

TEMA MILSTEIN

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At this time of mounting human-induced ecological crises, the ways people communicate about nature have far reaching reverberations. Communication scholars engaged with ecological issues often assert that "what we say is what we see" (Cantrill & Oravec, 1996, p. 1) and what we see, or perceive, shapes how we behave ecologically. Communication scholars are especially concerned with the ways language, symbols, messages, interaction processes, and more broadly defined forms of discourse inform human perceptions of and practices within the natural world.

In the past 25 years, environmental communication emerged as a subfield within the communication discipline, yet the subfield is also a metafield that necessarily cuts across disciplines. The merging of communication foci and nature-human subjects has broadened and theoretically diversified environmental studies, providing a much-needed lens on the social meaning-making aspects of nature-human relations. For instance, in looking at communication research on environmental activism, one can begin to see how a communication lens provides an especially effective way to identify and critically analyze both the symbolic (language) and material (practice) aspects of ecological relations – in this case, those of eco-advocacy. Examples of such studies illustrate how activists engage potentially sympathetic outsiders via "toxic tours" of environmentally, racially, and socio-economically marginalized communities, opening up possibilities for critical and unified interpretation and advocacy (Pezzullo, 2007); how governments and corporations use discursive strategies to exclude Indigenous peoples and perpetuate the disproportionate targeting and devastation of them and their lands to maintain nuclear production processes (Endres, 2009); how activists initiate widely televised image events, such as the occupation of old growth trees marked for logging, to confront profit motive-driven industrialism with popular expression of community and ecological needs (DeLuca, 1999); or how recent globally networked actions calling for political response to mitigate climate crisis used strategic and performative communication to articulate ways forward and successfully used local action to buoy the climate crisis movement (Endres, Sprain & Peterson, 2009).

In order to illustrate communication studies' importance in a broad-based liberal arts approach to the environment, this chapter shows the range of valuable interpretations emanating from the field. To contextualize these interpretations, I also outline the origin and growth of the greening of the communication discipline. In addition, I describe current trends, looking at recent disciplinary conversations

about scholars' ethical roles as environmental advocates and describing the early emergence of ecologically informed communication theory. Finally, I discuss future directions and possibilities for the field, including increased internationalization, intercultural conversation, and interdisciplinary collaboration.

CURRENT INTERPRETATION WITHIN THE FIELD

Environmental communication comprises two core assumptions. First, the ways we communicate powerfully shape our understandings of nature. Second, these understandings inform how we relate with and within the living world. In this way, scholars see communication as not merely reflecting but also as producing and naturalizing particular human relations with nature. Many studies also include a third assumption that our representations of nature are *interested*. In other words, representations of nature are not neutral, but instead informed by particular contexts and interests, often in ways we are unaware, directing us to see nature through particular lenses while also obscuring alternative ways of perceiving nature (Milstein, 2009a).

One of the discipline's key additions to the field of environmental studies has been the focused investigation of human-nature relations as both materially and symbolically constructed. Informed by poststructuralism, and in conversation with contemporary transdisciplines and orientations (such as science studies or ecofeminism), many environmental communication scholars view human symbolic traffic and human relations with the material world as intricately entwined. Scholarly explorations of this notion serve to bridge the humanities, social sciences, and natural sciences by paying close attention to the intersections of perception, meaning production, and practice, pointing to ways that "natural and cultural systems help shape each other and are radically consequential for each other" (Carbaugh, 1996, p. 40).

A goal of many critical environmental communication scholars is to identify, critique, and raise awareness about the ways in which environmental discourses reflect and reproduce a particular political economy of interests. In addition, many scholars explore and theorize about ecologically sustainable or restorative discourses, finding these persist or can be created or revitalized in cultures and communities. In this way, scholars are interested in illustrating ways that symbols, meanings, and/or discourses might allow for different socio-environmental views and inform different actions. In the following, I provide several examples to briefly illustrate the orientations and topics within the range of environmental communication work.

Examples of studies that look at discursive elements of consumerism include: A study of TV advertisements for Hummers and fast food that demonstrates ways corporations, to sell products and resist moves toward sustainability, activate perceived "threats" to masculinity posed by environmental and animal rights movements (Rogers, 2008); a study that looks at ways the meat industry uses discursive strategies such as "speaking" animals to construct a benevolent image

for itself in advertisements that informs meat eaters to think about animals in ways that tacitly endorse cruel and environmentally destructive industry practices (Glenn, 2004); and a study that analyzes the evangelical movement to curb SUV driving and finds the campaign offers potential for stimulating sustainable environmental action yet also reproduces framings of mastery that perpetuate exclusion and control of both nature and other humans construed as inferior (Hendry & Cramer, 2005).

