Stories about the environment surround us daily—on CNN or the Daily Show or the award-winning blog Dot Earth (http://dotearth.blogs.nytimes.com). We find in-depth environmental news in the Los Angeles Times and New York Times as well as at online sites or RSS feeds from the Environment News Network (www.enn.com) or Real Climate (www.realclimate.org). Our ideas about nature are influenced when we watch popular movies such as Avatar, and the list goes on.

This chapter describes environmental communication as a multidisciplinary field of study and a practice or mode of influence in daily life in the media, in business and government affairs, and in civic life. Environmental communication describes the many ways and the forums in which citizens, corporations, public officials, journalists, and environmental groups raise concerns and attempt to influence the important decisions that affect our planet. They and others realize that our understanding of nature and our actions toward the environment depend not only on science but on public debate, media, the Internet, and even ordinary conversations.

Chapter Preview

- The first section of this chapter describes the field of environmental communication, defines the term, and identifies seven principal areas of study and practice in this field.
- The second section introduces three themes that constitute the framework for this book:
  - (1) human communication is a form of symbolic action, that is, our language and other ways of conveying purpose and meaning affect our consciousness itself, shaping our perceptions and motivating actions;
After reading this chapter, you should have an understanding of environmental communication as an area of study and an important practice in public life. You should also be able to recognize the range of voices and practices through which environmental groups, ordinary citizens, businesses, and others discuss important environmental problems—from management of public lands to global climate change. As a result, I hope that you’ll not only become a more critical consumer of such communication but also discover opportunities to add your own voice to the vibrant conversations about the environment that are already in progress.

The Field of Environmental Communication

Along with the growth of environmental studies, educational and professional opportunities that stress the role of human communication in environmental affairs also have emerged. On many college campuses, environmental communication courses study a range of related topics: environmental news media, methods of public participation in environmental decisions, environmental rhetoric, risk communication, environmental conflict resolution, advocacy campaigns, “green” marketing, and images of nature in popular culture. And, a growing number of scholars in communication, journalism, literature, science communication, and the social sciences are pioneering research in the role and influence of environmental communication in the public sphere.

Finally, on a practical level, the study of environmental communication helps to prepare you to enter many professions in which communication is central to an entity’s involvement in environmental affairs. Indeed, some predict that, like the Internet, “the green economy will create a massive new set of opportunities” for professionals in new technologies as well as businesses (Martini & Reed, 2010, p. 74). For example, businesses, government agencies, law firms, public relations (PR) firms, and nonprofit environmental groups employ consultants or staff in environmental communication. As one firm noted, “Environmental communications professionals are working in every sector of the economy. . . . The field is becoming more and more important as the stakes have become greater . . . and the tools for communicating become more diverse” (EnviroEducation.com, 2004, para. 2).
Growth of the Field

Communication scholar Susan Senecah (2007) has observed, “Fields of inquiry do not simply happen by wishing them into existence. The field of [environmental communication] is no different” (p. 22). In the United States, the field grew out of the work of a diverse group of communication scholars, many of whom used the tools of rhetorical criticism to study conflicts over wilderness, forests, farmlands, and endangered species as well as the rhetoric of environmental groups (Cox, 1982; Lange, 1990, 1993; Moore, 1993; Oravec, 1981, 1984; Peterson, 1986; Short, 1991). Christine Oravec’s 1981 study of the “sublime” in John Muir’s appeals to preserve Yosemite Valley in the 19th century is considered by many to be the start of scholarship in what would become the field of environmental communication.

At the same time, the subjects that such scholars studied widened to include the roles of science, media, and industry in responding to threats to human health and environmental quality. Early studies investigated issues such as industry’s use of PR and mass-circulation magazines to construct “ecological” images (Brown & Crable, 1973; Greenberg, Sandman, Sachsman, & Salamone, 1989; Grunig, 1989); the nuclear power industry’s response to dramatic accidents at Three Mile Island and Chernobyl (Farrell & Goodnight, 1981; Luke, 1987); and risk communication in conveying the dangers of recombinant DNA experiments (Waddell, 1990). Scholars in the fields of journalism and mass communication began a systematic study of the influence of media depictions of the environment on public attitudes (Anderson, 1997; Shanahan & McComas, 1999, pp. 26–27). In fact, the study of environmental media has grown so rapidly that many now consider it a distinct subfield, and journalists practicing in this area formed the Society of Environmental Journalists (SEJ, sej.org).

