those other topics. Hugely successful when it came to BLM doing an RMP.

This participant brings up several important issues in their statement. NWCOS was successful in providing feedback to the BLM for their RMP revision and in giving people the opportunity to thoroughly flush out the various issues. This participant uses both meanings of the word success by stating that it was not successful in reaching consensus on the core issues (oil and gas, wilderness designations and wildlife), but that the group was successful in achieving a good, quality conversation. The issue of consensus-based decision-making is flushed out more thoroughly later in this paper.

While NWCOS was generally considered successful in improving social relationships and a failure in accomplishing goals, questions remain as to how people will apply lessons they learned from NWCOS to similar collaborative situations in the future. One participant, who advocated that NWCOS was a complete success in terms of crafting an RMP despite the community alternative, also stated that “...it burned me out on trying to work with people is what NWCOS did to me.” This participant said that the consensus-based model for decision-making was good in that it did not alienate people, however the process was enough to make him not want to participate in future collaborative efforts where, according to him, people could not compromise. This participant also said:

“[t]hat process to me leaves a sour spot in my gut, the two years of collaboration, because I don’t think the people were truly,

the other side... was never—I just really don’t believe they were there to reach agreement. I truly believe I opened up and said ‘alright, [we hate] these kinds of things, but we’ll meet in the middle if you can’ and I don’t feel like the other side tried to give any. I think they just tried to suck us towards their side. And, so, if... any federal agency, ask to do this, if I felt they were there in good faith, I’d probably would be easy to deal with, but if I suspected there was not genuine effort to give on that, I’d have a hard time, I’d be hard nosed at those meetings, yeah.

This participant also recognized that the reason he would participate pertained more to the fact that he is required to by his job than because he would voluntarily take part in another collaborative effort. This same participant went on to say that while he gained from the process of NWCOS, identifying deal-breakers early in the process was a lesson learned, but also resulted in not attempting collaboration in another group based out of the same area for other natural resource issues:

I didn’t lose anything. I gained all. Even for the parts where I was burned, it educated as to what to watch out for in the future. And that saved our tail, and NWCOS saved our tail on [the other group] because we knew right up front, ‘alright, let’s find out the deal breakers upfront where can’t go through this’. And it was actually thanks to [another participant, who] said, ‘alright, we’ll be collaborative, but only if right up front, you identify your deal breakers or things you won’t give on’, and that was awesome because we saved a, we realized we were not going to



agree on a couple key issues for [that group] and we just abandoned the meetings, and agreed to fight.

This comment brings up interesting issues for the outcomes of collaboration when it is unable to reach its goals which will be discussed further in the discussion section.

Analysis of NWCOS data suggests that participants had varied perceptions of success. However most people identified frustration and perceptions of failure with the collaborative process (particularly with regards to meeting goals and decision-making) as well as perceived success due to the level and quality of conversations that occurred. Many NWCOS participants generally felt that the process and outcomes were enough of a success to outweigh a failure to reach goals. This concept will be analyzed further in the following section. We recognize that perceptions of success vary within a collaborative process and different stakeholders may walk away from the same experience with entirely different interpretations of success, the trick is to be able to identify indicators of perceived success and keep the group moving toward those and away from indicators of failure in the process.

#### *The Role of Consensus-based Decision-Making*

In their initial list of agreed-upon rules, NWCOS participants committed to using consensus-based decision-making. It was their decision as a collaborative to use consensus, and according to some parties, the group would not consider any other type of decision-making process. In this section, we explore the role of consensus-based decision making in NWCOS and how it contributed to different types of success or failure in the group.

We found that a majority of the participants felt that the NWCOS collaborative process was beneficial, despite a lack of consensus and unattained goals. Additionally, most participants agreed that consensus was probably not possible given the group makeup and goals.

However, participants' understanding of the definition of consensus may have varied. Many NWCOS participants contrasted consensus with compromise or voting systems. Several participants felt that a consensus process gave participants veto power, which made it a non-majority process, and therefore a safer way to participate. It is important to know and understand these differences of perception in order to understand how people valued and weighed a consensus process, as well as their knowledge of alternate decision-making systems for comparison purposes.

To assess the role of consensus in NWCOS, we asked three main questions of most participants. These questions were: 1) Was the process of NWCOS useful/did it have some benefits? 2) Was a consensus community alternative for the RMP revision possible? and 3) Did it require the goal of consensus-decision-making in order to have had a useful and productive process?

The analysis revealed that most participants answered the first question (was the process useful) as "yes", the second (was a consensus-based RMP revision possible) "no" and many answered the third (was the goal consensus necessary in order for the process to have been useful) "yes". In general, participants felt that the process and conversations in NWCOS were useful, however reaching a consensus agreement was probably not possible. When asked whether or not the goal of consensus was required in order to have achieved a process that was as useful as it was, there was more variance in responses. While fewer participants directly answered the third question, quite a few of them thought that the goal of consensus was indeed helpful or even required. This section outlines findings from these three interview questions and how they relate to the role of consensus decision-making.

#### *Interview Question 1: Was the Process Useful?*

This interview question relates to the earlier analysis on perceptions of success, though more loosely defines benefits

without the specific associated terminology of “success” and “failure”.

Nearly all the participants found NWCOS to have been beneficial. All but one of the 20 interview participants gave a positive indication of the usefulness of the process. Of the 19 respondents that answered the question, 16 people gave a definite and often enthusiastic “yes,”-- they thought the process and conversation of NWCOS was very beneficial. Three of the 19 people stated that it was a beneficial process, but had a few reservations or were slightly less enthusiastic and definite in their response compared to the other 16. None of the participants felt that NWCOS was useless or had no benefits.

Figure 2 is a taxonomy of how participants felt the process was beneficial or useful and their reasoning. The two possible responses from interview data are “YES” and “YES/kind of”. Those themes that flow from the “YES/Kind of” group are in addition to sentiments from the “YES” responses, which were not isolated to the more solid respondents.

Participants generally felt that the NWCOS process was a good use of time and were pleased with the process and associated conversation. One participant stated:

...but I am immensely pleased with the outcomes of having everyone in the room in being listened to. And I’m saying that as there’s a bunch of stuff in that plan that pisses me off... ...but, you know, I thought that, it was just a great process. Now whether or not it’s worth, you know, the cost benefit ratio and time invested for some people, I have no idea. Um, for me, personally, it was well worth my time.

Questions of time and money often arose during interviews, though most people felt that for them personally, the process was still worth it. Another participant voiced a

similar sentiment with regards to the process relative to the cost in terms of time said (in response to whether or not the process was worth it for them):

Yeah, oh yeah... I don’t know if it was useful to the, to the degree that it was worth the amount of time that it took...

This was one of the three respondents whose interview was coded as “YES/kind of” during axial coding rather than “YES” definite. Some of the 19 more definite responses felt that NWCOS was immensely beneficial despite a lack of consensus. One participant stated that not only was the conversation useful, but also the non-consensus RMP revision process and product benefited:

...[there were areas that we] didn’t reach consensus, and that doesn’t matter. Let me be clear about that. What matters, is BLM heard the differing views. They would never have heard those views without NWCOS. So it doesn’t matter that we didn’t agree on things. The point is when BLM when back to the drawing—went back to write that plan, they knew where every side was coming from, and they had the knowledge to make the best balance they could. That’s what the group’s all about.

This participant, as well as others, found the NWCOS to be hugely beneficial for the RMP revision despite a lack of a consensus community alternative. Participants felt that the process allowed for the expression of differing views, new information provided to the BLM, and the development of a solid plan that will potentially face less controversy. Many respondents felt that the NWCOS process and resulting conversations allowed for public involvement and opinions to be incorporated

into decision-making in ways that would not otherwise have been possible.

In many cases, participants felt that the process was so useful that they would do it all over again if given the choice. While most respondents also stated feelings of frustration, loss and anger when thinking back on NWCOS, most of those people also said that they still got something out of the process, and either they or the larger community benefited from the NWCOS process. One participant highlighted these feelings, stating:

I gained skills. I gained some friendships, lost some time, lost my temper a couple of times you know, um, but yeah... you know I'm sure, I'm sure I gained more than I lost personally.

Another participant felt similarly and stated:

It sucked, I mean, I will say, you know, going and working 16 hour days, spending just thousands upon thousands and thousands of hours, you know... The nights you know, at the office 'til one, two in the morning, I mean, those are things that were difficult. But like I said, I think it was all worthwhile in the end, whether or not people reached the resolution that they wanted, and I think, you got to look at things in a little bit more, I don't know, unbiased perspective. You invest in—you invest in things to, to you know, see a variety of different outcomes, and in this case I view it as I invested in my community...

For most participants, the enormous and even painful investment of time was worth developing relationships, learning, and the opportunity to consider a variety of perspectives

#### *Interview Question 2: Was Consensus Possible?*

Most participants felt that consensus on a community alternative for the RMP would not have been possible given the circumstances of the collaborative group. While some participants said that consensus may have been possible under different circumstances, such a change in goals, issues or membership, only one participant felt that NWCOS would have been able to come to consensus if given more time *without* changing those variables. In other words, given the participants involved and the issues on which the group was attempting to achieve consensus, only one person thought that if given more time, a consensus agreement would have been possible. The fact that such a large majority of respondents felt that NWCOS would not have been able to come to consensus suggests that a consensus community alternative for the LSRA Resource Management Plan was not a realistic goal for this group.

Extended analysis examined variation among participant views regarding the possibility of consensus and the reasons why they viewed it as possible or impossible. All of the 20 participants addressed whether or not consensus would have been possible given the circumstances of the group. Of these, 15 respondents stated that NWCOS definitely would not have been able to come to consensus on the core issues of the RMP revision. Four respondents gave qualified no. These four respondents indicated that they thought consensus was unlikely, and probably would never have occurred, but were a little less definite than those who directly said "no". Only one respondent thought consensus would have been a possible goal for NWCOS to achieve if given more time. It should be noted that this participant as well as one of the participants that gave a less certain "no", were two of three interview respondents that did not actively participate in NWCOS to the very end. Figure 3 is a taxonomy depicting some of issues that respondents discussed with regards to why

they thought consensus was or was not possible for NWCOS.

Participants gave a variety of reasons that NWCOS was unable to come to consensus on the RMP revision. People generally felt that the core issues with which NWCOS was grappling, including oil and gas development and wilderness designations, were issues that they would never be able to find agreement on. Participants also noted that consensus was not possible given the wide range of stakeholders (and opposing perspectives) involved. Some participants felt that the open process paired with those core issues would never have produced consensus agreement. One participant articulated this sentiment by stating:

...and that's the difficulty, you have a big, a big group, that's completely nebulous in concept and completely open in membership, it's difficult getting things done at those meetings.

The core issues in the RMP revision, oil and gas exploration and wilderness designation, were associated with fundamentally incompatible natural resource values, namely a highly utilitarian view and a strongly preservationist perspective. Wilderness proponents believed that wilderness by definition and function cannot coexist with oil and gas development, and vice versa. NWCOS experienced entrenched conflict and core incompatibilities of land-use perspectives. One participant highlighted the intensity of the issues and the improbability of consensus, by stating:

...I tend to think that the natural resource disputes are more entrenched ... I mean, the way you talk about it in mediation and stuff is you can't really expand the pie, you've got to divide the pie, and uh, you know that it's mine or it's yours, and I think they've done some creative stuff

[for some natural resource issues in other areas where people have thought about] ...not so much expanding the pie of creative solutions but thinking a little bit about what can coexist and where can we just divide. ...And my guess is, in Moffat County I mean there are clearly areas where 'this is the best for the wild horse range' and um, but in a lot of those areas it's also best for you know off road riding and um [right] Jeeping and other things and um, people really fell very passionate about their own, own interests...

This respondent also stated that:

...although I think there are times where I think you had hope of full consensus, most of the time it was just narrowing down the areas of agreement and disagreement.

One participant responded to the incompatibility of the core issues and stakeholders' inability to compromise on those issues by stating:

...I think the big, glaring example is with the wilderness issue and Vermillion Basin, or other areas, but Vermillion Basin being one of the key wins, um, are the most key win, that the wilderness advocate groups, there just wasn't any ability for them to compromise on the issue, you know, that they had to go for 'this needs to be preserved in a wilderness state' or they aren't doing their job. And um, and by the same token you got to recognize like Moffat County, lets say on the other side couldn't go for that, you know, so there's these inflexible diametrically opposed points

that made it, um, futile to try to collaborate on that issue.

NWCOS was unable to compromise on the core issues, and most participants were too far entrenched to come out of their positions. Another respondent stated:

...On certain things that weren't your core issues, people were willing to compromise on process, or, whatever, but in terms of the core issues that were really underneath this, like what happens to Vermillion Basin, um, which is a, what you quote a zero sum issue, no, oil and gas industry wants in, [others] want to protect it as wilderness, and the ranchers ... and county ... they basically brought everybody together thinking, I believe, that they would convince everybody to go their way, I don't know why they felt that, but um, so now, I think on the core issues nobody in the end felt it was within their best interest to compromise.

Another participant said:

We weren't able to collaborate. In general... I mean, ... we have our locked-in positions and people were not willing to, they say you don't use the word compromise in collaboration, but a reality is you do have to compromise if you want 100% of the land to be graze anything less is a compromise, and just the opposite if you want 100% preserved, anything less would be compromise and most people were not willing to compromise on any of the key issues.

Some people were wary as to whether or not other participants even had

incentives to come to agreement on some issues:

...It changed over time, I think people were more willing to look at compromise solutions over time. [But] Overall, people went into it thinking, 'I'm going into this process, either because I'm going to get what I want out of this process, or I'm going to make damn sure they don't get what they want out of the process'.

Such a sentiment about other people's willingness to collaborate and a lack of incentives was a common theme in the interviews. A lack of incentives and perceived lack of incentives for others was a reason people did not work towards consensus-based decisions. Respondents generally felt that they were truly willing and attempting compromise and collaborative decision-making and that participants holding opposing views were not. Many participants, regardless of their value orientations or stakeholder group, mistrusted other participants' intentions.

In sum, participants felt that NWCOS was not capable of reaching a consensus community alternative for the RMP revision. Nearly all respondents believed consensus was not possible. Their reasoning included politics (which will be incorporated into future analysis), incompatibility of land-use goals and value systems, disincentives to collaborate, and the stakeholder makeup of the groups.

*Interview Question 3: Was the Goal of Consensus Required to Achieve the Perceived Benefits of the Process?*

Most respondents had not thought about the role of consensus in achieving the benefits of the process that they perceived, and some found this question difficult to answer. Of the 20 participants, 15 sufficiently understood and answered the question. Of these 15, four respondents stated a definite yes, that in order to attain the benefits of the process, consensus-based decision-making was required. Six

respondents stated a “yes/probably” answer, where they thought there was truth in the statement but were less certain of their convictions. Three people said “no”, that they did not think consensus was required for the process to have been beneficial, and two respondents clearly stated that they were unsure. Overall, nearly all participants felt the process was beneficial to some degree and that consensus was not possible. Of these, nine also thought, to varying degrees, that the goal of consensus decision-making was needed in order for the process and conversation to have been as useful as it was.

One participant articulated both the advantage and cost of open process with the goal of consensus by stating:

...consensus is process of sort of an iterative, how about now? What if we tried this? How about now? What if we try this? Where everyone agrees to keep trying and keep trying until we know we've done the very, very best to maximize everyone's gain. You can't do that in a in a drop in open membership process... You can but then you're signing yourself up for what NWCOS ended up being [-] just this on-going-always-something-new, always-do, you know new issues new people, new concerns, there's no way to end it.

Another participant gave a similar cost/benefit statement, arguing that the goal of consensus is what got them to the table and having the conversation in the first place, but also served to inhibit their goals:

...I think [the goal of consensus decision-making] was necessary, it ultimately prevented [NWCOS] from reaching its success, but um given that I don't think it could have ever

reached that success, um, I'd say it was a good thing to process wise.

These participants voiced a common sentiment amongst NWCOS members that the consensus-based decision-making helped the group to continue a productive conversation and to attempt to maximize everyone's gain. However, it was also a process that did not enable them to achieve their goal of consensus on a community alternative for the RMP revision.

NWCOS' employment of consensus-based decision-making was the reason that some participants engaged in the process in the first place. One such respondent stated: “Well I don't think we [would] have come to the table... if it wasn't consensus based...” This participant, as well as others, felt that the use of a consensus model was the only way that they could be sure of fair process in NWCOS. These respondents felt that the employment of consensus decision-making gave them a voice that would otherwise not be heard and that existing power inequalities would have otherwise dominated their opinions. This perspective generally came from those people that felt in some way could be marginalized in a majority-type format.

#### *Discussion and Conclusions*

The NWCOS collaborative group was unable to reach its goal of crafting a consensus community alternative for the BLM's RMP revision for the Little Snake Resource Area. This research found that NWCOS participants perceived the collaborative effort as both successful and unsuccessful. Participants agreed that there were many benefits that resulted from the collaborative effort apart from the consensus community alternative and most felt that consensus probably was not possible for the RMP revision. Perceived benefits from collaboration and social indicators of success are consistent with literature on collaboration – NWCOS experienced improved communication and relationships (e.g. Schuett et al., 2001), some increased trust (e.g. Leach and Pelkey, 2001) and other indicators of social

capital, as well as increased legitimacy for decisions (e.g. Daniels and Walker, 2001). Additionally, participants had the opportunity to engage in a collaborative process and provide meaningful input to the BLM for their RMP revision. However, research also indicated that the goal of consensus may have other roles in collaborative process and that relationships and social capital (e.g. Wagner, 2006) can both degrade and improve as a result of collaboration. Lessons from NWCOS indicate that participants had a positive perspective on the process, but that they may not engage in another collaborative effort for similar issues in the future due to a lack of trust in the other stakeholders to participate collaboratively in the process and skepticism about whether or not goals are achievable.

This research revealed that consensus-based decision-making had both positive (improved communication and process that was more thorough and in-depth) and negative (goals were not reached and were potentially unrealistic) outcomes for NWCOS. These outcomes indicate that the process of attempting consensus improves communication, social capital and decision-making (e.g. Wondolleck and Yaffee, 2000), but can also potentially undermine social capital and confidence in collaborative process when goals are not reached (Conley and Moote, 2003). In this research, we found that participants perceived many benefits from the process, some successes, improved communication and possibly an improved RMP revision from NWCOS. However, some participants also stated that one way they have applied lessons learned to other subsequent situations was to identify that there were some areas where a consensus was not likely early in the process and have opted out of collaborative discussions and decision-making accordingly.

NWCOS' failure to achieve its primary goal, despite an overall positive perspective on the collaborative group, may deter participants from collaborating on other projects when similarly difficult issues

present themselves in the future. Our findings raise an important issue—what is more important in collaboration—process or outcomes? Our findings suggest that a process that is perceived as legitimate and beneficial to participants may not outweigh the negative effects of its ineffectiveness in reaching consensus. The paradox is that the commitment to consensus made the perceived benefits possible, but also may have undermined the ability of the group to achieve its primary goal of agreement on a community alternative for the RMP. Thus, while consensus may have lent legitimacy to the process, kept participants motivated and engaged, and therefore created opportunities for increased learning and mutual understanding, it also contributed to unrealistic expectations and ultimately disappointment and disillusionment among participants when their goal of agreement was not achieved. This disappointment, in turn, may discourage participants from investing in future collaborative efforts. It also showed that consensus was not likely possible for this group. While we found that participants perceived the process as beneficial and in some cases successful, it did not necessarily translate into future social capacity for overcoming core differences.

This analysis found that perceptions of success and the role of consensus in natural resource collaboration require more in-depth research. While this paper and other literature state that there are benefits that come from the collaborative process, we found that the role of decision-making and procedural goals, such as consensus can yield both positive and negative outcomes simultaneously. NWCOS experienced many benefits from the collaborative process, which has helped them to communicate effectively and to provide meaningful input to the BLM for their RMP revision. However, it is not yet clear as to whether these benefits will outweigh the costs in the short and long terms for both the specific goals of the RMP revision and social capital and capacity within the community. NWCOS was a long

and drawn-out process, which participants felt was well worth their while, but also potentially tedious enough to discourage them from engaging in such processes in the future. Most participants genuinely felt that those from opposing perspectives were never able to truly collaborate or compromise on core value-based issues.