Examples of studies that look at how communication helps frame human relations with other animals include: An examination of ways endangered species proponents' strategic rhetoric about the uniqueness of orangutans and their rainforest habitat, the precariousness of their continued existence, and the timeliness for immediate action in the face of threats, may work to ally foreign audiences but may not do the same for Indonesians living alongside the species (Sowards, 2006); and an investigation of how contemporary Western zoo conservation discourses reproduce particular human relationships with nature and stand in the way of zoo abilities to work as agents for systemic ecocultural change (Milstein, 2009b).

Examples of studies that look at environmental discourse in pop culture or in culture-specific everyday talk include: An analysis of how dissonance in audience reactions to the documentary *Grizzly Man* was rooted in the film's disconfirmation of human faith in the nature/culture binary via the protagonist's death in becoming prey, or "pieces of meat," and object rather than subject (Schutten, 2008); and an examination of the ways members of a particular Indigenous culture speak of "listening" to nature, a cultural form of communication that supports a highly reflective and revelatory mode of being that opens one to relations between human and nonhuman forms (Carbaugh, 1999).

Other examples illustrate the role of communication and interdisciplinary theory in planning or evaluating the effectiveness of public participation in environmental decision making: One recent study by communication scholars examines participant feedback about multi-stakeholder processes regarding contentious environmental issues and highlights the roles of collaborative learning and stakeholder access, standing, and influence (Walker, Senecah & Daniels, 2006); another draws from the sociological tradition of Anthony Giddens to investigate ways environmental public participation can benefit from structuration theory and parallel systems thinking (Norton, 2007).

These examples merely scratch the surface of environmental communication research. They begin to illustrate, however, the range of work emanating from the field. The breadth and diversity of approach and topic are perhaps all the more remarkable when one considers the field's youthfulness.

THE EMERGENCE OF ENVIRONMENTAL COMMUNICATION

Environmental communication broke the surface of the communication discipline in the mid-1980s in the United States. Scholars often cite the 1984 publication of Christine Oravec's generative rhetorical study as definitively introducing

environmental communication to the wider communication discipline. In this study, Oravec analyzed the discourse of early 1900s preservationists and conservationists, as each group represented opposite sides of a controversy over whether to build a dam in a highly regarded natural site in North America. Oravec illustrated how conservationists won — and the dam was built — by appealing to a “progressive” view of the “public” and its relationship to nature. The debate’s outcome signaled the defeat of one view of society — the preservationist view that the intact beauty of nature serves the nation as an organic whole. The outcome also signaled the rise of the conservationist view of progressivism, in which the material needs of individuals determine the uses of nature, a view that is still a dominant discursive force in the way environmental decisions are made today.

A number of environmentally dedicated and methodologically diverse scholars started publishing in the 1980s, leading to remarkable growth in the field in the following decade. American scholars formed the Conference on Communication and Environment in 1991, a biennial interdisciplinary conference that brings together scholars who hold nature and communication as central to their work. From this meeting emerged the Environmental Communication Network (www.esf.edu/ecn/), which harbors a well-utilized listserv and a web site with links to bibliographies, sample courses, journals, undergraduate and graduate programs, and a newsletter for scholars, graduate students, and practitioners.¹

Meanwhile, parallel growth was taking place internationally. The Europe-based International Association for Media and Communication Research founded its Environmental Issues, Science and Risk Communication working group in 1988, which began by focusing on media and environmental issues and now includes a broader spectrum of concerns regarding public understanding, media constructions, political discourses, and the environmental roles of pressure groups, new media, and activism. In 1990, a small group of award-winning journalists founded the Society of Environmental Journalists with the mission to advance public understanding of environmental issues by improving quality, accuracy, and visibility of environmental reporting; the international membership includes some 1,500 journalists and academics. In 2008, the European Communication Research and Education Association founded its Science and Environment Communication section to help provide core contributions to current debates about scientific and environmental problems and issues of democracy, citizenship, and power.