By the 1990s, a biennial Conference on Communication and Environment began to attract scholars from a range of academic disciplines in the United States and other nations. Also, a new Environmental Communication Network and website were launched to provide online resources for scholars, teachers, students, and practitioners. And, new journals in communication and environmental topics have begun to appear, including Environmental Communication: A Journal of Nature and Culture.

In 2011, scholars and practitioners established the International Environmental Communication Association (http://environmentalcomm.org) to coordinate research and activities worldwide. Interest has grown not only in the United States, but Europe, particularly, has seen “ample signs that environmental communication has grown substantially as a field” (Carvalho, 2009, para. 1). Professional associations linking communication or media with environmental topics now exist in China, Southeast Asia, India, Russia, and Latin America. The Environmental Communication Network of Latin America and the Caribbean, for example, offers support for environmental reporters in fifteen countries in the regions. (For a list of some of these associations and journals, see “FYI: Professional Associations and Journals in Environmental Communication.”)
PART I  CONCEPTUAL AND HISTORICAL CONTEXTS

The sheer range of subjects makes defining the field of environmental communication somewhat difficult. For example, environmental communication scholar Steve Depoe (1997) earlier defined the field as the study of the “relationships between our talk and our experiences of our natural surroundings” (p. 368). Yet, Depoe cautioned that the field is more than simply “talk” about the environment. Let’s look at some of the areas that such scholars study.

Areas of Study

Although the study of environmental communication covers a wide range of topics, most research and the practice of communication fall into one of seven areas. I explore many of these areas more in later chapters. For now, I’ll briefly identify the kinds of concerns that environmental communication scholars currently are studying.

1. Environmental rhetoric and the social–symbolic “construction” of nature. Studies of the rhetoric of environmental organizations and campaigns emerged as an early focus of the new field. Along with the related interest in how our language helps to construct or represent nature to us, this is one of the broadest areas of study.

FYI  Professional Associations and Journals in Environmental Communication

**Journals:**
- SEJ Journal: www.sej.org/publications/sejournal/overview
- Science Communication: http://scx.sagepub.com
- Journal of Environmental Education: http://www.tandf.co.uk/journals/titles/00958964.asp

**Associations and Institutes:**
- International Environmental Communication Association: http://environmentalcomm.org
- North American Association for Environmental Education: www.naaee.org
- Public Relations Society of America, Environment Section: www.prsa.org/Network/Communities/Environmental
- Society of Environmental Journalists (SEJ): www.sej.org
- International Institute for Environmental Communication: www.envcomm.org
- Science and Environment Communication Section of the European Communication Research and Education Association: www.ecrea.eu/divisions/section/id/16
- Environmental Communication Network of Latin America and the Caribbean: http://www.redcalc.org
- International Federation of Environmental Journalists: www.ifej.org
Studies of the persuasion of groups and individuals have given us rich insights into a wide range of practices aimed at influencing the public’s views about the environment. For example, Marafiote (2008) has described the ways in which environmental groups reshaped the idea of wilderness to win passage of the 1964 Wilderness Act; and Brian Cozen (2010) has examined the images of food in advertising by corporations such as Shell and Chevron, concluding that food images help to “naturalize” the energy industry’s “essential role in supplying substance to bodies” (p. 355).

Relatedly, studies of language and other symbolic forms have allowed scholars to probe the constitutive power of communication to shape our ideas and the meanings of nature and the environment that it invites. For example, scholars have studied Earth First! activists’ questioning of the ideology of progress (Cooper, 1996) and, more recently, challenged the assumptions behind popular documentary films. DeLuca (2010), for example, questions Ken Burns’ film *The National Parks: America’s Best Idea* for its treatment of wilderness “as an historic relic and vacation spot . . . [sapping] it of its vital relevance and political power” (p. 484). (I’ll explore this area more in Chapters 2–3.)

2. **Public participation in environmental decision making.** The National Research Council has found that, “when done well, public participation improves the quality and legitimacy of a decision and . . . can lead to better results in terms of environmental quality” (Dietz & Stern, 2008). Still, in many cases, barriers prevent the meaningful involvement of citizens in decisions affecting their communities or the natural environment. As a result, a number of scholars have scrutinized government agencies in the United States and other nations to identify both the opportunities for—and barriers to—the participation of ordinary citizens, as well as environmentalists and scientists, in an agency’s decision making.