Participants in the collaborative process should carefully consider the costs and benefits of engaging in a consensus-based decision-making process. While NWCOS found that the goal of consensus helped cultivate a process that was perceived by many as successful due to increased social capital and improved communication, less-measurable costs were also accrued. Failure to reach consensus was the catalyst for burnout amongst participants and while spoken of as a beneficial process, has in some ways deterred participants from collaborating on other projects. The goal of consensus can improve process, but when goals are not reached, can cause participants to feel higher levels of frustration. Participants with higher hopes or expectations for consensus also felt the most disappointed and distrust from the process. Participants of collaborative process should recognize that a consensus-based collaborative can encourage participation and cultivate a more representative stakeholder group. The goal of consensus can play an integral

role in improving the quality of communication, relationships and possibly outputs from the group. Consensus pushes conversations to be more thorough and in-depth and can increase the likelihood of perceived success in terms of process and social capital. However, collaborative groups should be careful about employing consensus. When used in contentious, entrenched conflict scenarios, such as NWCOS, a failure to reach the goal of consensus can have other negative effects and participants should weigh these costs and benefits carefully. While consensus may be beneficial for a specific case, it may not be the most appropriate for a community in the long-term, which must continue to work together on similar issues and consensus is unlikely.

There are many costs and benefits to natural resource collaboration. While inconclusive per the long-term outcomes from NWCOS, the process was successful in the eyes of the participants in cultivating and respecting participant views and perspectives, improving social capital and capacity and in developing a better thought-out RMP revision. Additionally, the goal of consensus decision-making helped improve relationships and communication between participants.



Figure 1: Reasons that NWCOS was considered successful and unsuccessful by participants.

|              |                                                  |                    |                                |  |             |  |
|--------------|--------------------------------------------------|--------------------|--------------------------------|--|-------------|--|
| Unsuccessful | Consensus Community Alternative for RMP Revision |                    | Consensus not reached          |  | Core issues |  |
|              |                                                  |                    | Issues remaining in RMP        |  |             |  |
|              |                                                  |                    | May still end up in litigation |  |             |  |
|              | Costs vs. benefits                               | Was it worth...    | ...the time?                   |  |             |  |
|              |                                                  |                    | ...the money?                  |  |             |  |
|              | Process                                          | Picking contractor |                                |  |             |  |
|              | Power inequalities                               |                    | Perceived                      |  |             |  |
|              |                                                  |                    | Actual                         |  |             |  |
| Potential    |                                                  |                    |                                |  |             |  |

|            |                                                |                                           |                                         |                                   |  |  |
|------------|------------------------------------------------|-------------------------------------------|-----------------------------------------|-----------------------------------|--|--|
| Successful | Learning                                       | How to collaborate                        | Process                                 |                                   |  |  |
|            |                                                |                                           | Communication                           |                                   |  |  |
|            |                                                | BLM process                               | Policy and limitations                  |                                   |  |  |
|            |                                                |                                           | How decisions are made                  |                                   |  |  |
|            |                                                |                                           |                                         | Ecological/science                |  |  |
|            | Increased Awareness                            | Issues                                    |                                         |                                   |  |  |
|            |                                                | Positions/values                          |                                         |                                   |  |  |
|            |                                                | Other participants                        |                                         |                                   |  |  |
|            | Interpersonal relationships and social capital |                                           | Better communication                    |                                   |  |  |
|            |                                                |                                           | Better understanding                    |                                   |  |  |
|            |                                                |                                           | Friendships                             |                                   |  |  |
|            | BLM                                            | Relationship with Community               | Transparency                            |                                   |  |  |
|            |                                                |                                           | Trust                                   |                                   |  |  |
|            |                                                |                                           | Interpersonal                           |                                   |  |  |
|            |                                                |                                           | Reputation                              | As an agency                      |  |  |
|            |                                                |                                           |                                         | Individual BLM employees          |  |  |
|            |                                                |                                           | Communication                           | Understanding stakeholder issues  |  |  |
|            |                                                |                                           |                                         | Listening to stakeholders         |  |  |
|            |                                                |                                           |                                         | Open communication with community |  |  |
|            |                                                |                                           | RMP Revision                            | Better vented, well thought-out   |  |  |
|            |                                                | Potentially less dispute                  |                                         |                                   |  |  |
|            |                                                | More representative of stakeholder issues |                                         |                                   |  |  |
|            |                                                | Opportunity to provide input              |                                         |                                   |  |  |
|            | Process                                        | Facilitation                              | Style/form                              |                                   |  |  |
|            |                                                |                                           | Group consensus on choosing facilitator |                                   |  |  |
|            |                                                | Communication                             |                                         |                                   |  |  |

Figure 2. Participant response taxonomy to whether or not they thought NWCOS was useful and reasoning.

|                |     |                                                       |                                            |                                    |       |
|----------------|-----|-------------------------------------------------------|--------------------------------------------|------------------------------------|-------|
| Was it Useful? | YES | RMP revision benefited                                |                                            |                                    |       |
|                |     | Conversations                                         | Good quality                               |                                    |       |
|                |     |                                                       | Finally having the discussion face-to-face |                                    |       |
|                |     |                                                       | Transparency                               |                                    |       |
|                |     |                                                       | Tackling the issues                        |                                    |       |
|                |     | Relationship building and trust building              |                                            |                                    |       |
|                |     | BLM hearing opinions                                  |                                            |                                    |       |
|                |     | Hearing each others' perspectives and new information |                                            |                                    |       |
|                |     | YES/kind of                                           | All Reasons Above                          |                                    |       |
|                |     |                                                       | Reasons for "kind of"                      | Did not achieve goals/decisions    |       |
|                |     |                                                       |                                            | Conversations/frustrations         |       |
|                |     |                                                       |                                            | Some trust degraded                |       |
|                |     |                                                       |                                            | Some relationships degraded        |       |
|                |     |                                                       |                                            | Were the benefits worth the costs? | Time  |
|                |     |                                                       |                                            |                                    | Money |
| Effort         |     |                                                       |                                            |                                    |       |

Figure 3. Taxonomy of participants' reasoning behind NWCOS' inability to reach its goals and come to a consensus agreement.

|                         |     |                                                          |                                  |                                    |                   |  |
|-------------------------|-----|----------------------------------------------------------|----------------------------------|------------------------------------|-------------------|--|
|                         | YES | Needed more time/funding                                 |                                  |                                    |                   |  |
|                         |     | Respondents that replied "probably not" rather than "no" | More time                        |                                    |                   |  |
|                         |     |                                                          | National vs. local players       |                                    |                   |  |
|                         |     |                                                          | Politics                         | National                           |                   |  |
|                         |     |                                                          |                                  | Local                              |                   |  |
|                         |     | Membership                                               | Open process                     |                                    |                   |  |
|                         |     |                                                          | Newcomers can derail discussions |                                    |                   |  |
|                         |     |                                                          |                                  | National membership to groups      |                   |  |
|                         |     |                                                          | National stakeholders            | Federal lands = public stakeholder | Validity of stake |  |
| Was Consensus Possible? | NO  |                                                          |                                  | Impact                             |                   |  |
|                         |     |                                                          | Local stakeholders               |                                    |                   |  |
|                         |     | Core issues                                              | Incompatibility                  | Uses                               |                   |  |
|                         |     |                                                          |                                  | Values                             |                   |  |
|                         |     |                                                          |                                  | Beliefs                            |                   |  |
|                         |     |                                                          | Entrenchment                     |                                    |                   |  |
|                         |     |                                                          | Framing and conflict             |                                    |                   |  |
|                         |     |                                                          | Issues of single use             | Wilderness                         | No way to coexist |  |
|                         |     | Oil and gas                                              |                                  |                                    |                   |  |
|                         |     | Lack of incentives                                       | Better options elsewhere         | Litigation                         |                   |  |
|                         |     |                                                          |                                  | Court                              |                   |  |
|                         |     |                                                          | Other's lack of transparency     |                                    |                   |  |
|                         |     |                                                          | Lack of trust in others          |                                    |                   |  |
|                         |     | Politics/politicians                                     | Local                            |                                    |                   |  |

|  |  |                 |                          |         |
|--|--|-----------------|--------------------------|---------|
|  |  |                 | National                 |         |
|  |  |                 | Policy                   | Federal |
|  |  |                 |                          | Local   |
|  |  |                 | Stakeholder influence    |         |
|  |  | Decision-making | Authority - stakeholders |         |
|  |  |                 | BLM vs. group            |         |

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**Politics on the Trail: A Rhetorical  
Critique of Hidden Canyon Trail in Zion National Park**

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**Abstract**

*Claims of naturalness often belie thoughts of rhetoric, which is one reason such claims are so persuasive. With this in mind, I focus my attentions on a seemingly natural landscape—a hiking trail. Critical scholarly approaches to environmental communication tend to focus on environmental justice issues, but researchers have called for increased attention to outdoor recreation. In answer to this call, I rhetorically analyze Hidden Canyon hiking trail in Zion National Park using Cara Finnegan’s concept of the naturalistic enthymeme. Since this is an uncommon text, I take two approaches. First, I address the trail itself, assessing the rhetorical strategies that feed the assumption of naturalness. Finally, drawing on cultural theorists such as de Certeau, Benjamin, and Bourdieu, I consider the politics of the walk itself. To highlight the rhetoricity of hiking trails, I briefly contrast this example with a hike that has no trail. Although I would like to argue for more democracy on the trail, I think that preserving its distance and inaccessibility to some extent is also desirable. My critique demonstrates how the politics of outdoor recreation converge when visitors get out of their cars and explore a landscape built for them to enjoy.*

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Claims of naturalness often belie thoughts of rhetoric, which is one reason such claims are so persuasive. Recently, gene and brain scientists have pursued the “gay gene” or the neurological source of same-sex feelings (Byers, 2007). Contrary to lay beliefs that finding a biological root for sexuality will make people more accepting, history shows us that searches for biological sources of difference frequently produce results that justify oppression (e.g., White, 1998, p. 25-26). Even as evidence demonstrates that equality is not the necessary product of discovering “natural” differences, we still desire to locate identity in the natural realm. I purport that this is because of the strength of the “naturalness” argument. The logic of the natural is positioned so that it is rarely examined in everyday life. In other words, things that appear natural justify cultural assumptions and normalize patterns of thought and behavior.

An example of such naturalistic rhetoric that is hardly investigated is that of the built or modified landscape, in particular those hiking trails that we traverse in search of fresh air and exercise. Despite research into spaces/places that ask us to remember (see, e.g.: Blair, 2006; Blair, 1999; Browne, 1999; Dickinson, Ott, & Aoki, 2005; Dickinson, Ott, & Aoki, 2006; Leib, 2004; Wright, 2005) or consume (see, e.g.: Dickinson, 2002; Stewart & Dickinson, 2008), scant attention has been paid to the rhetorical aspects of hiking in semi-built environments. Trails and paths can shape our experiences in ways that we do not consider partly because we overlook their constructedness (Solnit, 2003, p. 113-122). The rhetoric at work on these trails is akin to what Cara Finnegan (2001) called the naturalistic enthymeme. She defined this phrase in terms of photography, claiming that Western culture’s accumulation of knowledge is grounded in Descartes’ privileging of observation, of sight.

Therefore, when we see photographs, we understand that they are not “real,” but treat them as if they are (p. 141-142). The audience’s assumption of naturalness, or at least transparency, completes the truncated syllogism, inviting particular interpretations of photographs as well as what is real and what is fake. Similarly, hiking trails as well as the practices that occur on them mediate our outdoor recreation experiences, functioning to rhetorically construct notions of what “counts” as recreation, who a “real” recreator is, and where recreation happens. My analysis contributes to communication theory in that it extends this notion of the naturalistic enthymeme to apply to places and practices in those places.

In this essay, I focus on hiking and the trails themselves as rhetorical discourses and practices that cultivate experiences. By examining how hiking experiences are rhetorically shaped, my critique illuminates the undertheorized area of outdoor recreation in communication and cultural research. I contend that three specific aspects of hiking—the map, the landscape itself, and the practice of destination hiking—demonstrate key tensions in outdoor recreation that have to do with definitions of wilderness and leisure, inclusion and exclusion, and audience’s passivity. This essay is comprised of four sections. First, I explain how my critique fits into scholarly conversations about rhetorical criticism and outdoor recreation. Then I offer my analysis in two parts—the trail and the practice of hiking. In each section I review literature that helps situate my critique and then discuss the rhetorical strategies at work. I close the essay with an articulation of the primary tensions illuminated by my critique.

### **Rhetoric on the Trail**

By most standards, my selection of a hiking trail as a text for rhetorical criticism is a bit unusual. Therefore, in this section, I articulate my definition of rhetoric and review a multi-vocal call for more critical scholarship about outdoor recreation.

I start with Kevin DeLuca’s (1999) definition of rhetoric—“the mobilization of signs, images, and discourses for the articulation of identities, ideologies, consciousnesses, communities, publics, and cultures” (p. 10). The rhetoric that happens on the trail produces ideologies and consciousnesses that perpetuate, for better or worse, distinctions between wilderness and not, humanity and not under the guise of naturalness. Rhetorical criticism demonstrated the value in challenging such binaries through its expansion of texts and approaches. Many poststructuralist rhetoricians are interested in deconstructing naturalized binaries such as male and female, black and white, while acknowledging the political expediency that such binaries sometimes offer (see, e.g.: Bennett, 2003; Delgado, 1998; Ono & Sloop, 1992; Sloop, 2000). DeLuca (2001) applied these same deconstruction strategies to rhetoric outside of identity politics as well to challenge conceptual definitions of wilderness and their deployment by the mainstream environmental movement. I view expanded definitions of text and increased approaches to rhetorical criticism as necessary elements to the progression of rhetorical studies. Rhetorical critics moved away from analyzing the speeches of “great speakers” to take up leaderless movements (Campbell, 1973), body arguments (DeLuca, 1999; Pezzullo, 2003), and physical spaces (Blair, Jeppeson, & Pucci, 2001). Additionally the approaches to critiquing these texts have shifted from Neo-Aristotelian to ideological to ethnographic and discursive. In particular, Phaedra Pezzullo (2001, 2003a, 2003b) and Carole Blair (2001) showed alternative “methods” for analysis.

For these reasons, I posit that rhetorical criticism is well-positioned to answer a call for more critical research into outdoor recreation. Scholars in leisure studies have documented the ways that outdoor recreation is exclusionary to historically marginalized groups of people, such as

racial minorities, gay and lesbian people, Native Americans, and women (see, e.g.: Shores, Scott, & Floyd, 2007; Allison & Hibbler, 2004; Henderson, 2005). For example, Derek Martin (2004) argued that outdoor recreation advertising creates apartheid in perceptions of outdoor recreation by portraying black people in urban settings and white people in wilderness settings. Through his analysis of tourism in the west, Hal Rothman (1998) explained that small town residents who rely on tourism as the primary means of income are often excluded from most of the services and recreation opportunities offered by corporate businesses that move in (p. 254-265). Also, Gerard Kyle, James Absher, and Charles Chancellor (2005) contended that rising recreation fees deter lower income people from taking part in recreation at fee-based use areas. In England, problems with signing create access barriers for people unfamiliar with countryside walking paths, as George Kay and Norma Moxham (1996) described.

Having determined that various aspects of outdoor recreation are exclusionary on a number of different fronts, scholars call for more research to address these aspects. Chieh-Lu Li, James Absher, Alan Graefe, and Yi-Chung Hsu (2008) asserted that with increased cultural diversity at recreation areas, management personnel need to create services for different people. They explained that research in this area can help management effectively accomplish this task. Myron F. Floyd and Cassandra Y. Johnson (2002) explicated why it is time to take an environmental justice approach to outdoor recreation research. Most of the scholars in leisure research take a quantitative approach to these topics. I suggest that rhetorical criticism's concentration on suasive strategies can add to the perspectives summarized here. Donovan S. Conley and Lawrence J. Mullen (2008) offered an example of how that might work. In their analysis of hiking "guest books," they found binary thinking in hikers

and "a dangerously innocent self-righteousness" (p. 180).

#### *Modifying Landscapes*

To explore "disjunctures between economy, culture, and politics," Arjun Appadurai (1996) identified five "landscapes" (p. 33). Despite his calling these conceptual areas landscapes, none of them pertain directly to the landscapes in the conventional sense. André Jansson (2002) added landscapes to this typology in order to explore tourism in a globalized world. He offered a useful definition of landscape:

Landscapes are located in the physical world that the individual can experience through sensory impressions, involving for example the natural and built environments of tourism destinations. Landscapes are typically conceived of aesthetically, as views and sceneries, or as natural conditions (water, wind, mountains, snow, etc.) to enjoy or contest (p. 432).

Gregory Clark (2004) asserted that land is the physical and landscape is the conceptual and that land becomes landscape when it functions symbolically (p. 9). I think that it is difficult for humans to separate the physical from the symbolic. Therefore, I would be hard-pressed to think of a land that did not qualify as a landscape. To me, the physical and the conceptual are constantly shaping our perceptions. Given this, I rely on Jansson's definition for my analysis. Semi-built or modified landscapes speak our language; we understand them because we have created them. In this case I am not interested in the rhetoric of mountains or dunes or even beaver dams. I am only interested in those landscapes that humans have shaped.

Of course, there is a great range in the degree to which some landscapes are constructed. Frederick Law Olmsted (1863)

was concerned with presenting nature in the best way possible. He masterfully planned every aspect of a landscape to communicate a particular message and evoke a particular emotion. In a letter to Ignaz Anton Pilat, his gardener at Central Park, he discussed the effects of the plants in Panama:

The groundwork was not extraordinary to us, the topographical characteristics not differing essentially from those of the park; yet the scenery excited a wholly different emotion from that produced by any of our temperate-zone scenery, or rather it excited an emotion of a kind which our scenery sometimes produces as a quiet suggestion to reflection, excited it instantly, instinctively and directly (p. 85).

He went on to discuss how similar effects could be achieved on “the island,” specifying details such as flower head size and stem length. These explicit instructions developed one of the most widely recognized pieces of landscape architecture. As Anne Whiston Spirn (1996) contended, these efforts largely remain invisible. She explains that “Few people now recognize [Central Park, Niagara Falls, and Yosemite] as built landscapes” (p. 91).

What is also masked by the plants and curving paths are the political foundations. Galen Cranz (1982) documented the historical purposes and criticisms of three city park systems: New York, Chicago, and San Francisco. She reported that parks have been exclusionary in terms of class, physical and mental health, race and ethnicity, and sex, but that one of the purposes of city parks was to neutralize these differences—by bringing those thought to be lower up rather than those thought higher down (p. 183-206). The landscapes formerly available to the well-to-do would, according to the planners of these

city parks, be accessible by everyone. Richard Todd (2008) explained his childhood realization of the class distinctions made apparent by modified landscapes in his neighborhood. He stated,

A few lived in the lushest part of town, in certifiable mansions behind high masonry walls, on winding roads, amidst dense greenery. For the first time in my life, I tried to make sense out of what had previously seemed a given, as natural as the trees themselves: the man-made [sic] landscape (p. 74).

To lessen these distinctions, city parks employed a democratic ideology, and planners hoped that “people from different walks of life could rub shoulders and dissipate class hostilities and rivalries” (Cranz, p. 183).

It would be a mistake to assume that simply changing the context of the park, displacing it from the city and relocating it in the wilderness,<sup>i</sup> would change the politics of constructing the landscape. DeLuca (2001) took issue with contemporary constructions of a mythic wilderness and “remembers” the role of railroad companies in developing national parks (p. 633). Echoing a similar argument, Rothman (1998) discussed railroads and the Grand Canyon as well as the democratizing effects of the automobile (p. 50-80 & 143-153). The move from trains to cars effectively shifted the way that people thought about traveling and outdoor recreation. Utah and Arizona—between Salt Lake City and the Grand Canyon—experienced an increase in individual-minded tourists looking to achieve a “personal and cultural conquest” by making it to the rim (Rothman, p. 151). National parks have had to contend with the individualistic agendas of visitors ever since, constructing buildings, roads, trails, and landscapes to gently guide visitors.



In addition to these physical constructions, Linda Flint McClelland (1998) described how the National Park Service cultivated ironically “naturalistic scenes” by “planting low-growth plants[, which] gave the designer an opportunity to model the ground, add interest to a particular area, or differentiate one area from another by choosing different ground-covering plants” (p. 260). Because national parks get a high number of visitors, park managers build “walkways and curbing . . . to channel pedestrian and automobile traffic and thus minimize the wear and tear of visitor use on park resources. . .” (p. 261). My point here is that in addition to having political interests, national parks also replant areas and strategically build trails, roads, and structures to maximize their “naturalist character.” In this way, constructing the natural and relying on visitors’ assumptions of naturalness functions rhetorically to conceal rhetorical efforts.