In 1996, US scholars created what became the division of Environmental Communication at the National Communication Association, establishing the field’s legitimacy within the larger discipline and providing scholars a national platform. The 1990s also saw the publication in North America and Europe of key books examining communication and the environment (See Cantrill & Oravec, 1996; Cronon, 1996; Darier, 1999; Davis, 1997; DeLuca, 1999; 1999; Harvey, 1996; Herndl & Brown, 1996; Killingsworth & Palmer, 1992; Muir & Veenendall, 1996; Myerson & Rydin, 1996). By the mid-1990s, the more prominent communication journals began to publish environmental communication research on a regular basis (S. Depoe, 1997).

The past decade has brought the field increased participation and legitimacy. The US-based *Environmental Communication Yearbook* began publishing in 2003 and its 2007 transformation into a quarterly published academic journal, *Environmental Communication: A Journal of Nature and Culture* (Routledge), marked the coming of age of the field. Other interdisciplinary journals dedicated to issues of communication and environment began publication, including the Australia-based *Applied Environmental Education and Communication* (Taylor and Francis) in 2001 and the Germany-based *International Journal of Sustainability Communication: Research and Practice for a Sustainable Future* in 2007.

Whereas courses in environmental communication used to be a rarity, student interest and demand, as well as more Ph.Ds. graduating with a focus in environmental communication, have led to more departments offering undergraduate and graduate classes focusing on ecological issues. Presses began to publish textbooks in 2006 (Corbett, 2006; Cox, 2009) and new textbooks continue to be introduced (e.g., Hendry, 2010). While some departments still lack professors specializing in environmental communication, many now have at least one or two with environmental foci. In addition, some departments are beginning to market themselves as providing environmental communication among their emphases. Many faculty also affiliate with interdisciplinary sustainability programs at their universities, helping students across campus expand beyond techno-scientific elements to articulate the socio-cultural and communicative elements of environmental issues.

CURRENT TRENDS AND FUTURE DIRECTIONS IN ENVIRONMENTAL COMMUNICATION

Ethical Imperatives: Advocacy and Application

Environmental communication scholarship is not only engaged in intellectual exploration of social-ecological issues, but also often in seeking to bring about positive transformation. These efforts can range from scholars articulating via theory and research how communication helps to shape and shift nature in an effort to illustrate and raise awareness in and beyond the academy, to explicitly activist research in which theory is directly applied to particular situations in an effort to help enact social or political change.

Along these lines, recent conversations have been particularly interested in scholars’ ethical roles. Environmental communication scholar Robert Cox (2007), three-time president of the Sierra Club (2007–2008, 2000–2001, & 1994–1996), has argued the subfield is a “crisis discipline” as it deals either directly or indirectly with pressing life-and-death issues such as climate crisis, endangered species, and toxic pollution. Much as the discipline of conservation biology strives to illustrate and explain biological elements of ecological collapse in an attempt to halt and reverse collapse, Cox and others claim environmental communication scholars have an ethical duty not only to try to explain but also to help change societal elements that

cause ecological collapse. One could also use as an example restoration ecology, which both studies and applies notions of beneficial human intervention to help restore healthy ecological relations. Many argue environmental communication is or should be similarly restorative, uniquely focusing on and putting forth notions of beneficial human discursive interventions.

Though some argue that articulating scholarship as advocacy might not be especially effective or appropriate (Senecah, 2007), many, driven by the urgency to address communication's perceived environmental failures and healing possibilities, not only examine and critique discourses, but also engage their scholarship directly by facilitating or taking part in public processes, sharing critiques with discourse producers, and/or offering alternative discourses more conducive to sustainability. Still others choose research sites and approaches that ensure they are not merely observers but also advocates in their case studies, reflecting upon, contributing, and practicing discursive interventions.

Using communication research to help societies consider and transform human-nature relations seems inevitable as well as highly advisable, and, indeed, communities, organizations, and movements are calling for such work. A brief personal research example may help illustrate the usefulness of communication scholarship to such public endeavors:² I recently responded to calls from The Wilderness Society, Conservation Voters of New Mexico, and local US Southwest cultural and academic organizations to raise awareness about marginalized ecocultural ways of perceiving and practicing human relations with nature. We formed a collaborative community-based participatory action research project to attempt to identify and illustrate varied Southwest Hispanic environmental meaning systems. These efforts were focused not only on interpreting different ways of communicating relations with nature, but also on what advocates described as helping these communities "rewrite themselves into the land." Our findings pointed to Hispanic participants valuing a sense of *relations-in-place*, which constitutes nature as a socially integrated space that provides the grounding for human relations, and differs from dominant Western discourses that constitute nature as an entity separate from humans (Milstein, Anguiano, Sandoval, Chen & Dickinson, in press). Some organizations we collaborated with intend to use the study's findings to confront and sway pro-industry politicians who have long justified voting records by arguing they represent their "anti-environmentalist" Hispanic constituents. In the process, the organizations hope to identify ways of advocating for these communities' ecological values and needs by creating persuasive messages that accurately reflect Hispanic constituents.

