

Nature's "Crisis Disciplines":

Does Environmental Communication Have an Ethical Duty?

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

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

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

In his influential 1985 essay in *Bioscience*, Michael Soulé, founder of the Society

for Conservation Biology, proclaimed that “*ethical norms* are a genuine part of conservation biology, as they are in all ... crisis-oriented disciplines” (p. 727; emphases added). Soulé was simultaneously announcing the arrival of a new field, defined by crisis, and driven by an urgency—an injunction to protect what remained of the planet’s biodiversity.

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

I want, then, to pose a simple question for us to consider: Is the field of environmental communication a “crisis discipline”? More specifically, is our discipline premised on normative assumptions that lend urgency to our scholarship and professional service? I am not asking, “what *is* environmental communication?” That is, what are the objects of our study—the role of the media, risk communication, nature writing, public participation, or other worthy topics. Nor am I asking the question Depoe recently posed on-line: How can we assess the “health” of the various environmental communication

research, teaching, and service activities that we engage in? Some of the responses took this to be asking: Do we publish enough peer-reviewed articles? Are we graduating new Ph.D.'s in the field? Do we have adequate textbooks for our students?

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

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

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

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

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

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

Conservation Biology and the Crisis of Biodiversity

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Conservation biology certainly is not the only field that is driven by normative concerns. Yet, I believe it can be heuristic to consider such a stance in a field close to our own concerns. I say this because I believe that both conservation biologists and communication scholars believe that the stakes are high. In his new book, *Collapse: How Societies Choose to Fail or Succeed*, Jared Diamond (2005) argues that past and present civilizations have responded differently to environmental signals of decline—deforestation, salinity of water, climate change, and the over-hunting of species on which these societies depended. Some such as the Polynesian society of Easter Island and the medieval Viking colony on Greenland “collapsed” in large part due to failure to adapt or change their abuse of natural systems that sustained their worlds. In our own time, conservation biology has emerged in response to the heightened signals we are receiving from the natural world: a “recognition that humans are causing the death of life—the

extinction of species and the disruption of evolution” (Barry & Oelschaeger, 1996, p. 906).

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

Crisis and Environmental Communication

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

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

Consider these reports in the past 24 months:

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

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

- On October 17, 2004, Ron Suskind (2004) wrote in *The New York Times Magazine* of the tongue-lashing he received from a senior adviser to President Bush for an unfavorable story about the White House. Suskind wrote that the advisor told him, that [G]uys like me were "in what we call the reality-based community," which he defined as people who "believe that solutions emerge from your judicious study of discernible reality." I nodded and murmured something about enlightenment principles and empiricism. He cut me off. "That's not the way the world really works anymore," he continued. "We're an empire now, and when we act, we create our own reality. And while you're studying that reality -- judiciously, as you will -- we'll act again, creating other new realities, which you can study too" (p. 44 ff.).

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

- On April 6, 2001, lobbyists from the National Mining Association met with EPA officials to argue for "a small wording change" to the regulations that prohibit dumping of soil and rocks from mountaintops into valley streams, in a process of coal mining known as mountaintop removal (Warrick, 2004, p. A1). As a result of this lobbying, officials "simply reclassified the [mining] debris from objectionable 'waste' to legally acceptable 'fill'" (p. A1). This change in the definition of what is "waste" and what is acceptable "fill" "explicitly allows the dumping of mining debris into streambeds" (p. A6).

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

- In other cases, federal agencies have begun to limit public access under the

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

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

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

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

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

1. *“Environment” imbricates material and social/symbolic processes.*

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

Although at times, we may mistake tropes for real terrains or, in dismantling social constructions of the “pristine,” forget that the loss of habitat has real consequences, our field is founded on this tension. Recently, Tarla Peterson, Markus Peterson and William Grant (2004) have attempted to model this relationship of biophysical processes and social practices. They turn to Niklas Luhman’s theory of ecological communication,

they explain, to recover a kind of “rhetorical realism”: “an awareness that although rhetoric may structure our lived relation to the real, conditions of existence remain” (p. 16). This is surely is the cornerstone of our scholarship and, I’ll suggest in a moment, the basis of an ethical duty.

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

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

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

The political economy of such sites not only help us to account for diverse

representations of “environment,” but they sometimes constrain or exclude, in material or bodily ways, certain voices and communities.

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

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

Ethical Postulates of Environmental Communication

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

For similar reasons, I believe we cannot escape the necessity of ethical choice, even if implicit, in much of our scholarship and teaching. Even in our sometimes cautious

ways, as we propose that the objectives of our work are to “appreciate” the different constructions of wilderness, to help stakeholders to “understand” or to “participate in” processes that affect them, or to “translate” technical reports, we are straddling an ethical divide that has implies choice. For example, why should residents living near a Superfund site “understand” technical materials? In order to object, if they perceive that their health is at risk? Or, to facilitate harried bureaucrats in gaining residents’ compliance or acceptance of cleanup plans? Which is it? Is our purpose merely the perfection of a process of communication, or is it an ethic of democratic empowerment as a means of an environmentally just and sustainable society?

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

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

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

Such a postulate seems self-evident from broader societal values related to

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

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

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

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

Implicit in this norm, of course, are the prerequisites of a participatory democracy—the right to know, to comment, and to have standing to speak for or against the judgments of societal institutions. Such prescriptions are not limited to an official public sphere but increasingly recognized in private and other social relationships, particularly in recent calls for collaborative approaches to managing conflicts over environmental concerns. Indeed, both natural resources decisions—such as the Quincy

Library collaboration in California—and the granting of permits to polluting industries in at-risk, communities of color have been criticized precisely for their exclusion of affected parties.

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

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

By this last statement, I don't mean to raise the controversy of whether scholars can or should speak outside their expertise or enter the public realm as partisan advocates. I do, however, agree with those conservation biologists and other scientists who believe that scholars have a duty to speak forcefully when the results of their scholarship point to alarm. For example, William Schlesinger (2003), Dean of the Nicholas School of the Environment and Earth Sciences at Duke University, has argued that environmental scientists have a public responsibility “to speak out against a toxic impact to our environment, just as we would expect a physician to speak against a carcinogenic substance that might contaminate our food” (p. 23A). Such “advocacy,” if we wish to use the term, is emboldened precisely because it is fueled by our findings.

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

Conclusion

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

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

conflict,” such research has value for state and federal officials, wildlife biologists, and community leaders who, daily, face challenges of design of communication processes as well as that of habitat management.

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

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

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