#### *Masked Human Intervention*

Trail crews typically have to maintain trails to prevent erosion, environmental degradation, and safety hazards, and part of the job is to mask their efforts. Erosion and environmental degradation are frequently the result of poor trail design and lack of maintenance. Clay Phillips (2008) stated, “A well-designed trail will be easier to maintain, will deteriorate more slowly and will be more pleasant to use” (n.p.). He delineated the trail standards of the California State Parks, which are much the same as those for the National Park Service. Trails must be practical—accommodating people, geological features, and landscape views—and aesthetically expected—the trail itself need not be beautiful, but should blend into the surrounding area. McClelland explained that in the 1920s, park managers decided that trails were an eyesore and were worried about the “visual compatibility of trails with their surroundings” (p. 233). This started improvements in multiple national parks and the use of techniques still practiced.

On the Hidden Canyon trail, hikers must walk through an area with low vegetation and sandy soil. Two rhetorical devices are prevalent in this section. First, the strategic placement of stones and plants help cut an obvious path. This serves to keep people on the trail. When side paths form, this speeds up environmental degradation in the area and violates the naturalistic perception. It also tempts people to take a different route, which undermines the trail planning of civil engineers. This first kind of rhetoric then persuades people to stay on the path initially constructed and to enjoy the planned vistas. To continue to maintain the perception of a natural, unmodified landscape, while keeping people on the trail, trail crews prune branches and overhanging limbs. Phillips explained this second rhetorical strategy: “our goal in trail maintenance is to maintain a trail in as natural appearance as possible. A quick pruning job deals only with the function of trail maintenance, not the aesthetics” (emphasis in original; Phillips, n.p.). Some of the strategies he suggests are: “Place the butt (cut) end [of the limb] away from the trail. This will help disguise the debris.” And “Pruning should be done sensitively so that the trail appears natural and not as if a chain saw just blasted through. Trail users should not be aware that any maintenance work has recently been done” (Phillips, n.p.). His concern here was equal parts practical—health of the tree, fire hazards—and aesthetic. I am interested in the aesthetic efforts because these are the elements that mask human tampering. They cultivate a naturalistic illusion, giving the impression that no real choice has been made, that no rhetoric has happened.

A second example illustrates two different rhetorical strategies. The stone staircase on the trail performs a similar function. It helps protect hikers’ safety and maintain trail integrity while it blends into the surrounding area. The staircase, again, clarifies where the path is, but it also looks beautiful. It is made from the same red rock as the walls of the cliff. The structure is comprised of

rough-looking, large stones instead of carved blocks. The specific strategies to ensure that this blending happens are (1) that it is made out of a natural material, in this case rock, and (2) made to match the surroundings. Phillips dictated that even when synthetic materials might do a better job, they “should not be used because their appearance is foreign to a natural environment” (n.p.). Both Phillips and McClelland explained that a local, natural material like rock or wood should be used. Furthermore, McClelland reported that when rocks were used to construct walls and other structures, they were to appear “battered” (p. 242). Both of these strategies show efforts to conceal the constructedness, the decidedly human additions, to the trail. This perpetuates the perception of naturalness and subtly encourages the naturalistic enthymeme. Despite these efforts, parts of the trail stand out as obvious human constructions.

#### *Obvious Human Structures*

The two obviously built additions on the trail are the paved portions and the chain support. I do not discuss the rock staircase in this section because it uses materials from the surrounding area. The pavement and chain are both apparently from elsewhere. These two function in different ways. First, the paved portion of the trail does not immediately call attention to itself since a hiker goes from paved street to paved trailhead for Weeping Rock to paved Hidden Canyon trail. Despite what would seem obvious in a “naturalist” setting, the paved parts actually logically—or naturally—follow one another. Based on McClelland’s description of historical construction practices by the National Park Service, I attribute the pavement to the grade of the climb. The trail crew is challenged with a steep rise over run ratio, a need to prevent erosion, and a high volume of users. As a result, the trail has a number of switchbacks near the beginning of the hike. The pavement stops somewhere on the switchbacks, but it does not stand out. Like a good trail crew, these workers made

sure that the break in the pavement did not call attention to itself and did not create a tripping hazard.<sup>ii</sup> Even as they are utilizing an apparent human augmentation, they are masking its existence for practical and aesthetic purposes. I interpret the end of the pavement as a signal that fewer people use that part of the trail. In other words, after people get into the switchbacks, some of them decide it is not worth the effort or that they are unprepared and turn around. In predicting patterns of use, trail crews are also marking the trail in particular ways.

One section of the trail is treacherous. After meandering through trees and looking out over the valley, the trail dips into a deep gully, going down slightly, but more prominently *back* into the land. Water that ran down this gully would be going more down than out. On the days that I have hiked this trail, I have always seen people across the gully. As I walk down the rock staircase, I can see people walk up a smooth, narrow outcropped path and disappear around a corner. This is a cliff of which they are walking on the side. The cliff juts out of the gully. Perceptually, when I walk up the path, on my left the cliff goes up and on the right is a sheer drop. Looking straight ahead, it looks as if the path ends right there, and brave hikers must repel down the cliff to get back to the shuttle. The path looks this way because it follows the rock and curves back into Hidden Canyon. To accommodate the faint of heart, like myself, trail crews installed a long chain attached to giant stakes driven into the side of the rock. There is no way to tell if another hiker is coming from the opposite direction. Although my stomach turns from just the recollection of this, other hikers seem to have no problem. I think that this part of the trail gives people a sense of danger that many other paths do not. Moreover, this trail represents a lost way of doing things. As Ron Terry (2008) explained, trail crews used to use dynamite to blast a trail out of rock, which would not happen today. Hikers get a feel for the challenges that earlier people faced in such environments. The

Utah Travel Industry Website (2008) reflected this sentiment: “hikers must enter the canyon itself as did the ancients” (n.p.). It replicates at once a feeling of nostalgia and discovery. This breaks with a contemporary naturalistic understanding, but is in line with a historic one. That is, even though the chain does not align with the naturalistic goals, it produces an experience of being in a time when people were closer with nature and had to take more risks to explore national parks.

The obvious rhetoric of maps and subtle rhetoric of trails shape our hiking experiences. Like critical cultural studies researchers, I must have one foot in the effects camp that assumes what we see deeply affects our perceptions and one foot in the personal choice camp that resists the classification of audiences as dupes. Indeed, I am in both realms. My understanding of what makes rhetoric have the impacts it does is that people who are exposed to it make choices, but they are always prioritizing these choices. So, while I might veer off-trail to get a better look at a cliff, I will not stray too far because I do not want to get lost. In other words, it behooves me to follow the established trail, and in doing so, I understand that I surrender a little bit of my power to those civil engineers of the 1920s.

### **The Pleasure and Politics of Walking**

Cultural scholars such as Michel de Certeau and Walter Benjamin have theorized the power of walking through cityscapes. De Certeau (1984) contrasted the voyeurs—those who can see the city from above—with those who walk the street. The knowledge gained from above—whether from the 110<sup>th</sup> floor or a fictional perspective offered in a Renaissance painting—is not accurate, according to him. To have worthwhile knowledge of a place, one must walk it (p. 93). In his conception, walking is a form of speech act that develops into “a grammar of movement” (Stewart & Dickinson, 2008, p. 286).

Similarly, Benjamin asserted that a kind of cultural pedestrian emerged in Paris called a flâneur. This person walked the streets of the city, consuming images and scenes; in a way, Benjamin himself was one of the flâneurs he studied—walking, observing. Susan Buck-Morss (1986) described the flâneur, “In the relatively tranquil shelter of the arcades, his original habitat, he practiced his trade of not trading, viewing as he loitered the varied selection of luxury-goods and luxury-people displayed before him” (p. 102). Linking the flâneur to consumerism, Vanessa R. Schwartz (2001) explained that this typically bourgeois male perfected strolling (p. 1732). This walking subject is what concerns me here. In this section, I am concerned with the practice of hiking itself. Based on Pierre Bourdieu’s (1990) notion of practice, which refers to a mastery of culturally-specific body language, I suggest that destination hiking as a practice restricts our thinking about outdoor recreation (p. 103-104).

Like in the city, walking through less populated, less built areas can have its own meanings, purposes, and assumptions. Kay & Moxham (1996) identified one of the primary recreational benefits of walking as its range. They contend that people of a variety of skill levels can participate because walking ranges from “a daily stroll with a dog . . . to peak bagging” (p. 174).<sup>iii</sup> Understanding the range and where one falls on it is part of the skilled practice of hiking. I discuss this. Then, to emphasize the rhetoric of the trail, I contrast this example with another kind of hiking.

### **The Practice of Walking On-Trail**

In Bourdieu’s articulation of the theory of practice, one must have boundaries and a mastery of actions and knowledge. He postulated this theory to remedy the divide between objective and subjective approaches to scholarship, which suits my purposes well in this section. In society, people operate under specific (spoken or unspoken) rules that dictate appropriate behaviors in different settings.

Understanding these rules and the boundaries of different contexts—or *habitus*—allows one to master “the game.” The theory of practice is that everyday performances display one’s social and situational knowledge and offer the opportunity to succeed. These practices develop a logic of their own, and it becomes difficult to think of what to do without that logic. Bourdieu gave the example of gift-giving and the logic and practices that surround this cultural ritual. He stated, “Gift exchange is one of the social games that cannot be played unless the players refuse to acknowledge the objective truth of the game, . . . and unless they are predisposed to contribute, with their efforts, their marks of care and attention, and their time, to the production of collective misrecognition” (p. 105-106). This quote emphasizes that the logic that exists within these situations is not always the best and unless people feel an obligation, they would not otherwise participate. I use this concept to highlight the constructedness of the practice of hiking. What we do on the trail is in part the product of subtle rules and the rhetoric of the trail.

Hiking has some more prominent rules, but I would also like to discuss the subtle implications of practices on the trail. Some of the more formalized rules involve yielding. Generally, people on bikes and horses will yield to pedestrians; then, pedestrians will move to the side to let the mounted recreators carry on. Hikers on the downward descent will yield to those going up. These are the rules I have seen posted at trailheads and had people inform me of. However, some of the more subtle rules—and I hesitate to even call them that—have more impact on our thinking.

While in the switchbacks I mentioned earlier, I started to question my goals for this hike. On a destination hike, the apparent goal would be the destination. This is one of the subtle rules of the hike. Built into every description and warning is the assumption that the reader wants to make it

to the destination. However, I have decided for myself that I do not usually mind not reaching my destination on a hike. Then, the logic of the practice—the thing I tell myself to make it to the top of the switchbacks—is that I do it for the outdoor enjoyment. I like to be outdoors, and maybe I even like the physical exertion. This is an implication of the hike itself; the journey through the outdoors is its own reward. Instead of cutting up through the center of this hill to get it over with fast, I will follow the switchbacks so that I do not contribute to erosion. Trail crews have groomed these paths so that I may enjoy them. This is part of respecting the environment in a national park. I also try to respect the other people on the trail by not calling them out for their unpreparedness; and they do not call me out for my overpreparedness. In fact, people rarely talk to any stranger, even when standing right next to them, photographing the same landscape. Words of encouragement are allowed by downhill hikers to tell the uphill hikers that they are “almost there” and that the hike is “worth it.” The feigned ignorance of other hikers and positive feedback are products of the trail. Without the trail, the chances of running into someone unknown are slim.

Becoming masterful at these rules, knowing when to break them and when to adhere to them, ensures my recreation experience will continue without dirty looks and a stern talking-to from park staff. But there is more logic at work here—the reason I am on the trail in the first place. Something about being outdoors *here* is important. Walking up the steep sidewalks of the Avenues, where I live, would not produce the same results. A planet of underlying logic goes into the travel arrangements to get to Hidden Canyon trail, to get “out of” the city and “into” what? Wilderness? Nature? These are the questions that the trail never asks us to pose. These are the logics that are naturalized through our walking, through our acceptance of the *habitus* and the participation in the game of outdoor recreation.

### *The Logic Undermined*

The differences between wandering outside or hiking to a specific location matter. As André Jansson articulated, destination hiking is in the antagonistic realm whereas walking connotes a much different, less consumeristic practice, as Henry David Thoreau indicated. Jansson (2002) explained that the antagonistic mode of travel means people “conform to the archetypal, objectifying principle of the ‘tourist gaze’” (p. 433). Thoreau (1998) explicated that walking without a direction, but with a purpose, benefits the traveler. Hiking on a planned, mapped route removes the spontaneity of discovery, the self-determination of movement. It distances us from the place.

Although all of this might seem quite ordinary—hiking a trail, holding on to a chain for dear life—and not rhetorical in the least, I would like to offer a short example to contrast with the one I have given. My goal here is to show that the planned routes and scenes, maintenance, and structures of a conventional hiking trail all contribute to a rhetoric of the natural, a perception that what we experience on these trails is a product of our own choice, when in fact, much of what we experience is organized long before we arrive. Great Sand Dunes National Park offers some perspective here.

Hiking in sand dunes offers visitors the opportunity to hike without a trail. Since the high winds are constantly shifting surface sand, environmental degradation is of little concern. What is important here is that each visitor gets to pick her/his own path to whatever destination (s)he chooses. At the visitor center, a friendly ranger will try to point High Dune and Star Dune, ironically the highest. If I ever knew where these were while in the visitor center, I lost my perspective while in the dunes. Therefore, although people can choose their specific destination before they begin, it becomes much more difficult to judge distance, direction, and location while among the

dunes. Hiking in dunes is physically challenging as well, which is one reason it is tempting to follow someone else’s footsteps. After doing this for a while, I questioned the logic of the unknown footstep maker and set off on another path of my own forging. In other words, the opportunity to wander in dunes is much greater; there is no guarantee of seeing the best view or getting atop the highest dune. This type of hiking encourages a much different perception.

This experience challenges the naturalistic enthymeme in that it invites the hiker to invent and create an experience. Would hiking without a trail in other places produce the same results? For me, it has. Since the danger of getting lost is much higher, I have had to attend to the direction and notable scenery more diligently. The feeling of responsibility for the self is greater; the risk is greater. Rebecca Solnit (2005) explained that despite this, “there’s another art of being at home in the unknown, so that being in its midst isn’t cause for panic or suffering, of being at home with being lost” (p. 10). Being lost only matters when it is mixed with unpreparedness and lack of knowledge. Solnit contended that “being off course for a day or a week wasn’t a disaster for those who didn’t keep a tight schedule, knew how to live off the land, how to track, how to navigate by heavenly bodies, waterways, and word-of-mouth in those place before they were mapped” (p. 13). This is the difference. Surviving while lost teaches us something about ourselves and the places we have been. Hiking without a trail opens a space for this to happen, but only if safety is not an issue. When I have hiked without a trail, I wonder if anyone has ever bothered to go to the bluff I have in mind, the one without a path leading to it. This type of hiking resists the planned vistas and the perspective wrought in the trail constructed by civil engineers. In doing so, it exposes the very construction that the trail itself conceals.

This challenge also raises a question about the context of outdoor recreation. Does

outdoor recreation happen in the city? Surely. People hike over paved hill and dale, being mindful of traffic. However, the consequences of straying from the path in the city are more immediate. Tickets, structures, and personal safety probably limit the trail choices in the city, suburb, and small town. Perhaps this is one of the differences that makes a difference, then. The *opportunity* to stray from the path at least exists when the path is defined more subtly, when the trimmed limb and the map are the organizer of my priorities rather than the traffic light and fast-moving delivery truck.

### **Challenging the “Naturalness” of the Outdoors**

In this essay, I applied a rhetorical lens to three aspects of hiking in the city, the problem itself, and the experience demonstrates some of the problematic briar patches that exist in outdoor recreation scholarship. In particular, it draws attention to the tensions that are implicit in outdoor recreation goals and practices.

I identify two such tensions that are interrelated. First, although I want to argue for democratic approaches to outdoor recreation, I am not sure if that is practical. Additionally, I am not convinced that it would actually appeal to people. In terms of its practicality, national parks tend to be isolated and surrounded by rural land. Therefore making these public lands truly public would mean providing public transportation to such places. Although Zion provides shuttles up the canyon and through the town, they do not leave Springdale, the town just south of the park. A person would first have to make it to rural Utah before the shuttle would be of any use. This might increase visitors, which carries problems of its own. One of the reasons for recreating outdoors is to escape the crowdedness of the city. As the number of national park visitors has grown, so have the problems. The shuttle in Zion is actually a solution to the overcrowding problem. It was implemented in 2000 because the park was getting hundreds of cars fighting for the 50 or so parking spaces everyday (National

Park Service, 2008). So, increasing visitors is not something that sparks Zion park officials’ interests.

But another flaw is the assumption that everyone desires wilderness experiences. Simply put, visiting wilderness does not appeal to everyone. Part of the democratizing logic of outdoor recreation is that it is an activity that is universally appealing, that its benefits are naturally understood. DeLuca (2001) challenged the naturalness of the wilderness position—that is, the assumption that all people understand, value, and will respond to wilderness in the same way (p. 644-645). This argument critiqued the naturalistic enthymeme currently in place. In my analysis of hiking in the city, the problem itself and the “usually implicit mode of communication” that is the naturalistic enthymeme (Finnegan, 2001, p. 148).

The second tension has to do with definitions of outdoor recreation, as my questions in the last section previewed. Not all recreation that takes place outdoors falls under this heading; this term refers to something specific. Problematizing this definition also has its problems. The critical project in this case is less clear about what power structures and limitations are good and desirable because there are multiple unprivileged perspectives in this case. Of course, we might think of people who live in urban areas who cannot afford to go to national parks or other conventional recreation areas. There is also, however, the land itself and the non-human creatures who live there. In her analyses of landscape, Spirn (1998) cautioned humans against ignoring the “grammars of nature” (p. 185-188). Although we may be ruining the solitary experience of some privileged hiker by democratizing outdoor recreation, we might also be ignoring the needs of plants and animals to recoup. In 1972, Richard Saul Wurman, Alan Levy, and Joel Katz identified the already-developing problems with crowdedness at national parks.

We might want to say that outdoor recreation can happen anywhere, urbaneering, as REI executives have posited. However, hiking in a city is not the same as doing so in a wilderness area, which is one reason for the calls for democratization. As Wurman, Levy, and Katz asserted, “parks are for people and there are certainly those who deserve to enjoy the open spaces and yet are unable to backpack several miles or sleep on the ground in a pup tent” (p. 19).

Exposing the rhetorical nature of hiking and the rhetoric of discourses, space and materials, and unexamined practices. Challenging naturalistic logic inculcated through enthymeme engenders skepticism toward the highly planned rhetorical strategies of outdoor recreation rhetors.

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## Notes

<sup>i</sup>. I understand the contested nature of this term, first if wilderness exists and second whom is served by (assumed) wilderness preservation. Although I understand the debate, it is not my intention to take part in it at this point. If the reader is hungry for a discussion, see: Callicott, J. Baird, & Nelson, Michael (Eds.). (1998). *The Great New Wilderness Debate*. Athens, GA: University of Georgia Press.

<sup>ii</sup>. I remember once on my descent, looking down, seeing the pavement, and thinking that I was close to the bottom. I never caught where is started.

<sup>iii</sup>. I am not a hiker, but I understand the abstract constructions that contribute to not only practices on the trail but also the rhetoric of reaching a number of peaks.