Ethical ecological advocacy extends to pedagogy. Communication faculty teach students to critically reflect on human-nature relations by exposing them to different ways of communicating, helping them select language that matches their views of what needs to be done in the world, and pointing out ways to powerfully and persuasively use such language in their own environmental communication. Cox's (2009) textbook, now in its second edition, also emphasizes opportunities for students to apply their growing knowledge of principles of environmental communication to

their campuses and communities. Using "Act Locally!" chapter exercises, students, for instance, interview local environmental groups about forms of communication the groups use to pursue missions, investigate types of communication in public environmental hearings in their community, count and characterize news stories in local media on environmental issues and examine effects on audiences, and design campus-based environmental campaigns that use appeals and messages to create demand and mobilize support to hold decision makers accountable.

ECOLOGICAL THEORY: NATURE AS CO-COMMUNICANT

In research, some scholars are exploring the notion that communication *mediates* human-nature relations and that this process is a connecting force. At first, mediation theory appears much like a material-symbolic discursive approach, understanding human discourse as informing views and actions toward nature. However, mediation theory also questions how nature's communication might mediate human-nature relations. Mediation is concerned, therefore, with the interactivity of ecological co-presence – the ways humans symbolically mediate views of and actions toward nature and the ways that all of nature "speaks" (Milburn interview with Donal Carbaugh, 2007) shaping and shifting living knowledge and interconnecting beings.

A mediation framework attempts to sensitize us to, and move us away from, modernist framings of nature as a passive, mute, detached object – framings used not only in Western culture at large but also in the majority of research in the humanities, social sciences, and physical sciences. Even studies that are explicitly critical of such conventional framings often stop at the step of illustrating and critiquing anthropocentric and hierarchical articulations of human-nature relations. Therefore, mediation, a nascent, demanding, and promising heuristic move in the field of environmental communication, is an attempt to both incorporate and move beyond critique to begin to posit an ecologically inspired ontological framework.

Scholars who are working toward these emergent directions argue that one must be cautious not to view nature as merely another text to decode and, instead, to view the notion of nature communicating as a nuanced way to articulate agency beyond the human world, to situate nature as an active subject in determining the ways we sense and perceive the world. Some have turned to existing theory, such as phenomenology, to attempt to stitch the human corporeally and perceptually back into the fabric of the Earth (Abram, 1997; Kinsella, 2007). Others have worked to articulate a materialist theory of communication in an effort to overcome nature objectification in constitutive theories (Rogers, 1998). Still others have created a framework for balancing the twin objectives of studying how the word and the world speak in order to design research that serves a diversity of peoples, eco-parts, and processes (Carbaugh, 2007). And then there are those who have empirically illustrated and critiqued how people of Western cultures discuss nature "speaking" in ways that bring people in touch with nature and inspire people to learn about and protect nature, yet can also be used to justify particular commercial endeavors

(Milstein, 2008). Still others argue the voices of nature, or the “extrahuman,” must be included not only in everyday communication but also in democratic practices (Peterson, Peterson & Peterson, 2007).

AN INTERNATIONAL, INTERCULTURAL & INTERDISCIPLINARY FUTURE

If current growth is any indicator, the field will likely continue to experience great expansion and diversification with new energy and voices due to the widely recognized necessity of effective communication skills and analysis for today’s ecological questions, problems, and policies. The vibrancy of this expansion depends upon further internationalization and more interdisciplinary and intercultural dialogue. The global topic of human-nature relations demands such moves, and such moves would further strengthen environmental communication’s theoretical rigor and applicability.

Recently, Steve Depoe (2008), editor of the journal *Environmental Communication: A Journal of Nature and Culture*, convincingly argued that scholars have spent the past 25 years building the field of inquiry’s cornerstones and the next logical step was “the creation of an international organization that brings more coherence, visibility, and impact to what scholars and practitioners are doing around the world” (p. 2). When this book went to press, scholars were actively working toward this goal by forming the International Environmental Communication Association (IECA) (<http://environmentalcomm.org/>).

The need to improve cross-talk among European and American-based scholars is apparent in the lack of Western hemispheric intellectual dialogue in most studies. For instance, ecolinguistics scholars, based largely in Europe, Australia, and Canada (see www.ecoling.net and www-gewi.uni-graz.at/ecoling), specifically focus on issues of communication and sustainability. Yet, though ecolinguistics research significantly overlaps with much US-based environmental communication research, only a few scholars from either camp explicitly interact with the other in their work.

Collaboration among global North, global South, and Indigenous scholars perhaps is even more imperative. Such discussions will generate valuable studies and ideas that speak to broader intercultural audiences and situations. Drawing on more truly global scholarship will expand options for rethinking our world and lead to better scholarly critiques. Along these lines, Piyush Mathur (2008) at the American University of Nigeria critiques what he characterizes as an inward looking US-based body of environmental communication scholarship, arguing such practices stand in the way of worldwide-informed or oriented intellectual traditions, robust critiques, or meticulous and ambitious thinking – in the end, limiting the field’s theoretical savvy.

The richer international dialogue hoped for in the formation of the IECA goes hand-in-hand with more interaction with practitioners and more interdisciplinary conversations. Global South interdisciplinary scholars and practitioners who speak directly to issues of communication and sustainability yet who communication

scholars have been slow to engage include philosopher Arturo Escobar (who has published political ecology work on discourse in Colombian Pacific rainforest communities); self-“deprofessionalized” agronomist Julio Valladolid and anthropologist Frédérique Apffel-Marglin (who have published work on ecological conversation, cosmovision, and the nurturing of biodiversity in Andean campesino communities in Peru); and physicist and activist Vandana Shiva (who has published prolifically on discourse, neoliberal globalization, ecojustice, and agricultural biodiversity in India).

In addition, scholars who represent some of the disciplines under the humanities’ scrutiny, such as the natural and physical sciences and the legal and policy-focused disciplines, would benefit from closer dialogue with communication scholars to use their insights to better examine, explain, and critique the environmental discourses in which they take part. Working together in some investigations also allows communication scholars to better understand the contexts, drives, and frameworks of the discourses we sometimes critique. Scholars would also benefit from closer dialogue with other critics, such as cultural geographers and environmental literature scholars, so as to better co-build and strengthen theory via interdisciplinary critique, providing contrast to the separately generated, maintained, and utilized theory that disciplinary lines tend to promote.

A rich and careful development of the budding theory of mediation outlined above, for example, depends on such interdisciplinary conversations. Communication scholars are trained to examine human communication and, therefore, in their explorations of ways nature “speaks” are able to focus on ways humans perceive, articulate, represent, and reproduce nature communicating. These explorations, however, would be nourished were they in closer dialogue with scientific perceptions of ways nature communicates ecologically and biologically, or with psychology’s notions of the emotional elements of mediation, or legal notions of the rights of elements of nature.

Other fields need communication scholars to help in their efforts to educate and communicate their messages – one recent example of an interdisciplinary effort that reflects such needs is an edited book titled *Creating a Climate for Change: Communicating Climate Change and Facilitating Social Change* (Moser & Dilling, 2007) that organized interdisciplinary academics and practitioners to examine the communication challenges associated with climate crisis and social change and offered practical suggestions on ways to communicate climate change more effectively to facilitate societal response.

Universities can and must support such interdisciplinary moves by backing the increasingly popular rhetoric of interdisciplinarity with structural and financial support and incentives for such endeavors. In addition, grant-giving institutions need to expand their focus beyond the natural sciences, law and policy sciences, and beyond positivist social science research. Calls and criteria for grant proposals should be written in ways that are also receptive to the value of critical and cultural approaches to looking at environmental issues. As I’ve detailed in this chapter and

as others have in other chapters in this book, the range of interdisciplinary work can be extremely useful for contemporary environmental questions and endeavors. Part of this entails more scholars taking the risk of standing in the traditional gap between theory and practice, as well as building transdisciplinary bridges (Senecah, 2007).