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**What We Talk About When We Talk About Recreation:  
Outdoor Experience, Access to the Coast, and Relationship with Nature**

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**Abstract**

*Access to the water, whether a river, lake, or ocean, has been through history and continues to be a challenge across the United States, with various user groups competing for space. Communication about human interaction with natural places employs the term "recreation" to describe certain outdoor activities, yet definitions and meanings of the word remain elusive. The history of usage and meanings of "recreation," including within a legal context, illuminate more recent struggles over rights to public space, especially coastal areas. The importance of recreation to individual and collective health and wellbeing justifies efforts to protect and increase recreational space. An interdisciplinary perspective on these issues is offered as a way to redefine recreation and revalue the human-nature relationship.*

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*How can you explain that you need to know that the trees are still there, and the hills and the sky? Anyone knows they are. How can you say it is time your pulse responded to another rhythm, the rhythm of the day and the season instead of the hour and the minute? No, you cannot explain. So you walk.... There is the earth, the sun, the wind—the turning earth, the blazing sun, the restless wind that knows the farthest ocean, the highest hill. You walk, stretch your legs, refresh your lungs. You see and feel and know some of the things a man must know about this deliberately spinning earth where man came to being, where man still lives. —New York Times, 1950*

*For the mighty wind arises, roaring seaward, and I go. —A.L.Tennyson*

Humans have always been drawn to the sea, pulled to the edge where land meets water. At first, we were lured by the promise of sustenance, travel, and trade, and the coastline's wild plenty seemed boundless. Later, people went to the sea to walk, to swim, to breathe the salt air. Today, half of the world's population lives within

200 kilometers of the coast, a figure likely to double to more than six billion by 2025 (Creel, 2003). As the coast became crowded, lines were drawn in the sand, and now it seems as if there is nowhere to swim, nowhere to land. Access to the water, whether a river, lake, or ocean, continues to be a challenge across the United States, with various user groups competing for space (Springuel and Schmitt, 2007).

Communication about human interaction with natural places like waterfronts employs the term "recreation" to describe certain outdoor activities. Just as place names have a "semantic depth that extends beyond the concern with simple reference to location or to a single image" (Entrikin, 1990, p. 55), the word "recreation" has different meanings for individuals and groups.<sup>i</sup> Parks, natural resource, and experiential education professionals have been outwardly struggling with this problem of identity and definition since at least the 1970s (e.g., Gray and Greben, 1974; Arnold, 1980; Dustin et al., 2002; Jennings, 2007), discontented with the language of their field to the extent of feeling burdened by it (Dustin et al., 2002). And the "recreationists" themselves—people who view their daily walk outside or stroll along the beach as fundamental to their quality of

life—feel cheated by the label<sup>ii</sup> but may struggle to explain why.

This review is concerned with recreation as an experience in nature or the outdoors (as opposed to sports, games, or other leisure-time activities), with particular focus on coastal beaches and rivers. This paper views recreation as one way that humans experience place. Place has a range of significances and identities that is as wide as the range of human consciousness, and any investigation into the human-place relationship is inherently interdisciplinary (Relph, 1976) and so what follows is something of a journey through the literature of parks and recreation, legal history, and environmental psychology.

This review first examines the language, history, and law that have shaped our understanding of recreation, with particular emphasis on coastal areas. The reasons why people recreate help to explain the politics of access to place. Finally, suggestions for incorporating a cross-cultural perspective are provided as a way of understanding the role of recreation in the social construction of place (Stokowski, 2002).

#### *Recreation's beginning*

The word recreation originated in 14th century France, as European culture emerged from the Dark Ages and began a period of rediscovery. According to the Oxford English Dictionary, recreation has always described an activity separate from, yet most of the time considered vital to, daily life. Rooted in the Latin *recreatio*, "restoration to health," and *recreare*, "to create anew, to restore, refresh," recreation originally meant "refreshment or comfort produced by something affecting the senses or body," and later, "comfort or consolation of the mind; that which comforts or consoles."

According to an analysis by Arnold (1980), French was the literary language of polite society. Words incorporated into English from French were likely words of the upper classes, as Arnold could find no example of the use of the word *recreation*

by commoners. Only the upper classes had the *time* to re-create themselves in nature, and therefore needed a word to describe it.

Since medieval times, wilderness had been the domain of nobility, with "forests" being areas outside the realm of customary law that were reserved for the king and his friends. Game laws restricted hunting to the wealthy while increasingly punitive measures were taken to limit access to the land and more of the landscape became subject to absolute rights of ownership. Parks remained a buffer zone between the leisure classes and the agricultural land and workers around them (Towner, 1996; Solnit, 2000, p.88). Enclosure and the creation of large estates facilitated the growth of recreation and support for the affluent (Towner, 1996).

The role of the countryside as an amenity for wealthy urbanites, originally enshrined in the Roman villa rustica, had been in retreat during the later Middle Ages, when Norman hunting reserves were eroded by economic pressures. But the return of prosperity towards the end of the 15th century was accompanied by a new wave of parkland creation (Coates, 1998, p. 114). As Europe's upper classes gradually withdrew from popular culture, recreation became defined as escape, diversion, "the action of recreating (oneself or another), or fact of being recreated, by some pleasant occupation, pastime or amusement."

The Europeans had known the uninhabited forest as an important part of their folklore and mythology, a dark and mysterious place filled with demons and spirits. In the 16th and 17th centuries, Europeans laid the intellectual foundation for a favorable attitude toward wild nature. The concept of the sublime and picturesque led the way by enlisting aesthetics in wild country's behalf while deism associated nature and religion. Combined with the primitive idealization of a life closer to nature, these ideas fed the Romantic movement. The change in attitude began with the breakthroughs of astronomy and physics that marked the beginning of the Enlightenment. As scientists revealed a

universe that was at once vast, complex, and harmonious, they strengthened the belief that nature had a divine source. In time, the awe extended to the oceans (Nash, 1973, p. 44-45).

This concept of recreation was embodied in the "pleasure gardens" that emerged in the 17th century, many of which had water as a prominent feature. Filled with pavilions, lodges, groves, grottoes, lawns, temples, cascades and colonnades, glowing with lamplight, Vauxhall Gardens and other parks that followed became the chief haunt of the aristocratic pleasure seeker (Kennedy, 1969).

A taste for the landscape became a sign of refinement; "to walk in the gracious and expansive confines of the garden was to associate walking, nature, the leisure classes, and the established order that secured that leisure" (Solnit, 2000, p. 109). As the social elite appropriated space for its own exclusive pleasures, access to space for recreation became an issue throughout the European countryside. Solnit (2000) has provided an excellent review of these battles that will not be repeated here, except to note that even "pedestrian poet" William Wordsworth defended ancient rights of commoners to recreate.

Although European gardens and parks were originally designed and built for royalty, in time many were opened to the public and some eventually became public property. In France, revolution ended the period of park-building for the privileged classes and established the need of the common people as the primary concern. People seeking respite from the crowded streets of Paris strolled along the Seine, where green lawns lined the banks and alleys of trees formed promenades. In London in the 18th century, the Crown's great parks were given up to the use of the people, who came to expect this as a matter of right. "The taste for walking and landscape became a kind of Trojan horse that would eventually democratize many arenas and in the 20th century literally bring down the barriers around aristocratic estates" (Solnit, 2000, p. 86).

History played out a bit differently on the coast. Unlike terrestrial environments, lakes, rivers, and coastal waters were plentiful, and difficult to enclose or reduce to property.<sup>iii</sup> Waterways and shorelines were defined as public because they served transportation and commerce, thus expanding wealth and enhancing sociability (Rose, 1986). The land between the low and high tides was considered "public property," or at least was subject to a public easement for navigational and fishing purposes.<sup>iv</sup> The transition to private ownership of the seashore began with the advent of commercial navigation in England, when wharves became necessary (Curtis, 1981).

Although recreation was considered a "customary right" in British legal doctrine,<sup>v</sup> use of the shoreline was not always protected. In 1821, a British court ruled that the public right to use the seashore did not include the recreational pursuits of swimming and bathing, distinguishing recreational beach uses from the historic public rights of navigation and fishing (*Blundell v. Catterall*). A dissenting judge in the case argued that the shore had always been impressed with a public trust, and recreational use of the beach was universal custom (Rose, 1986).

Compared to Europe, American colonists had little concern for developing public lands and protecting access to those lands. European settlers understood the wilderness as something alien to man, an insecure and uncomfortable environment against which civilization had waged an unceasing struggle. As a result, the first immigrants approached North America with preconceived ideas about nature (Nash, 1973, p. 8).

Eliminating the forested wilderness was a priority, and the coastal regions were the first to be settled and cleared. Even in the earliest colonies, however, particularly in New England, commons or greens were established in towns and villages, used chiefly for pasturing cattle and sheep. Boston set aside a common in 1634. Similar open places were established in towns

settled by the Spanish in the South and Southwest, in the form of plazas and large squares (Kraus, 1971).

Britain's doctrine of the public trust as it pertained to the coast was adopted as common law by the new American colonies. The idea of the public trust was synonymous with America's promise of freedom, and several states eventually wrote some form of the ancient code directly into their constitutions.<sup>vi</sup> These interpretations were based on English, French, or Spanish common law, depending on the nationality of the colonists (Dowie, 2005). In the case of Maine and Massachusetts, the Colonial Ordinance of 1641-1647 granted right of access to "great ponds, bays, coves and rivers, so far as the sea ebbs and flows" for fishing, fowling, and navigation (Cowger, 1978).<sup>vii</sup>

#### *The Leisure Class heads to the seaside*

With the emergence of the leisure class in the 19th century (Veblen, 1999), recreation came to mean "refreshment of strength and spirits after work." The Pleasure Ground Era in the development of parks and recreation (Cranz, 1982) extended to the seaside, which was becoming a popular destination in Europe and America.

At first, people were attracted for much-touted health benefits, but "sea-bathing" by itself mingled therapy and enjoyment (Kennedy, 1969; Walton 1983). The beach provided an ideal setting for emerging interests in natural science, through beachcombing, fossil-hunting, and seaweed-pressing (Walton, 1983), and appealed to the Romantic taste for landscape scenery. The first recreationists were those with the education and leisure to pursue Romantic ideas, including writers, artists, and adventurers, who came to America especially to experience the "pathless woods" and "lonely shores" of Lord Byron's poetry. The capacity to appreciate wilderness was deemed one of the qualities of a gentleman (Nash, 1973, pp. 50-62). The lure of the sea and the consequent creation of seaside resorts

demonstrated the power of leisure to create new landscapes, to shape new patterns of activity, and to generate new social and economic relationships (Towner, 1996).

#### *Recreation as a solution to social problems*

In the late 19th century and early 20th century, recreation was integrated into the urban reform movement to solve the social and physical problems associated with the new industrial society: poor living environments, poverty, illiteracy, etc. In the Reform Park Era (Cranz, 1982), parks, playgrounds, recreation facilities and services were seen as an integral component of community enhancement or wellbeing.

Employers resisted the idea of an eight-hour work day because they feared loss of control over their workers. Yet management was aware that they had to provide diversions in workers' lives before boredom drove them into total apathy or violence. If the company could reorganize and redefine employees non-work time, the threat from freedom would be minimal. Company recreation appeared to meet this need: recreation added variety to workers' lives in a controlled and regulated environment without jeopardizing the employer's sense of ownership of the workers' time (Tsuchiya, 1986).

In these early days of corporate welfare (and good publicity), companies provided dances, bowling alleys, baseball teams, and summer shorefront cottages. Company recreation was influenced by the children's playground movement: just as play became a normal part of childhood, adult play<sup>viii</sup> was regarded not only as acceptable, but also "natural."

Leisure and recreation were no longer isolated to the upper classes, but were inseparably tied to the American style of living. According to Roderick Nash (1973, p. 143), appreciation for nature had spread from a relatively small group of Romantic and patriotic literati to become a national cult. The average citizen could approach nature with the viewpoint of the vacationer rather than the conqueror (the word

"recreationist" first appeared in 1904, according to the OED).

Interest in primitive environments for purposes of recreation surged, as city dwellers camped in the wilderness and climbed mountains as temporary relief from artificiality and confinement. In the 1923 review of the newly published *New York Walk Book*, The New York Times declared, "The American Geographical Society can give no better advice than to help Americans to become acquainted at first hand and as far as possible on foot with the land they live in" (Trent, 1971).

Further proof that recreation had evolved from a privilege to a right emerged as the government began to intervene on behalf of recreation. Thoreau, Muir, and George Perkins Marsh had argued for wilderness preservation in the previous century,<sup>ix</sup> but the increasing popularity of recreation in the early 1900s saw the establishment of the National Park Service in 1918, the Appalachian Trail concept in 1921, and the National Conference on Outdoor Recreation in 1924. Between 1932 and 1937, the federal government spent \$1.5 billion developing and improving camps, buildings, picnic grounds, trails, swimming pools, parks, and playgrounds (Kraus, 1971).

As the middle class began to emerge in the mid-20th century, recreation became a form of leisure time, a way to demonstrate wealth and power, and to gain the respect of others (Ragheb, 1989). Leisure time had always been a dream, and Americans found themselves unprepared for the reality. J.B. Nash believed that recreation was the wholesome use of leisure; a spiritual, creative outlet of expression (1965, p. 4). He argued for a national philosophy of recreation, and issued "a plea for a nation to catch its rhythm; for individuals, on the one hand, to take control of time won after a long struggle to master the environment and give it direction and, on the other, to learn to create and live happily amidst confusion" (1953, p. 65).

Yet beneath the seemingly objectified view of a nature conveyed by language about a "mastered environment," Nash's words hint of the original meaning of recreation, as "an antidote to the fatiguing and distracting elements inherent in an industrial, urban life" (1953, p. 119). Nash knew it was important for people to get outside and experience nature, and but feared that recreation was no longer perceived as a developmental service or a way to address social problems, but instead was considered a frivolous or diversionary activity (Nash, 1953).<sup>x</sup>

Despite Nash's pleas, recreation continued to carry the values of wealth, status, and leisure as a reflection of society, embodied in the "recreational vehicle," the RV, invented in 1966. Getting out into nature required both the time and the money to buy the gear which enabled outdoor experience. Recreation had become a category of luxury goods (Berry, 1994), what Aldo Leopold (1966; p. 280) called a "problem with a name" as land began to feel the impacts of more people seeking "wilderness" experiences farther from home.

#### *Preserving access to land for recreation*

"Of what avail are 40 freedoms without a blank spot on the map?" Aldo Leopold asked in 1945.<sup>xi</sup> As a result of industrialization, wilderness could not be everywhere—it had to be catalogued, bounded, legislated (Stokowski, 2002). Concerned that recreational opportunities had become increasingly limited for the American people as the society had urbanized and as economic development preempted areas which earlier had been devoted to outdoor recreation uses, state and federal government continued to protect wilderness areas (Trent, 1971). The people of Maine voted in 1966 to purchase what would be the only publicly owned wilderness river complex east of the Boundary Waters Canoe Area in northeastern Minnesota. Two years later, the Allagash became the first U.S. river to be granted federal protection

under the National Wild and Scenic Rivers Act.

Beach preservation did not receive the same attention until a bit later. Through the Coastal Zone Management Act of 1972, the U.S. Congress directed states to provide for "public access to the coasts for recreation purposes" (16 USC 1453 Section 303E). Even in relatively undeveloped Maine, residents were growing frustrated as access disappeared along the coast, and a majority favored increasing coastal beach rights (Cowger, 1978).

The fragmentation and privatization of America's forested wilderness came about because European settlers lacked any "common historical or mythical" memory of the communal forest (because, as was discussed earlier, the forest had been a legally protected area for the king and his friends to hunt; Jackson, 1994). But on the coast, where the beach resisted privatization and was continually used for recreation, people retained "a common memory of the sea."<sup>xii</sup> A tree is rooted in possessed earth, can be cut down, burned, sold; but the shore—the shore is nothing but shifting sand, held in the grasp of no one, waiting to be carried away by the next wave. As a result, coastal areas became the final battleground over the right to recreate, and the terms of recreation are being redefined by the law.

Curtis (1981) suggested that originally, fishing, fowling, and navigation were the only known uses of the shore and ponds. Once other "uses" emerged, such as recreation, the courts (at least in Maine) tended to protect those uses, occasionally upholding the views of recreation as a consoling, comforting, restoring exercise (Rose, 1986).<sup>xiii</sup> Curtis (1981, p. 81-82) argued that the littoral owner's rights are not infringed by the public's recreational use of the beach because nothing is taken from the land which might otherwise be his. However, the courts have been reluctant to subscribe wholeheartedly, continually reaffirming that "the right to exclude others is one of the most essential sticks in the bundle of rights that are commonly

characterized as property."<sup>xiv</sup> Strictly interpreted, the Colonial Ordinance recognizes no public right to use the foreshore for recreation, and the Massachusetts court has denied use of the intertidal zone for recreation, including walking (Curtis, 1981). While Curtis, Rose, Ducsik, and others defended recreation as a right, the role of law in the future of public access remains uncertain.

### *Redefining recreation*

We use the term "recreation" to talk about how we experience nature, but the lack of a better word has elicited frustration for some time. J.B. Nash wanted recreation redefined as an outlet for creativity (1965, p. 8). At the 1973 Congress for Recreation and Parks, an attempt to redefine recreation yielded a list of 180 associated outcomes (Gray and Greben, 1974). At a conference in Snowbird, Utah, in May 1989, experts studying the benefits of leisure could not agree on definitions of recreation and leisure and the difference between the two. Conference chairs (Driver et al., 1991, p. 7) agreed that, in general, "recreation refers to behaviors that are engaged in voluntarily for their intrinsic rewards during times when one is not committed to meeting basic survival and comfort needs, attaining material possessions, or meeting on-going social obligations... there is consensus that recreation occurs during nonwork times and is accompanied by a relatively high level of perceived personal freedom."

Professionals wanted recognition that despite the elusiveness of material benefits, parks and recreation still had a role to play in addressing the challenges facing society (Jordan, 1991). If recreation was "the business of recreating one's mind, body, and soul," it should not be marginalized or trivialized, or so restricted by the courts.

Dustin et al. (2002) believed that confusion over the meaning of the word "recreation" would become a barrier to the advancement of the park and recreation profession, citing an "inertia of existing language and consequently tremendous difficulty in



changing the meaning of the label...we are held back by our own vocabulary...many of the current problems besetting the park and recreation profession are rooted in communication disorders of one sort or another. The fact that we are still debating what 'recreation' is within our own ranks, for example, reflects the urgent need for internal linguistic housekeeping before we can expect the public to respond favorably to our pronouncements about the value of park and recreation services."

*Recreation as necessity*

The historical role of gardens and nature as temples, monasteries, retreat, and refuge is testament to the idea that natural settings afford emotional release and restorative experiences. To Robert Marshall, who wrote the recreation sections of the 1933 National Plan for American Forestry, wilderness offered a sanctuary; its solitude and silence eased strains and encouraged contemplation (Nash, 1973, p. 203-204). A growing body of modern research on natural settings is enriching our understanding of people's emotional relationships to places, and especially the restorative aspect of relationships with natural places.

For example, walking in a natural outdoor setting helps support and restore basic mental processes, sharpening the mind and securing memory. Just looking at a natural scene can lead to higher scores on tests of attention and memory (Berman et al., 2008). Walking outside makes people feel happier, more energetic, and more protective of the environment (Nisbet, 2008). Natural settings don't require the same amount of cognitive effort as crowded urban settings, and thus help to restore our attention (R. Kaplan, 2001; S. Kaplan, 2001; Kuo, 2001). Visiting natural places can alleviate negative feelings associated with health problems (Korpela and Ylen, 2007) and reduce physiological symptoms of stress (Berto, 2005).

There is evidence in history as well as legal and health literature of the importance of "psychological access" to the environment. In 1957, Howard Zahniser and

Sigurd Olson testified in U.S. Senate hearings on the Wilderness Act. Answering the argument that only a tiny minority actually went into wild country for recreation, they declared that, for many, just knowing wilderness existed was immensely important. Wallace Stegner echoed their sentiments in 1969 (p. 145) when he wrote that the human spirit is fortified by the knowledge that civilization is not all-embracing. For Stegner, America's remaining wilderness was part of the "geography of hope."

The National Survey on Recreation and the Environment (2001) continues to support the idea that Americans value the spiritual inspiration provided by wilderness, and feel that "just knowing that wilderness and primitive areas exist" is important. People want trails, wilderness areas, protected rivers, and public shorelines, even if they personally will never experience such areas. Some of the recent studies about the benefits of nature cited above used only photographs in their experiments. The Maine Coastal Program documents contain references to "psychological access," although the origins and legal ramifications of the term are unclear.<sup>xv</sup>

Psychological access has been only lightly addressed by the courts. In 1987, the U.S. Supreme Court ruled in favor of a California property owner, granting compensation because the Coastal Commission demanded that the landowner grant a public access easement across his property in order to receive a building permit. In requiring the easement, the commission had found that the new house would interfere with "visual access to the beach" by blocking the view of the ocean, thus contributing to the development of a "wall of residential structures" that would prevent the public "psychologically from realizing a stretch of coastline exists nearby that they have every right to visit." While the court ultimately ruled the condition a "taking," the dissenting opinion addressed this concept of psychological access: An access requirement permitting traffic along the beach promotes public access to the

beach by giving passersby a visual indication of their right of access and by formally declaring that right against increasing private encroachment (*Nollan et ux v. California Coastal Commission*, 1987).<sup>xvi</sup>

Access, whether actual or psychological, is gaining ground in planning circles. Communities seeking to "grow smart" and revitalize their waterfronts focus on trails, parks, conservation areas, boat ramps, interpretive kiosks, and other public spaces, recognizing that access to natural resources contributes to quality of life and creating a sense of place. According to the Project for Public Spaces (2008), enhancing public space is one of the qualities of a great waterfront. In their guidance to community planners, the Project advises, "any building on a waterfront should boost activity in public spaces...high rise towers that lack any public uses on the ground floor are noticeably out of place along rivers, lakes and oceanfronts. They create a wall that physically and psychologically divides the waterfront from surrounding neighborhoods."<sup>xvii</sup>

#### *Recreation as a democratic pursuit*

All of the health benefits presented here, and the much larger body of evidence they represent, testify to the importance of "nearby nature," (Kaplan et al., 2007) including shorelines, yet most social studies of outdoor recreation emphasize the wilderness as a setting (Farnum et al., 2005). Benefits of recreation in nature can be gained by visiting the smallest scrap of green, the narrowest path to the sea.

If recreation, as a means of experiencing place, is fundamental for achieving physical and mental health and sustainable communities, then recreation is not a luxury but a necessity. "We cannot think of it as an added pleasantness, an attractive quality for those who can afford it. The psychological and social benefits of nearby nature are pervasive. Each of us benefits individually and communally from living in a setting that enhances considerateness and wellbeing. The

contribution of nature to our health demands that we all have frequent and ready access to it" (Kaplan et al., 2007, p. 2).<sup>xviii</sup>

And yet, the places to which we have access, or to which we are denied access, are dictated by a larger political reality. Ever since leisure and recreation became a way to demonstrate wealth, certain groups of people have been denied access to nature, and thus denied all the benefits just described. Recreational space is harder to find in lower-income neighborhoods and in neighborhoods with higher proportions of non-white residents (Powell et al., 2006), and in some cases affluent communities have exerted political influence to prevent public transit to the beach and use of the beach by minorities (Garcia et al., 2005). In some places, walking has become a sign of powerlessness and low status, and new urban and suburban designs disdain walkers (Solnit, 2000, p. 253).

Many have highlighted the equalizing function of recreation. Dustin et al. (2002, p. 4) wrote, "Recreation resources represent the democratic principle of the public good...Regardless of one's station in life, one has the right of access to these resources. They are both the poor person's and the rich person's property." Recreating can be a way of defending places against the reductionism and systematization of roads, commerce, government, and mass culture (Amato, 2004). J.B. Nash wrote that recreation may be utilized to make democracy function (1953, p. 205). "The need to make and remake public spaces, and to struggle relentlessly for the social and political availability of public space, can be seen as a precondition for any kind of democratic politics" (Low, 2000, p. 240).<sup>xix</sup>

What is more democratic than a public beach? Beaches are the few remaining places where people of different ages, races, religions, and economic status converge and mingle willingly in nature. For the most part, we tolerate each other on the beach, crowding together and trying not to kick sand on strangers' blankets.<sup>xx</sup> We tend to police ourselves, and why? So we can

watch the waves, swim, sunbathe, build castles in the sand. Beach resorts, as extramural places of recreation, are in a way the last remnants of an older vernacular culture, with their own code of manners (Jackson, 1994, p. 114). The carnival atmosphere of some beaches is similar to fiestas, parades, and other forms of "ritual protest" that temporarily invert the everyday social structure and hegemonic meanings of the public space (Low, 2000, p. 183). Beaches provide a different set of rhythms to renew public life (Garcia et al., 2005).

In the view of the courts, recreation seems to support the "publicness" of some property, which is a reflection of changing attitudes toward recreation. According to Rose (1986), contemplating nature helps people both escape the workaday world and function in a democratic society, therefore public access should be protected since all of society benefits from the greater sociability of its citizens. Rose acknowledged the weakness in her argument ("Do people using the beach really become more civil, or acquire the mental habits of democracy?"), but argued that "while we may change our minds about which activities are socializing, we always accept that the public requires access to some physical locations for some of these activities. In the absence of the socializing activities that take place on 'inherently public property,' the public is a shapeless mob, whose members neither trade nor converse nor play, but only fight, in a setting where life is, in Hobbes' all too famous phrase, solitary, poor, nasty, brutish, and short" (p. 21).

Nevertheless, by the 1970s the waterfront lot had replaced the public beach as the modern symbol of coastal America, and the concept of shoreline for the public had become more an elusive dream than a cherished tradition (Ducsik, 1974, p. xi). The Coastal Zone Management Act was prompted by the finding that "cultural, historic, and aesthetic values in the coastal zone which are essential to the well-being of all citizens were being irretrievably

damaged or lost" (Ducsik, 1974, p.7) and the proposed National Open Beaches Bill was an attempt to broaden the base of litigation confirming public rights in the Nation's shores. That base of litigation has yet to emerge, as new efforts to protect working waterfronts and public access to the coast (Springuel and Schmitt, 2007) use language that would be familiar to those cited here.

#### *Different ways of communicating about recreation*

This paper was inspired by research into the privatization of America's shorelines and dwindling access to the waterfront as well as natural areas in general. Until the meanings and values of recreation to physical and psychological health are more broadly understood, people will continue to have to work in defense of public space and access to nature.

Through recreation, we can have intensely personal and profoundly significant encounters with our surroundings (Tuan 1961, 1974), experiencing or gaining a "sense of place."<sup>xxi</sup> We know that as people visit a place more often, their attachment to that place can grow stronger (e.g, Jones et al., 2000; Moore and Scott, 2003; Williams and Vaske, 2003).

In their review of sense of place research and its use by recreation and tourism professionals, Farnum et al. (2005) view recreation and sense of place as somewhat isolated subjects that have something to do with each other, but could see no way to integrate them in practice. Such integration may lie in the potential relationship between the *language* of recreation and the experience of place.

Research on the benefits of leisure is based on the assumption that recreation is a goal-oriented, behavioral process undertaken to achieve desired outcomes; outcomes such as "getting exercise and staying in shape, relaxing and relieving stress, and viewing scenery and enjoying nature" (Daigle et al., 2002). Some of the challenges of talking about recreation are not only related to what outcomes are

associated with recreation, but what people believe or don't believe are associated outcomes with recreation (Daigle, personal communication, January 7, 2009). In the example presented by Daigle (2002), people who recreate via wildlife viewing or hiking identify different benefits of hunting compared to people who hunt. The "meanings" attached to recreation are rooted in these values, beliefs, and personal identities.

People also come to know the meanings of places through names, with the stories about them capturing their deeper significance. Yet names for places change; stories about them get revised, discarded, created anew. At times, this variation can be a source of stress and strain, as a single place can be identified in different ways, each with its own story to tell, with each story advancing different ways of experiencing place (Carbaugh and Rudnick, 2006).

There is a parallel between place-names and place-experiences. One person's "hike" might be another's "escape," "exercise," "refreshment," etc. And what is "recreation" for one person might be part of another person's job, making it difficult to define recreation at an individual level (National Academy of Sciences, 1969). In their interviews with people recreating around Mount Medvednica in Croatia, Roberson and Babic (2008) acknowledged their study was limited by "cultural differences among the researchers as well as translations that occurred during this process. For example, in translating the data from Croatian language to English language some of the original meaning may be lost."

Arnold (1980, p. 7) realized the differences between play and display, leisure and license, recreation and diversion. "Those who say, 'let us get on with what we are doing and stop the old-age argument of what is really meant by recreation' should recognize that the problem will not resolve itself. ...it could be argued that recreation has no meaning

because it doesn't represent a thing or an object to exact description or quantification."

The stress and strain of our varied meanings for recreation are evident in the conflicts over access to the land and water, some of which have been mentioned here. Leisure, recreation and tourism have, so far, been defined and researched in western cultural terms and their history portrayed as a gradual spread from a European heartland to the rest of the world, as Romanticism recovered an appreciation for nature that the rest of the world never really lost (Solnit, 2000, p. 135). New geographical areas and cultures need to be brought into the picture (Towner, 1996).

The ancient Chinese sought out wild places in the hope of sensing more clearly something of the unity and rhythm that they believed pervaded the universe (Nash, 1973, p. 20). In China, wandering is celebrated, and mountains are a place of contemplated retreat from politics and society (Solnit, 2000, p. 144). The French have a word "flaner," which translates roughly to "loitering" or "milling around." The main difference is that it has a positive connotation in French (N. Springuel, personal communication, January 16, 2009). In Quebec, "le plein air," a masculine noun literally translated as "full breath," includes every activity that can be made outside, and sometimes only the act of being outside. For some persons, "plein air" can even be a lifestyle (Marie-Ève Maillé, personal communication, January 16, 2009). A cross-cultural perspective on the practices and meanings of recreation, together with a synthesis of the legal and health research, may provide the insight that parks and recreation professionals have been searching for: what we talk about when we talk about recreation.

If, as this review has attempted to show, places are fundamental to human existence in the world, if they are sources of security and identity for individuals and for groups of people, then it is important that the means of experiencing, creating, and maintaining significant places are not lost (Relph, 1993). If the words we use to

communicate about public and private spaces, and how we experience those places (a discussion fundamental to many issues faced by society today), are ineffective, public health and societal wellbeing will bear the consequences. Stokowski stated that the sense of place research traditions of Relph, Tuan, and others "carried over" into leisure, recreation, and tourism contexts. But the history of recreation presented here suggests the reverse: that recreation was the original way of experiencing place. Reuniting the language of the two disciplines may be a path toward reconciling communication barriers.

By affecting our physical and mental health, re-creating ourselves in the out-of-doors contributes to individual and collective creativity (e.g., see Nash, 1953). Fowles (1979) argued that retreating from the normal world ("a natural correspondence with the greener, more mysterious processes of the mind") is inherent in any act of artistic creation. When we recreate in rural woodlots, fields, and fencerows, in the semiwild lands and at the edge of the sea, we value what we have not worked to make: wild nature. We return to deeper layers of the self (Amato, 2004); we measure ourselves against the earth (Solnit, 2000), and in so doing understand our place within it.

### Notes

<sup>i</sup> Of probably hundreds, a representative definition from Towner (1996, p. 4): "Recreation refers to specific activities that take place within leisure time; activities that are undertaken freely and for pleasure. Thus almost any activity can be recreation if it satisfies certain needs on the part of the individual. A precise definition is elusive but here I am concerned largely with nonwork activities which mainly (though not always) take place away from home."

<sup>ii</sup> e.g., R. MacDonald, personal communication, January 2009.

<sup>iii</sup> See Huffman (2007) for an alternative interpretation, that the public trust doctrine did not mean that the seashore could not be owned, rather it meant that it belonged to no one until occupied or put to private use. However, even this interpretation would support the argument that access grows increasingly important as resources dwindle.

<sup>iv</sup> Public access to navigable waters was granted as a reaction to the king's having placed rivers and salt rivers *in defense* for [the kings' recreation]; that is, to bar fishing and

fowling in a river till the King had taken his pleasure or advantage of the writ *de defensione ripariae*. Thus, the Roman rule that the coastal area resources were open for common use until occupied or granted by the ruler remained the law of England for several centuries (Curtis, 1981).

<sup>v</sup> Customary law is formed from informal usages and understandings that are considered to be binding by those who practice and share them (Rose, 1986; Bederman 1996), and like language is determined by usage and the meanings inherent in that usage.

<sup>vi</sup> The rhetoric of "publicness" of water resources may have originated in the perception that fish and other marine resources were infinitely abundant in the New World, although the falsity of this perception was later recognized, when overfishing was an initial metaphor for the tragedy of the commons as ownership was allocated to waterfront landowners.

<sup>vii</sup> The colonial ordinance explicitly grants the right to cross private property to access great ponds, but contains no such provision for getting to saltwater, except by boat, presumably because getting to the shore was not a problem (Cowger, 1978, p.14).

<sup>viii</sup> While recreation is more than fun and games, fun is often a necessary component to keep people recreating in an activity (Daigle, personal communication). Joy is inherent, because "to live in an environment which has to be endured or ignored rather than enjoyed is to be diminished as a human being" (Gauldie, 1969). The United Nations (1989) recognizes children's right to play and human rights to "rest and leisure."

<sup>ix</sup> Thoreau advocated reserving public, "primitive forests" of 500-1,000 acres in Massachusetts towns in 1859; Marsh said an Adirondack preserve could serve as a "garden for the recreation of the lover of nature" and Yosemite Valley was designated a park in 1864 "for public use, resort and recreation." See Nash (1973), pp. 102-106. In creating Central Park in 1856, Frederick Law Olmstead felt an abiding concern to make nature accessible to the millions imprisoned in the big cities, even if that nature was planned (Havard, 1989). In the original legislation of 1872, Yellowstone Park was set aside for aesthetic value, as "a pleasuring-ground for the benefit and enjoyment of the people" (USC 1872 24, cited by Rolston, 1991).

<sup>x</sup> J.B. Nash is the father of Roderick Nash. "Roderick grew up in Manhattan (while his father taught at NYU), looking out on a brick wall, as he put it. When Rod was 16 or so he substituted the Grand Tetons for that brick wall. The rest, as they say, is history." Dustin, D., personal communication, March 18, 2009.

<sup>xi</sup> In "The Green Lagoons," *American Forests* 51: 414, quoted in Nash, 1973, p. 193.

<sup>xii</sup> Rose (1986) suggested that public ownership might best be protected legally by the theory of "custom," where the public asserts ownership of property under some claim so ancient that it antedates any memory to the contrary. However, in the U.S. the courts "bend over backwards to disprove that a custom exists" (Cowger, 1978, p.22).

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<sup>xiii</sup> In *National Audubon Society v. Superior Court of Alpine County* (1983), the court held that public trust doctrine protects ecological and recreational uses as well as navigation, commerce and fishing. The New Jersey Supreme Court has held that the public trust doctrine guarantees a public right of beach access across private, non-tidal uplands (*Matthews v. Bay Head Improvement Association*, 1984). Custom has been applied in Oregon to secure access to the coast for recreation (*State ex rel Thornton v. Hay*, 1969).

<sup>xiv</sup> *Nollan*, 483 U.S. at 831 (quoting *Loretto v. Teleprompter Manhattan CATV Corp.*, 458 U.S. 419, 433 1982, quoting *Kaiser Aetna v. United States*, 444 U.S. 164, 176, 1979).

<sup>xv</sup> N. Springuel, personal communication, January 16, 2009.

<sup>xvi</sup> Justice Brennan continued: "The court has given the appellants a windfall at the expense of the public... it is private landowners who are the interlopers. The public's expectation of access considerably antedates any private development on the coast."

<sup>xvii</sup> Yet planners must also realize that "authentic places are made unselfconsciously," and that place making can not be done programmatically; nor are experience and meaning merely variables to be manipulated (Relph, 1976).

<sup>xviii</sup> Fowles (1979) warned us, "nature can not be reached by turning it into a therapy, a free clinic for admirers of their own sensibility....we shall never fully understand nature (or ourselves) and certainly never respect it, until we dissociate the wild from the notion of usability."

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<sup>xix</sup> In planning our waterfronts and protecting access to the water, there is a risk of losing democracy of space if definitions of "recreation" are too narrow. As Low (2000, p. 35) observed, "Even city squares and village greens are no longer places for public discussion and casual loitering, but instead have become filled with regulated green markets, military reenactments, and seasonal county fairs...North American spaces must become commercially successful to remain secure." Commercialization and privatization limit participation to those who can afford it and who conform to middle-class rules of conduct and appearance.

<sup>xx</sup> Another view (Wolff, 1973, p.55) sees the masses "herded together on the sand like seals in a rookery, oiled and broiling in indecent proximity to the whole population they presumably came so far to get away from."

<sup>xxi</sup> Place attachment is a positive emotional bond that develops between people and their environment. Stedman (2003) suggests that the physical environment is just as important to "sense of place" as the experience (the environment is "raw material" for sense of place), since elements of the natural environment underpin the symbolic meanings on which attachment is based.

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## **Taking Public Out of Participation: How Rhetorical Conventions of Environmental Impact Statements Discourage Citizen Action**

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### **Abstract**

*The roots of democracy on which the American government operates are in part the rights of citizens to have access to government information and to participate in decisions that impact their lives. One such form of information is the Environmental Impact Statement (EIS). EISs, however, are dense documents typified by problematic language that can alienate and intimidate the public from making informed comments during the public participation process. This article discusses the rhetorical conventions EIS writers often use and how these conventions hamper readability and comprehension. Furthermore, this article addresses how language conventions rhetorically favor government agencies over readers and the ripple effect the conventions may have on public participation. The discussion in this article is based on a rhetorical and critical analysis of a highly contested EIS for a proposed highway that impacted 100 acres of wetlands near the Great Salt Lake in Utah.*

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### **The Environmental Impact Statement**

American government is designed to serve the citizens it represents. The roots of democracy on which the government operates are the rights of citizens to have access to government information and to participate in decisions that impact their lives. For example, decisions regarding a change to a community's environment can have enormous impact on citizens' quality of life. As such, citizens have a right to know what is proposed and to voice their opinions.

Back in 1969, at the height of the environmental protection movement, the U.S. government recognized the importance of public participation involving environmental issues. As a result, Congress passed the National Environmental Policy Act (NEPA) to require the federal government to issue an environmental impact statement (EIS) before allowing a change to air, land, or water. In addition to requiring federal agencies to conduct and document environmental studies, NEPA also required the government to open the process for public comment.

The purpose of an EIS is to describe and justify a proposed action, short- and

long-term effects, and alternatives to the proposed action. In short, an EIS is a communication device for the public to participate in the democratic process of influencing decisions that affect their communities. Unfortunately, however, the EIS can be one of the most difficult government documents for average citizens to read, hampering their ability to fully engage in the democratic process legislated in their behalf (Killingsworth & Palmer, 1992, p. 170).

Communication scholars have documented the current problems with EISs and the failures and successes of public participation associated with environmental decision making (Coppola, 1997; Hendry, 2004; Ingham, 1996; Killingsworth & Palmer, 1992; Rude, 1997; Schwarze, 2004; Waddell, 1996; Walker, 2004). At issue is the way EISs are written and used. Seminal research by M. Jimmie Killingsworth and Jacqueline S. Palmer (1992) show that government agencies use an EIS to assert their authority, sustain control by steering citizens along a path of action they have already chosen, and ultimately ignore dissenting public voices (pp. 164, 166). They do this, according to Killingsworth and

Palmer, by writing dense EISs full of technical and government jargon in a detached tone and objective style that often privileges the voice of the experts over the voice of the people (p. 170). When the government limits access to understandable information in an EIS, the public is often intimidated and alienated from making public comment on proposed actions (p. 168). Furthermore, according to Killingsworth and Palmer and Carolyn Rude (1997), the EIS of today has become more of a legal document than a public document. It serves as documented proof of the government's attempt to conduct environmental studies in case of a lawsuit.

Steve Schwarze (2004) agrees that government agencies assert their authority in EISs, but he argues that this "defensive posture is reasonable" (p. 153). The purpose of such a move, he says, is not to defend the agency from legal action but to establish the legitimacy of their decisions to the general public (p. 154). Schwarze further argues that EISs are rhetorical failures because they fail to sufficiently consider citizens as an intended audience, and they fail to sufficiently acknowledge the distinct values and voices citizens bring to the public participation process (p. 142).

Likewise, Judith Hendry (2004) applauds the government for "giving a voice to those who must bear the economic, social, and environmental consequences of government policy" but notes how the NEPA process is used more as "a tool to advocate a controversial decision rather than as a decision-making tool" (pp. 99, 100). Hendry argues that the NEPA process is far too often used as "an exercise in compliance," and a tight focus on compliance may result in confrontational encounters with citizens and perhaps even in litigation (p. 112). When a lawsuit ensues, community members, she argues, bear the burden of proving the EIS inadequate or inaccurate, and they must do it with limited resources and technical expertise (p. 112).