Scholarly collaboration is only one aspect of creating increasingly relevant and informed transdisciplinary work. In addition, we need to encourage communication students to cross disciplines during their education and encourage students from the natural and physical sciences and the policy and legal sciences to extend their learning to environmental communication if they are to critically and successfully communicate as and to the next generation of world leaders. Universities also must create campus-wide curricula and programs for interdisciplinary environmental learning; some have begun to do such work. For instance, a biology professor at the University of New Mexico recently led efforts to form a Sustainability Studies Program that organizes affiliated faculty from the humanities, social sciences, and natural and physical sciences to offer an interdisciplinary and service-oriented minor; the University of Utah offers an innovative Environmental Humanities graduate program; James Madison University supports a first-year general education learning community that combines classes in communication, writing, and critical thinking with a focus on environmental topics and service; and University of Texas El Paso's Communication Department started an MA program in 2008 in Environmental Communication and social change with classes in Indonesia, Mexico, China, and the US in Indonesian, Spanish, Chinese, and English in conjunction with an NGO called Rare (www.rareconservation.org) based in Washington, DC.

There is high interest among students for these sorts of interdisciplinary and intercultural offerings, yet some students are also restricted from such choices by university disciplinary structures. As an example, I teach a graduate course titled "EcoCulture: Humans and the Environment" that attracts students from departments of Communication, Fine Arts, American Studies, Cultural Studies, Education, Anthropology, and Architecture and Planning. In the class, the liberal arts, fine arts, social sciences, and policy makers of the future are represented, yet notably the scientists of the future, who largely dominate environmental studies, are not. This is likely due to a problematically inward looking scientific curriculum at the graduate level in most universities.

The reality is our curricula have not caught up to what our students care about or need in order to be active participants and leaders in social or political environmental change. Often, students are creating their own interdisciplinary degrees if they have the freedom to do so. As educators, we have a powerful opportunity provided by these students who are pushing our diverse fields to dialogue; in turn, we can give students the opportunity to discover their interdisciplinary niche. Environmental communication offers a highly applicable entry into both such introductory and advanced interdisciplinary environmental studies learning.

IN CLOSING

Environmental communication has matured at a rapid pace in the past 25 years. The field forges an important path into understanding human relations with and within their ecosystems. I've outlined the ways interpretations in the field rest upon the assumption that the ways we communicate powerfully affect our perceptions, definitions, and practices of "the environment."

Current trends in environmental communication reflect our times of ecological crisis and rapid changes in human-nature relations. Some argue that environmental communication scholars are public advocates for the environment through their research and related work. Others are providing early articulations of an ecologically informed theory of communication, positioning nature as co-present, active, and dynamic force in human-nature relations. Both trends point to restorative directions in the realms of research, methodology, theory, application, and publicly useful scholarship.

The future potency of the field depends upon increasingly international, intercultural, and interdisciplinary conversations that are scholar driven, university supported, and which benefit students. As ecologically oriented scholars around the globe in the humanities, social sciences, and natural and physical sciences forge more open channels of discussion, we can create more fertile, reciprocal networks of knowledge. In the process, we can create increasingly helpful work that illustrates, questions, and remakes the place of the human within the ecosphere.

NOTES

- ¹ At press, the newly formed International Environmental Communication Association (<http://environmentalcomm.org/>) planned to take on many of these services.
- ² While communication work is relevant and important in today's advocacy for the environment, some organizations overlook communication perhaps because of a lack of familiarity with the discipline. This perhaps points to the need to publicize communication scholarship, and particularly environmental communication scholarship, more widely beyond academics and to work more closely with practitioners. For instance, the United Kingdom branch of the World Wildlife Federation recently began work to try to identify and circumvent discursive barriers public figures encounter when they try to broaden environmental public debates beyond narrow pre-occupations with short-term economic arguments. The organization is also working to identify stories people tell themselves about who they are, or the 'myths we live by,' to learn whether environmental problems can be tackled from within constraints imposed by today's dominant myths, and is looking at possibilities of creating new, more ecologically beneficial myths (www.wwf.org.uk/core/ge_0000004945.asp, accessed November 28, 2008). While WWF-UK is working with psychologists and marketing executives in these endeavors, they appear to have overlooked the seemingly obvious choice of communication scholars.

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Greening the Academy

Ecopedagogy Through the Liberal Arts

Edited by
Samuel Day Fassbinder
Anthony J. Nocella II
and Richard Kahn



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WHAT PEOPLE ARE SAYING ABOUT *GREENING THE ACADEMY*

The necessity of linking together single issue social justice pursuits cannot be overstated, nor can the crucial role higher education must play in helping to solve international social justice dilemmas. *Greening the Academy* provides a much-needed analysis focusing on the importance of these issues as a means to progress global peace and justice issues. A must read for anyone seriously interested in making a difference in the world.