Citizens have limited expertise, according to Gregg Walker (2004), because government agencies that engage in traditional public

participation processes value technical knowledge, centralized power, and controlled access over open communication, mutual learning, and shared power (p. 120). In addition, Walker says, negotiation among interested parties is not likely without appeals or litigation, and the faces of democracy are not the citizens but the elites in the government (p. 120). Thus, information is held tightly in the hands of government knowledge experts, and citizens are informed of decisions and persuaded to accept them rather than invited to collaborate in a fair and deliberative process. The public participation processes that EISs invite seem more a compliance formality than an outreach to communities.

Litigation seems to be an overarching theme among EIS and public participation scholars. It is interesting to note that, historically, only 5 percent of EISs are challenged in a court of law, which means that the government successfully implements 95 percent of the proposed actions it presents to the public (Killingsworth & Palmer, 1992, p. 187). Other than through the public participation process, a lawsuit is often the most powerful tool citizens have to be heard. When the public participation process breaks down – because of an intimidating EIS, for example – then a lawsuit is the last resort.

### **Final Legacy Parkway Environmental Impact Statement**

One such EIS that was legally challenged was the final EIS for the Legacy Parkway, a proposed 14-mile, four-lane highway to carry north-end commuters in and out of Salt Lake City, Utah. Because population continues to increase in the communities north of Salt Lake City, the State of Utah proposed the Legacy Parkway as an alternate route to help alleviate congestion for commuters traveling on Interstate-15. Table 1 summarizes the project's legal history.

**Table 1: Legacy Parkway Project History**

| <b>Date</b>           | <b>Event</b>                                                                                                                                                                                                                                                                                                                                             |
|-----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>September 1998</b> | Working with the Utah Department of Transportation (UDOT), the Federal Highway Administration (FHWA) and the Army Corps of Engineers (the Corps), as the lead federal agencies, publish the draft Environmental Impact Statement (EIS).                                                                                                                  |
| <b>June 2000</b>      | FHWA and the Corps complete the final EIS.                                                                                                                                                                                                                                                                                                               |
| <b>October 2000</b>   | FHWA approves the Legacy Parkway project.                                                                                                                                                                                                                                                                                                                |
| <b>January 2001</b>   | The Corps approves the project, allowing UDOT and its contractor to begin construction of the Parkway.                                                                                                                                                                                                                                                   |
| <b>January 2001</b>   | The Sierra Club and a coalition of citizens called Utahns for Better Transportation (UBET) file a lawsuit in federal district court to stop the construction of the Parkway. Among other things, they challenge the proposed plan to fill 100 acres of wetlands near the Great Salt Lake to accommodate the new Parkway. Limited construction continues. |
| <b>August 2001</b>    | The federal district court dismisses the lawsuit, ruling in favor of UDOT, FHWA, and the Corps. Heavy construction throughout the project area begins.                                                                                                                                                                                                   |
| <b>September 2001</b> | The Sierra Club and UBET file a motion with the federal district court to halt construction.                                                                                                                                                                                                                                                             |
| <b>October 2001</b>   | The federal district court denies the motion.                                                                                                                                                                                                                                                                                                            |
| <b>November 2001</b>  | The Sierra Club and UBET file an appeal with the 10 <sup>th</sup> Circuit Court of Appeals. The court grants a temporary halt to construction pending the outcome of the appeal. However, UDOT and the Sierra Club and UBET agree that some limited construction can continue.                                                                           |
| <b>March 2002</b>     | The appeals court hears arguments on the Legacy Parkway case.                                                                                                                                                                                                                                                                                            |
| <b>September 2002</b> | The appeals court rules that the final EIS is inadequate in five areas and requires FHWA and the Corps to conduct more environmental studies and to detail their findings in a supplemental EIS.                                                                                                                                                         |
| <b>December 2004</b>  | The FHWA and the Corps complete the draft Supplemental EIS. The draft includes a proposed 2,100-acre wetland and wildlife Legacy Nature Preserve to offset the Parkway's impact on the 100 acres of                                                                                                                                                      |

|                       |                                                                                                                                                                                                                                                             |
|-----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                       | wetlands. However, the Sierra Club and UBET still have concerns about the project as proposed in the Supplemental EIS and file another lawsuit.                                                                                                             |
| <b>September 2005</b> | Utah's governor convenes a meeting with UDOT, the Sierra Club, and UBET to foster an agreement and settle the case out of court. Among other things, the groups agree to an additional 125 acres of additional nature preserve, for a total of 2,225 acres. |
| <b>November 2005</b>  | The Utah State Legislature approves the agreement. The Governor signs the agreement.                                                                                                                                                                        |
| <b>January 2006</b>   | The FHWA and the Corps approve the Legacy Parkway project and issue permits to UDOT to begin full construction.                                                                                                                                             |
| <b>September 2008</b> | UDOT completes construction of the project and opens Legacy Parkway to traffic.                                                                                                                                                                             |

This table collates information from the Final Legacy Parkway Supplemental Environmental Impact Statement and the Utah Department of Transportation's Legacy Parkway Web site.

Briefly, the project began in 1998 and ended seven and a half years later after a long legal battle spearheaded by the Sierra Club and a citizens group called Utahns for Better Transportation (UBET). Their main contention was the government's proposed plan to build the Parkway on top of 100 acres of wetlands near the Great Salt Lake. The Sierra Club and UBET eventually won their lawsuit in appeals court. The ruling required the federal government to issue a Supplemental EIS. However, the Sierra Club and UBET were not satisfied with the Supplemental EIS and filed another lawsuit, prompting Utah's governor to mediate an agreement. The mediation resulted in a 2,225-acre nature preserve to offset the Parkway's impact on the 100 acres of covered wetlands. Ten years after the first draft EIS was published, Legacy Parkway opened to traffic in September 2008.

The Legacy Parkway EIS created a limited sphere for citizen action. As this analysis shows, the EIS was a difficult document to read and was used by the government to assert its authority as the

expert, putting citizens at a tremendous disadvantage. Furthermore, citizen values toward the wetlands were not fully considered. It was only through legal action that negotiation was possible. The Legacy Parkway EIS is an example of how citizens can be discouraged from voicing their opinions and what can happen when strategies do not work as the government planned. It is unfortunate that it took a lawsuit for the government to preserve the wetlands along the Legacy Parkway corridor – a simple solution that probably could have been resolved during the EIS process had the government taken a more collaborative approach.

#### Summary Section of the Final Legacy Parkway Supplemental EIS

I have chosen the Legacy Parkway EIS as my text because it is an example of an environmental decision-making document that turns the NEPA process into an advocacy tool rather than a decision-making tool (Hendry, 2004) and because the public participation process for this document demonstrates a traditional (rather than innovative) view of citizen involvement (Walker, 2004). Furthermore, like Schwarze (2004), I conduct a textual analysis of an environmental decision-making document, but where he focuses on rhetorical conventions related to content, I focus on what Killingsworth and Palmer (1992) call rhetorical conventions of the “objective style” (p. 170). While my analysis extends the work of others, it also highlights a case study located in a state that has not received much attention in the environmental communication literature. Utah is an important area for scholarly research because of the unprecedented environmental issues it faces (e.g., radioactive waste, endangered species, energy development, water resources), many of which are controversial and at times emotionally charged.

Specifically, this paper takes a closer look at the Final Legacy Parkway Supplemental EIS (2005), particularly the

Summary Section. The purpose of the analysis is to find out how the EIS authors write the Summary Section of the EIS and if they privilege expert voices over public voices. The findings can perhaps then reveal potential impacts on the public participation process and explain, in theory, why the Sierra Club and UBET challenged the document in court. My intent is to conduct a textual analysis to uncover quantifiable rhetorical patterns that might otherwise remain hidden, and then use the data to interpret what those patterns may mean. Textual analysis by itself can provide the kind of data necessary to expose the hidden meanings behind words, especially in government policy documents such as EISs where comprehension and readability are such difficult obstacles for some readers to overcome.

I have chosen to examine the Summary Section of the Supplemental EIS because it may be the only part of an EIS average citizens read. Communication scholars have documented how EISs, in general, are dense documents containing problematic language that intimidates and alienates the general public from digesting the entire document in order to provide informed comments during the public participation process (Hendry, 2004; Killingsworth & Palmer, 1992; Rude, 1997; Schwarze, 2004). An initial review of the Final Legacy Parkway Supplemental EIS finds it to be no exception. Given that the general public lacks enough technical expertise and knowledge of government culture to fully comprehend an EIS, and given that the document is much too voluminous for the average reader to fully digest (605 pages, excluding appendices), an average citizen is perhaps more likely to read only the Summary Section of the EIS to grasp the necessary issues before making public comment.

Focusing on the Summary Section of the final Legacy Parkway EIS brings several questions to the surface. Is the summary complete enough to give the average citizen living in the impacted area a full sense of the document as a whole?

What is the purpose of the Summary Section? Who is the audience? What kind of language is used in the summary and what is the effect? What information is included and excluded and why? Whose voices are heard and marginalized? Who benefits the most from the way the summary is written? By using rhetorical and critical theories to analyze the 14-page Summary Section of the Final Legacy Parkway Supplement EIS, I answer these questions.

What follows are a brief discussions of the rhetorical and critical theories, the findings of my analysis, and concluding remarks about the importance of this analysis.

### **Rhetorical and Critical Theories**

To conduct my analysis of the Summary Section of the Final Legacy Parkway Supplemental EIS, I use rhetorical theory and critical theory as presented in the seminal work of Carolyn R. Miller (1979), Russell Rutter (1991), James Paradis (1991), Nancy Blyler (1998, 2002), and Charlotte Thralls (2002). Miller (1979) argues that communication, or language, is socially constructed; it occurs in communities (p. 616). Rutter (1991), extending Miller's argument, says that communication is an open system – "dynamic because it involves people" (p. 140). Language influences "what a person knows and is," which "determines what that person will do and how well he or she will do it (p. 137). Paradis (1991) further indicates that people convert language to action; meeting the needs of the audience is paramount to a successful outcome (p. 256). Thus, rhetorical theory involves language as it pertains to audience, purpose, and context. To apply rhetorical theory to a document, such as an EIS, is to examine how communication influences a community, that is, how people are influenced by language to solve problems and participate in future action.

In some ways, critical theory is an extension of rhetorical theory. Critical theory allows researchers to look at how language, among other things, is used to dominate or control people. Blyler (1998) argues that

documents can take a political turn to privilege certain practices and voices over others (p. 33). According to Thralls and Blyler (2002), organizational culture influences practices and discourses, which shape the way information is presented and the way an organization relates to its audience (p. 185). Thus, critical theory examines who holds power, how power comes about, and why power is maintained (Blyler, 1998, p. 35). To apply critical theory is to bring hidden ideologies out into the open with the goal of empowering people to act, rather than be acted upon.

Combining rhetorical and critical theories allows me to examine the words on the page and consider how those words serve other purposes, such as political power and control over public action. I have chosen these two theories because of their potential to influence change. This analysis demonstrates the process of critically examining the rhetorical conventions government agencies use when developing documents and the power those rhetorical conventions have over readers.

### **Analysis of the Legacy Parkway Supplemental EIS Summary Section**

The rhetorical conventions I use in my analysis are what Killingsworth and Palmer (1992) identify as "objective style" (p. 173). They are passive voice sentences, nominalizations, noun modifiers, and acronyms. According to Killingsworth and Palmer, these rhetorical conventions are "the chief syntactical means by which the authors of EISs achieve distance for their subject matter and audiences" (p. 173). I begin by taking a sample of how many passive voice sentences, nominalizations, noun modifiers, and acronyms are in the first five paragraphs (the introduction) of the Summary Section. Next, I move to a discussion of technical and legal jargon. Then, I discuss the adequacy of the content in the Summary Section. Finally, I discuss the privileging of experts over citizens. Throughout this section, I critically analyze why the EIS authors use rhetorical conventions, jargon, and privileged

information and voice, and who benefits and who loses in the public participation process.

### Rhetorical Conventions

The first few paragraphs of a document help orient readers to the topic and start them on a path to understanding the issues at hand. The language writers use either guides the readers along a clear path or slows the comprehension process down and hinders the readers from continuing. The introductory section of the Summary Section of the Final Legacy Parkway Supplemental EIS has five paragraphs. One of the paragraphs contains a bulleted list. Table 2 summarizes the use of rhetorical conventions in the first five paragraphs of the Summary Section.

Table 2: Rhetorical Analysis: First Five Paragraphs of the Summary Section

| <i>Rhetorical Convention</i>                                    | <i>Number of Times Used<br/>n=19 sentences</i> |
|-----------------------------------------------------------------|------------------------------------------------|
| Passive Voice Sentences                                         | 10                                             |
| Nominalizations                                                 | 30                                             |
| Noun Modifiers / Noun Form of Verbs Not Used as Nominalizations | 17 / 4                                         |
| Acronyms                                                        | 12                                             |

This table summarizes the rhetorical conventions writers use in the first five paragraphs of the Summary Section of the Final Legacy Parkway Supplemental Environmental Impact Statement.

As readers move through the first five paragraphs, they confront 10 passive voice constructions (or about 50 percent of all sentences), 30 nominalizations, 17 noun modifiers, four noun forms of verbs not used as nominalizations (i.e., consultation, coordination, acquisition, and modification), and 12 acronyms. Fortunately, the acronyms are identified; however, they are identified only once upon first use, which is an accepted convention. However, when readers come across the acronyms in subsequent sections, and they do not remember what they mean, they must search for the first use of the acronyms to identify them. Because some readers tend to read only the sections that interest them, it would be helpful if writers identified

acronyms in each section. Additionally, the writers use a five-point bulleted list to help readers scan the issues. Unfortunately, the writers construct this list using nominalizations, favoring inactivity over action. Using verbs would have been just as easy to write.

The first paragraph alone has 16 nominalizations, seven noun modifiers, two acronyms, and one passive voice sentence. The paragraph has only four sentences. Here is an example of one sentence. The nominalizations are in **bold** and the noun modifiers are in *italics*.

The Supplemental EIS includes **a presentation of results of evaluation** arising from **the decision of** the U.S. Court of Appeals for the Tenth Circuit, as well as **reevaluation of the purpose and need for** the action, the *alternative screening* process, and the *environmental impact* analysis and *proposed mitigation* measures (Final Supplemental EIS, Summary, p. 1)

Here is another example of a sentence from the fourth paragraph. It contains all four rhetorical conventions. Again, nominalizations are in **bold** and noun modifiers are in *italics*. The acronyms are in CAPS and the passive voice is underlined.

Consistent with FHWA-specific *National Environmental Policy Act (NEPA)* guidance, **a reevaluation of** the Final EIS was conducted because **construction of** the project was halted as **a result of** the *appellate court* decision and over 3 years have passed since FHWA filed the Final EIS (Final Supplemental EIS, Summary, p. 2).

According to Killingsworth and Palmer (1992), when writers favor nouns over verbs, construct sentences in passive voice, and compress expression into acronyms, they distance themselves from

their subject matter and audience (pp. 173, 174). In this case, the EIS writers silence the voices of the community and the environment, and, by obliterating agents of actions, they obscure responsibility and authority for those actions (Killingsworth & Palmer, 1992, p. 173). The result of such writing is that general readability and comprehension suffer, readers are intimidated, and reading becomes tedious and frustrating (Killingsworth & Palmer, 1992, pp. 174, 175). “More importantly, the expert’s style limits access to the information of the EIS to those accustomed to reading and interpreting this form of discourse” (Killingsworth & Palmer, 1992, p. 174). By limiting access, writers privilege experts who can understand the discourse over citizens who often cannot.

#### *Technical and Legal Jargon*

Most people consider acronyms as jargon, but for the purposes of this analysis, I chose to identify acronyms as a rhetorical convention. I could have easily included jargon as a rhetorical convention, but jargon in the Summary Section deserves a discussion of its own.

In the Summary Section, the EIS writers frequently use technical, government, and legal jargon. Technical jargon is more prevalent than legal jargon. The writers use the legal terms “notice of intent” (Final Supplemental EIS, Summary, p. 1) and “Record of Decision” (Final Supplemental EIS, Summary, p. 14) without explaining what these terms mean. They also use legal language such as “herein” and “remanded” (Final Supplemental EIS, Summary, pp. 1, 5, 6, 9, 13). Technical terms can be more problematic because they occur more frequently and are more abstract than commonly known terms. Below is sample of repeated, unexplained technical terms in the Summary Section:

- Facility (means “highway”)
- Transportation infrastructure
- Transit technology
- Travel demand data
- Travel demand model
- Transportation analysis

- Through-corridor traffic
- Right-of-way
- Roadway footprint
- Project footprint
- Buffer area
- Specific alignment options
- Robust transit scenario
- Maximum future transit alternative
- Transit-supportive land use patterns
- Cumulative habitat loss / effects
- Habitat fragmentation
- Matrix of wildlife habitats
- Mitigation measures
- Alternative construction sequence
- Context-sensitive solutions philosophy
- Transit-oriented development solutions

Jargon poses a problem for many citizens because they live and work outside the organizational culture and technical fields where jargon is born. As outsiders, they are often unable to overcome the cultural and technical barriers placed before them. Unexplained jargon is one such barrier that keeps outsiders in their place as outsiders. “The likelihood of an outsider influencing an agency action is slight” (Killingsworth & Palmer, 1992, p. 170). Hence, the inclusion and extended use of jargon is just one way the EIS works to exclude citizens from effective public participation.

#### *Included/Excluded Content*

What citizens read is just as important as how they read it. In this case, the EIS writers inadequately summarize the details of the Final Supplemental EIS. For example, in the Summary Section, the writers focus on the primary components of the “Shared Solution,” while referring readers to Section 1.2.3 and Appendix B of the Final Supplement EIS for information on the other components (Final Supplemental EIS, Summary, p. 2). In the right-of-way section, the writers refer readers to two tables in the Supplemental EIS for information on the typical size of a buffer. The writers probably could have told readers the size of the buffer in less space



and would have saved readers the aggravation of finding the information on their own. The most disturbing lack of information is the summary of Chapter 4 of the Supplemental EIS. At 356 pages, Chapter 4 is the meat of the Supplemental EIS, as it contains results and updates of additional environmental studies required by the appellate court. In the Summary Section, Chapter 4 is summarized in a high-density, one-page table using numbers to show the environmental impacts of each of the five alternatives considered (p. 11). Included impact categories are:

- Wetlands
- Wildlife
- Property displacement
- Noise
- Land use
- Archaeological resources
- Historical resources,
- Section 4(f)/6(f) land
- Farmland

According to Chapter 4 of the Supplemental EIS, impacts missing from the table and any narrative are the following:

- Social
- Economics (other than the cost to build each alternative)
- Recreation and public works projects
- Pedestrians and bicyclists
- Air quality
- Water quality
- Permits and clearances
- Floodplains
- Threatened and endangered species
- Hazardous waste sites
- Visual
- Energy
- Construction

The writers do not explain why they include some impact categories and exclude others. All they say is, "For an explanation of changes that have occurred in the number since publication of the Draft Supplemental EIS, see the individual sections in Chapter 4, *Supplemental Environmental Analysis*" (Final Supplemental EIS, Summary, p. 10). To get

that explanation, readers will have to wade through 350 pages of highly technical information. In addition, some readers ignore tables and only read the text. By doing so, they would not learn anything at all about the issues because they are not discussed in the text.

One possible reason for excluding some categories from the table is that not all impacts are quantifiable. However, including only those that are quantifiable suggests an objectivist relationship to the environment and community. Furthermore, by not even discussing the unquantifiable impacts, the writers suggest that some impacts do not matter, when in reality, all impacts studied deserve attention in the Summary Section, or at the very least, some acknowledgement that they exist.

Another possible reason for including and excluding categories is the writers' need to maintain control of knowledge and information. According to Blyler (1998), power accrues when knowledge and information are used to create reality (p. 272). The writers take for granted that readers are not going to critically examine the reality they have created (Blyler, 1998, p. 38). Therefore, they maintain power over public knowledge and, eventually, public action. Citizens are likely to support a project when they have been presented with information that puts that project in a favorable light.

#### *Privileged/Marginalized Voices*

Identifying how authors privilege some voices while marginalizing others is a major point of critical research and my analysis. In the Summary Section, the writers privilege experts over citizens. They also give more attention to officials who support the project than to nongovernmental groups or citizens who reject the project. For example, throughout the Summary Section, the writers use the metric system to present measurements. In the United States, we do not use the metric system. Fortunately, the writers put the standard American system in parenthesis to aid understanding, but they, nonetheless, favor technical experts' use of the metric system.

The metric system seems out of place in a United States government document.

In a second example, the EIS writers give voice to officials when discussing Legacy Parkway and mass transit. “Local, state, and federal transportation officials embrace many of the concepts and improvements included in the Maximum Future Transit Alternative (as developed for the integration analysis), many of which are also included in current and future plans” (Final Supplemental EIS, Summary, p. 5). There is no mention of what citizens or nongovernmental groups think of the Maximum Future Transit Alternative. Plus, the writers surround the officials’ decisions to embrace the alternative in a drape of technical expertise.

In a third example, the writers say that the preferred alternative is “consistent with input received from the U.S. Environmental Protection Agency ...” (Final Supplemental EIS, Summary, p. 12). Again, there is no mention of what citizens and nongovernmental groups think of the preferred alternative.

The only part of the Summary Section that even acknowledges a dissenting voice is at the end in a section called “Areas of Controversy” (p. 14). In this section, the writers begin by listing the government entities and committees in support of the project. Then, they say that “contrasting opinions were expressed by individuals and nongovernmental organizations ...” (p. 14). The writers name no individuals, and the only nongovernmental organization mentioned by name is Utahns for Better Transportation. They do not mention the Sierra Club by name but instead lump them, apparently, into the category of “some commenters expressed interest in developing the Legacy Nature Preserve ...” (p. 14). Power resides in being able to silence some voices while vocalizing others. The point of exercising this power is to minimize “noise” in the system. This practice of minimizing noise, or the voice of the people, is perhaps what started the legal battle over Legacy Parkway. A court of law

was the only way the public voice could be heard.

### **Analysis Overview**

In summary, the results of my analysis confirm my initial assumption about the Summary Section of the Final Legacy Parkway Supplemental EIS. The content of the Summary Section is inadequate to give readers a full understanding of the issues addressed in the Supplemental EIS. The writers overuse passive voice, nominalizations, noun modifiers, and acronyms, thus hampering readability and comprehension (Killingsworth & Palmer, 1992, p. 174). The result is a detached tone that objectifies people and the environment in which they live. The writers also heavily use technical jargon, and some legal jargon, to express ideas, resulting in confusing and tedious reading. Furthermore, the writers privilege experts over average citizens, giving the impression that the experts know more about the situation and know what is best for the community. Those in support of the project are also given privilege over those who disapprove of the project.

As a result of the negative rhetorical conventions that writers use, readers, many of whom lack technical expertise and government knowledge, are potentially not able to clearly understand the issues to provide well informed public comment. While they have access to the Summary Section and the public participation process, they do not have the means to overcome the barriers placed before them by government writers, and, therefore, are more likely to forfeit their right to comment. In essence, they lose their voice and the power to influence change. On the other hand, government agencies benefit the most by intimidating readers with what they consider positive rhetorical conventions, thus neutralizing potentially dissenting voices before they even have a chance to speak. Alienating readers eliminates or reduces the need to respond to comments and reduces further delays the public might impose on the project.

Overall, it appears that EIS writers wrote the Summary Section for technical,

government, and legal experts already familiar with the issues, terminology, and preferred plan of action. It also appears that writers wrote the EIS to prove that experts had complied with the law to conduct environmental studies and perform the public participation process. Sometimes, government agencies resist involving the public in policy decisions (Killingsworth & Palmer, 1992, p. 166) and employ a variety of rhetorical and control devices to neutralize the voice of the people.

The Summary Section has a negative rhetorical effect on readers but a positive rhetorical effect on government agencies producing the document. As such, government agencies maintain control of the information, language, and public. They also benefit the most by steering the public down a chosen path that the agencies' have already chosen. The EIS truly does generate an "us" vs. "them" situation (Killingsworth & Palmer, 1992, p. 163), with government ("us") controlling the actions of the public ("them"). In the end, the "knowledgeable rationale" experts get what they want at the expense of the "uninformed and emotional public" (Killingsworth & Palmer, 1992, p. 163).

It is interesting to note, however, that the Supplemental EIS was challenged in court. While some citizens may have been silenced during the public participation process, they were not silenced in court. The citizens united and joined forces with a tenacious environmental group to ensure their voices were heard.

#### Conclusion

Communication scholars have been documenting the ineffectiveness of EISs for more than 20 years. In that time, not much has changed. This analysis demonstrates that EIS authors continue to use objectivist rhetorical conventions that hamper comprehension and readability, alienate citizens from the public participation process, and privilege expert voices over citizen voices, maintaining an "us" versus "them" mentality. This mentality is unhealthy to the public participation process and

entrenches government agencies even more in the business-as-usual approach.

EISs are incredibly important documents that continue to impact communities, large and small, all over the United States. For example, the National Highway Traffic Safety Administration is writing an EIS to analyze the potential environmental impacts of new fuel economy standards for model year 2012–2016 passenger cars and light trucks. This EIS impacts nearly every citizen throughout the United States. Another example is the EIS for the Missouri River Ecosystem Restoration Plan for the Missouri River Basin, the second largest river basin in the United States. This EIS, written by the Army Corps of Engineers, impacts 10 states, two Canadian provinces, and 28 Native American Tribes. And final example is the EIS the Forest Service in Alaska is writing analyze the environmental impacts of harvesting 3,500 acres of timber in the Tongass National Forest. This EIS impacts the people of Alaska as well as the timber industry.

Because access to understandable information is an important part of a healthy democracy, communication scholars must continue to uncover the depth of ineffectiveness that has unfortunately become all too common in the EIS. In doing so, scholars can advocate a better process and influence change. EIS writers, the public, and government agencies can also be forces of change. EIS writers can begin by making different stylistic choices such as using active voice and verbs, defining technical terms, eliminating jargon, and including all major content areas in the summary section. Likewise, the public can affect change by raising a voice of concern about the problems with the EIS and the public participation process; hosting workshops, roundtables, and forums that promote dialogue and mutual learning; and encouraging collaboration with government to improve relationships and outcomes. Government agencies can embrace change by implementing the innovative public participation practices Walker (2004) and

Schwarze (2004) advocate. These practices include sharing decision-making power, communicating through dialogue, and fully addressing citizens' concerns.

To be sure, the EIS is not the only public document worthy of analysis, and there are certainly a number of other communication issues that impact communities. The rhetorical and critical theories I have used in this analysis could be applied to other technical government documents that influence policy, whether public participation is part of the process or not. And the topics of those documents could extend beyond the environment to include public health, welfare, public safety, and food safety. Most government

documents are open to the public and, therefore, available for public review. Technical documents such as reports (e.g., recommendation, inspection, analytical, audit), action plans, and white papers all have the potential to shed light on the rhetorical conventions government writers use to influence inexperienced readers and the underlying power issues government agencies use to control potentially self-serving policies. In short, an ongoing critical analysis of government rhetoric is paramount to protecting and enhancing the democratic process of informed public participation and decision making to benefit the citizens whom government serves.

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## **Public Participation in Energy Policy: A Case Study of the San Juan Citizens Alliance**

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### **Abstract**

*The United States is reaching a point of energy uncertainty, with increasing pressures to seek independence from foreign fuel and become more environmentally conscious in their energy production and use. Though technology is the harkened savior, it has yet to be realized, putting further strain on energy producing regions within the United States. Among these regions is the San Juan Basin, known for its oil and natural gas production. According to some residents, this area is also identified as a sacrifice zone due to environmental impacts from industry. In this paper, I examine the San Juan Citizens Alliance (SJCA), a regional NGO dedicated to protecting nature and the New Mexico way of life, using Susan Senecah's Trinity of Voice to critique their environmental efforts. Using text in the form of organization newsletters from electronic archives, I found that SJCA incorporates a plethora of public participation actions, ranging from mass letter writing and attendance of public meetings to litigation and lobbying, to provide access, standing, and influence to their constituency. Though the organization's successes were inconsistent, SJCA's high membership numbers, diverse representation of stakeholders, and persistence in action afforded SJCA the voice required to impact energy and environmental policies in their region.*

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### **Introduction**

The United States, as an industrialized nation desperately dependent on foreign fuel, has increased stress on their energy producing regions as they attempt to become more self-sufficient. With the promise of better technology and alternative energy sources not yet realized, areas such as the San Juan basin, known for its oil and natural gas production, are asked to increase their fuel output. New gas wells in the region number in the tens of thousands, with no slowdown of drilling in sight (San Juan Citizens Alliance, 2007). Besides fossil fuels, the San Juan Basin is also known for its rich cultural history as part of America's wilder west. Increasing pressure on the basin to meet fuel demands in addition to containing culturally and environmentally sensitive sites has forced many area residents to fight for the health of

both its natural spaces and its people. The San Juan Citizens Alliance (SJCA) is one such organization created to bring citizens' voice to energy and environmental policy. In this paper, I will examine how SJCA provides voice for citizens of the basin using various forms of public participation as well as appraise their successes and failures in such endeavors.

### **United States Energy Policy**

On January 23, 2007, former President George W. Bush gave his State of the Union Speech to the American public. In the portion of the address dedicated to energy policy, Bush spoke to America's need to decrease its dependency on foreign fuel and become more self-reliant:

So as we continue to diversify our fuel supply, we must also step up domestic oil production in

environmentally sensitive ways. And to further protect America against severe disruptions to our oil supply, I ask Congress to double the current capacity of the Strategic Petroleum Reserve. America is on the verge of technological breakthroughs that will enable us to live our lives less dependent on oil. These technologies will help us become better stewards of the environment, and they will help us to confront the serious challenge of global climate change (The White House, 2007).

This was reiterated in Bush's March 27, 2007 speech at a demonstration of alternative fuel vehicles:

I want the American people to understand that there are new technologies on the market that are being used every single day, but there's more we can do... They [Congress] need to pass meaningful energy legislation as soon as possible, all aiming at making sure that we promote technologies that, for the sake of our national security and for the sake of good environmental policy, we reduce the usage of gasoline (The White House, 2007).

Both speeches attempted to lay out our current energy situation: (1) we can no longer count on foreign fuel, (2) we have our own fossil fuel sources, but resources are limited, (3) there is technology either available or well on its way for alternative energies, and (4) future energy procurement must be somewhat environmentally sensitive. This last point, though never discussed in great detail, hints at an even

greater problem: global climate change. Though the Bush administration acknowledged climate change as a legitimate concern, they continued to embrace an oil-centric energy policy to the end of his term.

The Bush administration's political apathy to energy related environmental issues caused various organizations as well as individuals to respond. For example Step It Up sent the message on April 14, 2007, to "step it up congress! Reduce carbon 80% by 2050" (Step It Up, 2007). Stopglobalwarming.com, led by Laurie David and Sheryl Crow, started a college campus tour and a virtual march to encourage people to reduce their carbon footprint (Stopglobalwarming.com, 2007). Environmental documentaries targeted energy consumption and highlight the benefits of using "green" alternatives such as solar and wind energy. *An Inconvenient Truth* by former Vice President Al Gore and other less recognized movies such as *KilowattOurs* attempted to relay the message that though global warming is a daunting reality, individuals have the power to modify their energy consumption habits. The Union of Concerned Scientists also joined the fray with the expressed mission of humanizing and empowering the voice of the scientist (Union of Concerned Scientists, 2006).

Unfortunately all of these efforts combined did not lead to a movement or spark the American public to reduce their thirst for fuel. The Energy Information Administration (2007), a division of the Department of Energy reported that:

Petroleum consumption is projected to increase by an average 1.5 percent and 1.3 percent per year in 2007 and 2008, respectively. Motor gasoline consumption growth is projected to average 1.2 percent per year, reflecting continuing economic growth. Distillate (diesel fuel and heating oil) consumption,

having increased 1.3 percent in 2006, is projected to increase 2.1 percent in 2006 and 1.6 percent in 2007... Total natural gas consumption in 2008 is expected to increase by less than 2 percent, with growth of 2.3 and 1.6 percent in the residential and electric power sectors, respectively.

In addition, climate change legislation has struggled for support due to a weak social conscience created through mutual coercion on the part of American citizens, assisted by competition with other major issues such as a waning economy and military actions abroad (Hardin, 1968). Thus it is expected that, with accelerating energy consumption, there will be an even higher demand on the fossil fuel producing regions such as the San Juan Basin in the American southwest.

### ***San Juan Basin***

The San Juan Basin, located in the Four Corners region (includes Utah, Arizona, New Mexico, and Colorado) of the United States, is one of the nation's major oil and natural gas producing regions (San Juan Basin Data Recovery Project, 2007). The portion of the basin that is situated in northwestern New Mexico alone produces approximately 70 percent of New Mexico's natural gas. Coalbed methane, or natural gas, is extracted from coal seams in the sedimentary rock formations. Natural gas, which is 95 percent methane (CH<sub>4</sub>), is retrieved when water is removed from a coal seam, lowering reservoir pressure (Digital Library for Earth System Education, 2007). The methane is then pumped to the surface with the water where it is captured and transported to a storage facility. Though methane is a greenhouse gas, considered one of the top greenhouse gases contributing to the greenhouse effect and thus climate change, it is a relatively inexpensive, clean burning fuel (Intergovernmental Panel on Climate

Change, 2007; Digital Library for Earth System Education, 2007).

### ***People of the San Juan Basin***

The majority of rural residents in the San Juan Basin have historically made their living either farming or ranching, though people have immigrated and emigrated out of the region due to mining, land and timber rushes, reclamation projects, military contracts, and construction booms (Omer Parker Jr. and Inez Truby, Personal Communication; deBuys, 2006). In the 1920's oil and coal were discovered in the region, leading to a flourishing industry by the 1950's. In 1992 coalbed methane extraction initiated the newest fossil fuel obsession in the northwestern New Mexico and southern Colorado area (Bureau of Land Management, 1999).

Since the late 1990's, the explosion of the coalbed methane industry prompted various regional conflicts. Most of the animosity stems from private land right disputes (e.g., mineral rights and issues pertaining to eminent domain), public land usage (e.g., mineral excavation by oil and gas companies), and a slurry of health issues. According to one resident of the Farmington, New Mexico area, who also happens to be a San Juan Citizens Alliance staff member, "Oil and gas companies have been given the farm and it's time for a reality check," characterizing the Four Corners area as a battle ground and sacrifice zone for air quality.

The title of sacrifice zone is nothing new to the region, since other citizens have openly expressed their frustration with government agencies (i.e., Bureau of Land Management, New Mexico Oil Conservation Division, Bureau of Reclamation, and the Environmental Protection Agency) and industry (deBuy, 2006). Bullard (1993, p. 12) describes a sacrifice zone as a community sharing two characteristics: "(1) They already have more than their share of environmental problems and polluting industries, and (2) they are still attracting new polluters." According to some citizens, the San Juan Basin fits this description with



its numerous pumping stations dotting the desolate landscape, promising only to be amplified as the nation seeks to feed its growing energy needs.

The San Juan Citizens Alliance (SJCA), founded in 1986, is a volunteer run, grassroots organization interested in social, economic, and environmental justice (San Juan Citizens Alliance, 2007). Headquartered in Durango, Colorado with additional offices in Farmington, New Mexico and Cortez, Colorado, the organization has upwards of 500 members, 9 staff members, and 9 board members. According to the SJCA website:

Our priorities at San Juan Citizens Alliance include protecting wildlife and wild lands, advocating greater corporate and governmental responsibility in development of oil and gas resources, protecting and restoring rivers, and promoting basic civil rights and civil liberties for all residents.

Their mission statement includes organizing residents to protect resources such as air, water, and public lands as well as rural character and “our unique quality of life while embracing the diversity of our region’s people, economy, and ecology” (San Juan Citizens Alliance, 2007).

As an environmental non-governmental organization (NGO), SJCA takes on a multitude of issues ranging from the protection of local river systems, mountain and canyon systems, and other large tracks of wild lands and wildlife corridors to returning native flora and fauna to the region. They also aid in the protection of cultural sites such as Native American ruins. Furthermore, the organization is a watchdog for oil and gas exploration and regulation in the San Juan Basin. SJCA also sponsors the Compañeros Latino Resource Center. The goals of this center are: “(1) to improve the working and living conditions of immigrants in the San Juan Basin, (2) to

work with other organizations to eliminate the causes of their displacement from home, and (3) to build bridges between the Anglo and Latino communities in La Plata County” (San Juan Citizens Alliance, 2007).

### ***Public Participation***

In *Environmental Communication and the Public Sphere*, Robert Cox wrote that it is communities with residents willing to take action that invoke environmental change. These residents seek justice, or “the safety and quality of the environments where people lived, worked, played, and learned” (Cox, 2006, p. 49). This is the role SJCA attempts to play for their community; providing voice when no other venues are meeting resident needs for effective public participation in environmental justice and other environmental issues. In its most broad sense, public participation is the objectification of the human body in an effort to gain access, standing, and influence. In order to garner real voice, hopeful participants must often risk something personal and important in order to forcefully communicate with those in power (Peters, 2005). Stakeholders are rarely afforded voice through the charity of the powerful. It is the nature of the powerful to be disinterested in sharing. Voice is instead earned through pain, work, sacrifice, and even blood; the ability to force those in charge to listen simply through the stakeholders willingness to publicly endure injustice, or more than endure it...invite it. However, 2 other components are needed in the pursuit for voice. These components, hinted at above are: (1) force those in charge to “listen” and (2) stakeholder willingness to “publicly” endure injustice. What these statements imply is the necessity of having some enlightened powerful elite (or the decision-maker) willing to be shamed into action and the presence of a witness that can effectively transmit the injustice to those malleable elite.

### ***The Theory of Voice in Public Participation and Environmental Policy***

In 1958, William Schutz came up with the Fundamental Interpersonal Relations Orientation (FIRO) theory of inclusion, control, and affection explaining interpersonal behavior in small groups. The definitions, according to Liddell and Slocum (1976) who extended Schutz's theory to investigate the effects of differential degrees of compatibility between group members' personalities and behavior, due to their role, in group decision-making, are as follows:

The interpersonal need for inclusion is defined as the need to attain a psychologically comfortable relation with others in terms of the magnitude and initiating direction of interaction and association. The interpersonal need for control is defined as the need to attain a psychologically comfortable relation with others in terms of the magnitude and initiating direction of control and power. The interpersonal need for affection is defined as the need to attain a psychologically comfortable relation with others in terms of the magnitude and initiating direction of love and affection (Schutz, 1958; Liddell and Slocum, 1976).

In all 3 definitions, psychological comfort, or the comfort to contribute, is the main requirement in any role for effective interaction amongst group members.

Susan Senecah expanded Schutz's FIRO theory in her 2004 piece *The Trinity of Voice: The Role of Practical Theory in Planning and Evaluating the Effectiveness of Environmental Participatory Processes*, applying the concept of small group dynamics to multi-stakeholder environmental policy decision-making processes. In her paper, Senecah states that there are competing demands on the

environmental decision-making process including: (1) scientific and technical expertise, (2) decision-making authority by government agencies, and (3) public involvement, public participation, and inclusion. These demands, as part of the American character, are the result of a passion for democracy as well as enterprise, and that these two ideals have the potential to occasionally collide with one another. She goes on to state that ineffective public participation in processes affecting a community's environment (using environment in the broad sense of the word) can lead to civic discontent, whereas effective participation or voice leads to a community's ability to be more productive and build better relationships. These relationships unfortunately do not always lead to good environmental policy.

To address the issue of voice in the environmental decision-making process, Senecah developed the Trinity of Voice (TOV), a concept including access, standing, and influence, as a way to build relationships between stakeholders and the decision-making authority(ies). Though access, standing, and influence are interrelated and often difficult to compartmentalize, they all address a different aspect of voice. Access refers to having access to sufficient and appropriate opportunities to express thoughts as well as adequate access to support (i.e., technical support, education, and information). Access also implies an element of safety to express such thoughts to decision-makers. Standing on the other hand incorporates civic legitimacy, respect, esteem, and the belief that all stakeholders' perspectives should be considered by the decision-making authority. Both access and standing thus affect influence, which is the respectful consideration of stakeholders in the decision-making process. According to Senecah, "The general TOV theory holds that the key to effective process is an ongoing relationship of trust building to enhance community cohesiveness and capacity, and results in good environmental decisions" (Senecah, 2004, p. 23). This

concept also allows for assessment of process effectiveness to improve future communication and decision-making ventures.