- Craig Rosebraugh,
Author of *Burning Rage of a Dying Planet*

Many of the most important forces for social change in human history have taken root in our universities, and today the academy is a crucial site where scholars are working to integrate ecological sustainability and social justice. *Greening the Academy* is a clarion call for deep green approaches to thinking, teaching, research, and action that can make a dramatic and positive difference for the future of all species.

- Dr. David Naguib Pellow,
Author of *Garbage Wars: The Struggle for Environmental Justice in Chicago*

Critical, crucial, and challenging, this book initiates a dialogue essential to the survival of our planet and all the species on it, including our own. Ignored for far too long by leaders of the major social institutions around the world, this book poses the question of whether the academy will belatedly tackle the urgent policies and actions necessary to ameliorate the ecological destruction wrought by predatory capitalism. University Centers for Teaching and Learning should use this book to generate meaningful discussions of curriculum transformation wherever possible.

- Dr. Julie Andrzejewski,
Co-Director, Social Responsibility Masters Program,
St. Cloud State University

Greening the Academy breaks through barriers that continue to enervate higher education's contribution to environmental education and ecological justice. By connecting radical "cognitive praxis" and authentic Indigenous perspectives to a variety of relevant topics, it offers educators motivation and maps for helping us all regain our lost balance before it is too late.

- Four Arrows,
Editor of *Unlearning the Language of Conquest:
Scholars Expose Anti-Indianism in America*

This is an important and urgent book that represents a landmark for higher education. It is a book that must be heeded, and, more importantly acted upon.

- Dr. Peter McLaren,

Author of *Che Guevara, Paulo Freire, and the Pedagogy of Revolution*

Higher education plays an increasingly important role globally in determining responses to human-induced environmental change. *Greening the Academy* shows us that it is crucial that educational policy, curriculum, institutional practice, and scholarly research go beyond greenwashing business as usual and instead engage critically with environmental issues. The book highlights how environmental concerns are not only the purview of the sciences but are centrally a result of cultural and economic practices and priorities, and thus must be engaged interdisciplinarily and in relation to community and place. To change the path we have set for the planet, it will take collaboration and persistence; this book offers hope in moving forward.

- Dr. Marcia McKenzie,

Editor of *Fields of Green: Restorying Culture, Environment, and Education*

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FOREWORD

BILL MCKIBBEN

I've had the privilege, for more than a decade now, of being associated with Middlebury College's Environmental Studies Department. It's the oldest such beast in the country, dating back to the early 1960s, and it produces an astonishing number of graduates who go on to leadership roles in advocacy groups, state and federal agencies, and green business. The entire original leadership of 350.org, which in 18 months grew to be the largest grassroots climate campaign in the planet's history, was made up of kids who'd graduated Middlebury six months before they began.

My theory for why Middlebury was punching above its weight involved more than simply the superb instruction my colleagues were offering. It was also, I think, the design of the program—in particular, the fact that the humanities have always been a central part of the program, as important as science and policy. In most places, environmental studies have been focused on the natural sciences, or captured over time by them. And this makes a certain kind of sense: they're the easiest part of the equation to systematize, and the hardest to screw up. There's little danger of fuzzy thinking; for deans worried that programs will be partisan or ideological, there's comfort in biology and chemistry being at the core.

But the great insight of ecology—the greatest scientific insight of the 20th century, far more important in the long run than cracking the atom—was that everything was hooked together. And that's as true, in a way, in our political and economic ecosystem as it is in any vernal pool or alpine meadow. When we deal with a problem like global warming, the physics and chemistry are, at this point, the least of the issue. We understand them well enough to know *how* to act; that we *don't* act has something to do with other parts of our brain and heart. We need to understand the economic forces that constrain us, and also the cultural patterns, psychological intuitions, and visceral fears that keep us from doing what we must. And so—among other things—we need voices from people like Wendell Berry, Terry Tempest Williams, Leslie Marmon Silko, Ed Abbey, Henry Thoreau, Gary Snyder, Richard Cizik.

More, we need the kind of interdisciplinary insight that only a college or university can offer. The ag school needs to be in touch with the theology school, and the psych department needs to be talking to the chemists. If there was ever an argument for escaping the deep silos of academe, the environmental crisis is it. It's not a "subject" as much as a lens through which to view the world. These papers begin to postulate how different disciplines—right down to criminology—might