### **Methods**

For purposes of examination, I did a textual analysis of newsletters from SJCA to determine actions taken by the organization on behalf of their membership. Newsletters are an easily obtainable text that provides information about methods for public participation in a NGO as well as the possible successes and failures of such acts. I obtained archived newsletters from the organization's website made available as PDFs for downloading. I retrieved all electronic archives, starting with the fall 2001 newsletter, and ending with the last publication in February 2007. A total of 16 newsletters were accessible for download.

Using Susan Senecah's Trinity of Voice, I examined all articles addressing energy related issues (i.e., oil, gas, coal, and their green energy counterparts) including featured pieces, notes from the director, president, and featured staff and board members. I analyzed newsletter articles by paragraph to determine how the organization and individual members provided their constituents with access, standing, and influence as the 3 requirements for voice as well as the organization's accomplishments and defeats. I also searched the text for ways in which SJCA asked their membership to contribute such as donations, letter writing, etc. In addition to actions taken by the organization, I looked at membership composition to address the diversity of values demonstrated by the mission statement.

### **Results**

The major purpose for SJCA newsletters was information dissemination to their membership. Like all organizational newsletters, the SJCA strives to keep their association abreast of all news on the energy front. Though most articles in the newsletters are meant to provide readers

with detailed accounts of energy policy events in their community, SJCA also uses this media tool as a way to show organization progress, relay current actions, and encourage members to participate in key activities (especially those requiring large numbers of signatures).

In the course of 7 years (the time span recorded in the electronic archives), SJCA has taken on a variety of opponents, generally in the form of federal agencies and industry, in their attempts to give voice to the San Juan Basin residents. Chosen methods for public participation by SJCA, listed in Table 1, range from mass letter writing and attending public meetings to litigation and lobbying Congress. Though the organization stays within the legal realm of action, individual members have been known to partake in riskier forms of public participation, though not in association with SJCA. Noted as one form of action, data collection by the organization includes obtaining agency, industry, and consultant reports, proposals, and other documentation (unknown if consultants are paid for by SJCA) as well as gathering information from attending public meetings, workshops, and seminars. SJCA, recognizing the value of local knowledge, also attempts to document experiences and information from San Juan Basin residents (Cantrill, 2004).

### ***Access, Standing, and Influence Oh My!***

SJCA provided numerous examples of voice in the form of access, standing and influence throughout their newsletters. The following sections outline specific cases where the Alliance has provided these individual components to their constituency.

### **Access**

Access, as mentioned above, includes opportunity, potential, and safety as well as access to resources. The SJCA attempts to bring all components of access to their membership. However, they focus primarily on providing their members with opportunities to interact with decision-makers and information to allow for informed participation.

In a piece from the Winter 2001 newsletter called “Landowner Workshop,” SJCA chronicles a workshop put in cooperation with the Oil and Gas Accountability Project”:

The workshops are designed to increase landowners’ knowledge of oil and gas issues and promote cooperation among neighbors faced with oil and gas development.

Table 1. Public participation actions taken by SJCA.

| <b>Actions taken by SJCA</b>            | <b>Category of Voice</b> |
|-----------------------------------------|--------------------------|
| Attending Industry Seminars             | Access                   |
| Attending Public Meetings/Workshops     | Access                   |
| Contacting Demographic Groups           | Access                   |
| Creating Task Forces                    | Standing                 |
| Data Gathering                          | Access                   |
| Drafting/Supporting Bills               | Access                   |
| Filing Protests/Petitions               | Standing                 |
| Forming Alliances                       | Standing                 |
| Forming/Joining Accountability Projects | Standing                 |
| Grant Writing/Fundraising               | Access                   |
| Holding Positions on Commissions        | Influence                |
| Initiating/Joining Lawsuits             | Influence                |
| Letter/Comment Writing                  | Access                   |
| Lobbying in Washington D.C.             | Influence                |
| Meeting with Officials/Legislators      | Influence                |
| Organizing Community Workshops          | Access                   |
| Participating in Coalitions             | Standing                 |
| Participating in NEPA Comment Periods   | Access                   |
| Participating in NEPA Scoping Sessions  | Access                   |
| Participating in Protests/Marches       | Access                   |
| Participating in voting opportunities   | Influence                |
| Providing Public Forms                  | Access                   |
| Public Relations and Media Campaigns    | Standing                 |
| Supporting Legislation/Regulations      | Influence                |
| Writing Newsletters and Reports         | Access                   |

Information presented at the workshop included descriptions in drilling and well operations, working with landowners and how to document meetings, and oil and gas laws in the state of Colorado.

In this September 2004 example, SJCA puts on landowner forums to educate their constituency in how to work with industry in the article “Landowner Forums Planned in New Mexico.”

Information is power. Industry hates nothing more than negotiating with well-informed landowners armed with abundant good examples from their friends and neighbors. Following up with successful landowner forums in San Juan County in September and October. The forums are free and open to all.

In the Fall 2001 newsletter article “Counties Draft Regulations to Protect Landowners,” SJCA documents the attendance of Alliance members at two public hearings put on by Archuleta and La Plata Counties in southwest Colorado. The meetings were scheduled to address oil and gas regulations and county rights to manage surface impacts from oil and gas development under the state’s land use laws:

The San Juan Citizens Alliance (Alliance) turned out several members and supporters for the meetings. Paul Lerno and Penny Holmes spoke about the problems and consequences that landowners faced with development. Both of them encouraged the Board to protect landowners by passing effective regulations.

All examples are representations of SJCA’s dedication to providing access to their

membership by focusing energies on education and information dissemination to create informed participants. Quoting one SJCA staff member, "Information is power."

### ***Standing***

Standing, as another element to voice, represents civic legitimacy, respect, esteem, and consideration of all stakeholder perspectives. Following access, SJCA is able to provide their association with more standing in energy related issues than what could be achieved by individual community members alone. The following examples demonstrate how the standing of an organization contributes to better access and standing by members:

SJCA organizer Alan Rolston and member Tweeti Blancett met with Burlington officials and BLM personnel at the proposed site and expressed concerns about developing the relatively untouchable bench area overlooking the Animas River. The 360-acre piece is set aside for wildlife habitat and wintering area in the Blancett's BLM grazing management plan ("Burlington Resources Retracts Gas Well Application Along Animas River" in the January 2002 newsletter).

As we go to print, the Forest Service is primed to release its final decision about the fate of the HD Mountains...The Alliance plans to scrutinize the final EIS as soon as it becomes available, and will look to our technical experts and attorneys for advice on how to proceed next ("Final Decision on HD Mountains Imminent" in the July 2006 newsletter)

SJCA and other citizens groups are asking the Commission to support both rules [tightening of controls on emissions in Denver and other parts of Colorado], especially the passage of a strong statewide oil and gas ozone rule...SJCA has official party standing in the November hearings and will be advocating strongly for tougher standards in these areas ("Colorado Considers Air Quality Rules" in the November 2006 newsletter).

These examples represent how SJCA's community standing, mentioned outright in the last case, has not only increased their access to documents and people with decision-making power, but also increased their chances of influencing choices made in energy and environmental policy.

### ***Influence***

Recalling from the above explanation of Trinity of Voice, influence is the respectful consideration of ideas of all stakeholders in the decision-making process. With staff members, an attorney or two, and a good portion of the membership dedicated specifically to energy policy (mainly oil and gas regulation), SJCA has expanded their influence over the organization's 21 years of existence. In May of 2004, the Alliance even sent the executive director and a member to Washington D.C. to lobby for the protection of the Canyons of the Ancients National Monument (article titled "Alliance Staff Join Outreach Week in Washington D.C."). The following examples speak to SJCA influence both locally and regionally.

In an article entitled "Alliance Stalls New Gas Leasing in HD Mountain" from the Winter 2001 newsletter, SJCA reported:

A timely protest filed by the San Juan Citizens Alliance

derailed plans by the San Juan National Forest to issue new oil and gas leases for 2,000 acres in the HD Mountains southeast of Bayfield... Coalbed methane development was likely if the leases had been sold...The Alliance challenged the leases on several grounds, including the fact that the Forest Service had never conducted appropriate environmental studies prior to making these leases available for purchase and development... The day before the scheduled lease sale, the Forest Service apparently agreed with the inadequacy of their environmental compliance and pulled the two leases from the public auction, safeguarding 2,000 acres...from intensive gas exploration for the immediate future.

In this example from the May 2002 newsletter (article: "New Mexico Ranchers Tour With Senator Bingaman's Staff"), SJCA demonstrates how to force decision-makers to become witnesses to ineffective policy.

Several New Mexico ranchers and landowners vented their frustrations to Libby Rodke, of Senator Bingaman's Washington D.C. staff, at a meeting held recently in Aztec...The ranchers explained the detrimental impacts to their own land and BLM grazing allotments caused by oil and gas operators: death of livestock and wildlife due to unfenced or poorly fenced well pits containing high concentration of petroleum hydrocarbons, unreclaimed well pads, and

erosion from roads and well pads...After the meeting, the participants toured several wells on the Blancett's allotment. At one site, the produced water holding tanks were overflowing; at another site, fluids from another well were being dumped into well reserve pit. At most of the sites pad reclamation had not occurred or had failed.

In a final example of influence, the SJCA demonstrate their muscle-flexing abilities in the article "La Plata County Revises Oil & Gas Rules" in the November 2006 newsletter, stating:

At this time, it is still unclear as to what process the Planning Department is going to use to get the revisions done. The Alliance, however, has made it clear to the County Commissioners that any changes should strengthen, not weaken the code.

### ***Success and Failure in Action***

SJCA newsletters were replete with achievements, failures, stalemates, and cases yet determined. Though documented successes were relatively rare, the organization fruitfully fulfilled the role of regional watchdog to industry in the San Juan Basin. The Alliance happily demonstrated in their newsletters that no move could take place on the part of agencies or industry without SJCA knowledge, solidifying their influence in energy and environmental policy.

In the March 2005 newsletter article titled "Public Comment: Don't Drill the HDs" and the September 2005 newsletter article titled "SJCA scores quick victory on HD gas wells," the SJCA outlined one of their few successes for their readership, stating:

In a landslide of comments, the public overwhelmingly told the Forest Service not to

drill the HD mountains Roadless Area and the Fruitland Formation outcrop. The Forest Service received almost 70,000 comment letters and emails about industry plans to drill up to 300 coalbed methane gas wells in and around the HD Mountains near Bayfield...As a result of the overwhelming outpouring of support from local governments, local and national citizens, and diverse public users that included hunters, ranchers, archeologists, outfitters, hikers, horsemen, and more, the Forest Service is thoughtfully reconsidering its preferred alternative and one of the companies, Petrox, has abandoned plans for 20 wells located along the Fruitland Formation outcrop in Archuleta County.

In our last issue, we reported that the Forest Service had approved the first two wells planned for the HD Mountains. The Alliance rushed into federal district court in Denver to stop the wells. We are pleased to report that we scored a decisive victory, and stopped both wells in their tracks!

Articles such as these remind members what they work so diligently to achieve; a rally point for continued action on the energy front.

In addition to organization successes, SJCA actions also result in delaying industrial processes, or even more uncommon, a compromise between agency/industry and the community. The following example outlines one of these rare occasions where a settlement was reached

between the BLM and respective interest groups:

SJCA filed suit in federal court last summer after the Bureau of Land Management (BLM) issued a permit allowing WesternGeco to collect seismic data by crisscrossing 12,000 acres near Ismay's Trading Post along dozens of miles of routes using 60,000-pound vibroseis buggies or "thumper trucks." We were joined by The Wilderness Society, Colorado Environmental Coalition, and Oil and Gas Accountability Project...At the urging of the federal judge, we reached an out-of-court settlement with BLM and industry... ("Canyons of Ancients Seismic Suit Settled" in the March 2003 newsletter).

Besides demonstrations of Alliance victories and near successes, the SJCA also reported defeats, recounting their disappointment with authoritative decisions as well as in specific individuals believed to have additional influence in energy policy. These examples address the latter:

The Alliance had hoped to recruit Jim Dyer's replacement, Senator Jim Isgar (D-Durango) as a co-sponsor of the coalition's new conflict of interest bill [prohibits Colorado Oil and Gas Conservation Commission members from working for or having a monetary or pecuniary interest in any company regulated by the Commission]. Although Senator Isgar expressed concern about the imbalance of power between surface owners and mineral lessees',

he was reluctant to introduce such legislation ("Coalition Supports COGCC Reform" from the January 2002 newsletter).

Area residents were disappointed, but unsurprised when BLM Director Kathleen Clarke on September 16 rejected formal protests of BLM's approval for over 10,000 new gas wells around Farmington. The San Juan Citizens Alliance was among a crowd of twenty-three parties who protested the BLM's long-range drilling plan for the New Mexico portion of the San Juan Basin...Essentially, BLM responded to many of these concerns by admitting the Plan was deficient, but then claiming that additional mitigation requirements could be added at a later date...As we went to press with this newsletter, the Alliance and other protestants were evaluating options for pursuing litigation to make BLM obey the law, protect human health, and preserve the ability of the ecosystem to continue functioning ("BLM Rejects Citizen Protests of Farmington Drilling Plan" from the October 2003 newsletter).

Though the purpose of this paper is not to examine framing, it is interesting how SJCA attributes successes to organization action and failures to evil industry, incompetent federal agencies, and weak politicians. SJCA, recognizing that successes against powerful groups such as the oil and gas industry are few and far between, use framing to encourage continued participation by members in energy issues. By creating an "other," SJCA is able to morally exclude "Big Oil" in a rhetorical battle of ethics (Clark, 2001).

### ***Membership: Who are They and What is Their Role?***

As an organization dedicated to nature and environmental justice, members of the SJCA range from environmentalists, nature lovers, outdoor recreationists, and history buffs to ranchers, farmers, and others who live off the land. There are also those who embody multiple stakeholder roles when considering work and play. According to SJCA board member Carolyn Lamb, an outdoor enthusiast with a family in the oil industry, "Whether a liberal Californian or a conservative Texan, rehabilitation of the earth should be the main concern of every person" ("Liberal or Conservative, We All Depend Upon the Same Planet" in the October 2002 newsletter).

The following 2 examples testify to SJCA's expanding membership and dedication to their mission to embrace "the diversity of our region's people, economy, and ecology" (San Juan Citizens Alliance, 2007).

The Alliance is working with New Mexico residents and one cattleman's association to hold the agencies accountable by monitoring new leases, drilling permits and pressuring the agencies to enforce existing rules ("Environmental Violations Rampant in New Mexico Oil and Gas Fields" in the Fall 2001 newsletter).

The New Mexico Community Foundation presented the second Michael S. Currier Environmental Service Award to two northwest New Mexico ranching families who have taken on oil companies for damaging their land, confronted land management agencies, and forged unexpected alliances to protect the environment. The two couples—Linn and Tweeti



Blancett and Chris and Kay Velasquez—are both founding members of the Alliance's New Mexico Chapter. They drew national media attention a year ago when they gated and locked their private property and blocked access to companies that drill and produce oil and gas ("Blancett, Velasquez Families Receive Currier Environmental Award" in the February 2004 newsletter).

These examples represent the broadening of an environmental NGO as well as its definition of environment, since their interests are both the protection of nature and environmental justice for all. In addition, the second example provides evidence of SJCA's approval of acts offering up the body for sacrifice in order to make a statement to decision-makers (Peters, 2005). By risking their personal freedoms (breaking the law), the 2 couples made a statement worthy of national media attention: oil and gas industries are willing to ruin the environment and destroy others' way of life to make an extra dollar.

SJCA, with such a diverse constituency, have wielded their numbers in a manner that has provided them with greater voice than an organization of the same size consisting of only one type of demographic. With the rationale that a diversification of membership leads to greater support and thus power, the organization has sought out different interest groups either to join their society or partner in coalitions, such as this example:

A diverse coalition of ranchers, local Navajo governments and environmental groups joined together to challenge the Bureau of Land Management's decision to authorize nearly 10,000 new oil and gas wells in the San

Juan Basin. The group filed suit in Federal District Court, arguing the BLM's decision will lead to destruction of the ranching economy, the region's air quality, and destruction or desecration of many native cultural sites ("Diverse Coalition Challenges Farmington Gas Plan" in the February 2004 newsletter).

This diversification not only brings in more funds to support SJCA actions, but also provides the alliance with further justification for action, affirming the multitude of people and livelihoods afflicted by environmental impacts from industry operations.

In addition to adaptations to their membership base, SJCA also uses their 500-plus enrollment to flood offices with comments, letters, and voices to invoke action. Present in almost every newsletter was a note requesting members to contact representatives, participate in public meetings, or gain further information by attending workshops and public forums to pressure decision-makers with impressively overwhelming numbers of dissent on the part of the community. In examples from the January 2002 newsletter article "Coalbed Methane Threatens HD Mountains" and February 2007 newsletter article "What's Wrong with Desert Rock?," SJCA staff members beseech the community, pleading:

Don't let the massive destruction that would accompany bulldozing and blading roads, pipelines, and well pads for hundreds of new gas wells obliterate the remarkable values of the HD mountains – its value for rare wildlife, for unexplored archeological sites, and for pristine old-growth forests and stream corridors. Send letters by...make the following points...

SJCA is committed to sending Site packing with their ill-conceived plan for Desert Rock. SJCA is fighting for clean air for Four Corners citizens. Please join us and our broad coalition of groups and individuals concerned about public health and the economic/environmental future of the Four Corners!

These methods, though not always effective if ignored, can be impressive and shaming; an important component of public participation (Schwartz, 2004; Peters, 2005).

### **Discussion**

SJCA incorporates a wide variety of methods for public participation, providing access, standing, and influence to their constituency. Recalling Peters' (2005) broad description of public participation, SJCA uses their massive numbers and diversity of membership to provoke industry and embarrass agencies. Though actions on the part of the Alliance stay within the legal domain, they are still achieved through pain, work, and sacrifice on the part of their staff and membership; the vital components to invoke witnessing. According to Peters (2005, p. 250), "A witness is a medium, a means by which experience is supplied to others who lack access to the original." He continues, stating that "Witnessing is a mode of communication intimately tied to the mortality of both the one who bears witness and the one who witnesses" (Peters, 2005, p. 256). SJCA is able demonstrate this mortality not only in the impacts of the oil and gas industry to nature and sites with cultural importance, but also to the health and livelihoods of their members. By creating witnesses and shaming those in charge, SJCA gives voice to those without.

SJCA is not alone in its efforts to hold industry and government agencies

accountable for impacts due to oil and gas developments. In a similar case to the San Juan Basin, NGOs are fighting "Big Oil" and the agencies responsible for managing public lands (i.e. Forest Service and BLM) to prevent drilling in the Pinedale Anticline in Wyoming. Unlike the San Juan Basin, this is a relatively new development, since drilling was prohibited in this region until recently.

According to the Wilderness Society, the Pinedale Anticline, known for its big game such as mule deer, antelope, and elk, is considered critical habitat for mule deer and pronghorn populations in Wyoming (The Wilderness Society, 2007). The anticline is part of the longest remaining wildlife migration corridor in the lower 48 states, where it connects the Yellowstone and Grand Teton backcountry to the Red Desert. In December of 2006, BLM released a draft Supplemental Environmental Impact Statement (SEIS) on an industrial proposal for expansion and year-round drilling in the Pinedale Anticline near the town of Pinedale, Wyoming (Upper Green River Valley Coalition, 2007). According to the Wilderness Society and other interest groups involved, drilling in this "crucial wildlife habitat could set a dangerous precedent that would legitimize converting BLM's multiple-use lands to single-use industrial zones to the detriment of the public interest."

In another example of a community coming together in action, Terry Tempest Williams' book *The Open Space of Democracy* describes her experience living in Castle Valley, Utah where her community fought a high-density development project after the Utah School Institutional Trust Land Administration (SITLA) sold land to a developer at public auction. Williams and other members of her community formed the Castle Rock Collaboration (CRC). After 5 years of work CRC, with partners such as the Nature Conservancy, protected over 3 thousand acres of SITLA land. From this experience, Williams stressed 4 words: question, stand, speak, and act. "We have a history of bravery in this nation and we must call it forward now. Our future is guaranteed

only by the degree of our personal involvement and commitment to an inclusive justice” (Williams, 2004, p. 85).

Though William's example deals with a high density housing development and not energy policy, her point is no less valid. Action or public participation is needed to create change. Without participation, there is no dissent. And without dissent, unpopular events will take place without opposition. It is the responsibility of the community to defend themselves against the other, and in order to do so, they need voice.

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