Environmental communication scholars’ work in this area has ranged from the study of citizens’ comments on national forest management plans (Walker, 2004), public access to information about pollution in local communities (Beierle & Cayford, 2002), obstacles to meaningful public dialogue with the Department of Energy over the cleanup of nuclear weapons waste (Hamilton, 2008), and ways that public involvement in a hydropower (dam) project in India was compromised by communication practices that denied citizens access to information and privileged technical discourse (Martin, 2007). (We take up the study of public participation in Chapter 4.)

3. **Environmental collaboration and conflict resolution.** Dissatisfaction with some of the adversarial forms of public participation has led practitioners and scholars to explore alternative models of resolving environmental conflicts. They draw inspiration from the successes of local communities that have discovered ways to bring disputing parties together. For instance, groups that had been in conflict for years over logging in Canada’s coastal Great Bear Rainforest reached agreement recently to protect 5 million forest acres (Armstrong, 2009).

At the center of these modes of conflict resolution is the ideal of **collaboration**, a mode of communication that invites stakeholders to engage in problem-solving discussion rather than advocacy and debate. Collaboration is characterized as “constructive,
open, civil communication, generally as dialogue; a focus on the future; an emphasis on learning; and some degree of power sharing and levelling of the playing field” (Walker, 2004, p. 123). (I describe collaboration further in Chapter 5.)

4. Media and environmental journalism. In many ways, the study of environmental media has become its own subfield. The diverse research in this area focuses on ways in which the news, advertising, and commercial programs portray nature and environmental problems as well as the effects of different media on public attitudes. Subjects include the agenda-setting role of news media, that is, its ability to influence which issues audiences think about; journalist values of objectivity and balance in reporting; and media framing or the way that the packaging of news influences readers’ or viewers’ sense-making and evokes certain perceptions and values.

Figure 1.1 How do news, advertising, and other media affect our perceptions and attitudes toward the natural world or our understanding of environmental issues?
Studies in environmental media are also beginning to explore online news and the role of social media in engaging environmental concerns. These range widely, from an analysis of Facebook profiles created by environmental advocacy groups (Bortree & Seltzer, 2009) to studies of postnetwork television such as TreeHugger.com, a “collection of online videos that explores how to create, consume, and live in environmentally friendly ways” (Slawter, 2008). (I will describe both environmental journalism and social media in more detail in Chapters 6 and 7.)

5. **Representations of nature in corporate advertising and popular culture.** The use of nature images in film, television, photography, music, and commercial advertising is hardly new or surprising. What is new is the growing number of studies of how such popular culture images influence our attitudes or perceptions of nature and the environment. Scholars explore such questions by examining a range of cultural products—film (Retzinger, 2002, 2008); green advertising (Henry, 2010); Hallmark greeting cards, SUV ads, and supermarket tabloids (Meister & Japp, 2002); and wildlife films and nature documentaries (Hansen, 2010). For example, Brereton (2005) has traced the evolution of images of nature in science fiction, Westerns, nature, and road movies from the 1950s to the present, including films like *Emerald Forest*, *Jurassic Park*, *Easy Rider*, *Thelma and Louise*, *Invasion of the Body Snatchers*, and *Blade Runner*.

Scholars in cultural studies also are mapping some of the ways in which images in popular media sustain attitudes of dominance and exploitation of the natural world. For example, a special issue of *Environmental Communication: A Journal of Nature and Culture* examined the idea of food in modern society, where food is “the thin end of environmental awareness—a site where fundamental questions can . . . be asked, questions that . . . lead to challenging re-conceptions of our environments, our societies, and ourselves” (Opel, Johnston, & Wilk, 2010, p. 251). (I look at the role of green advertising in Chapter 10.)

6. **Advocacy campaigns and message construction.** A growing area of study is the use of public education and advocacy campaigns by environmental groups, corporations, and by climate scientists concerned about global warming. Sometimes called social marketing, these campaigns attempt to educate, change attitudes, and mobilize support for a specific course of action. They range from mobilizing the public to protect a wilderness area, convincing the U.S. Congress to raise the fuel efficiency of cars and SUVs, and influencing public attitudes about coal (e.g., “clean coal” TV ads) to corporate accountability campaigns to persuade businesses to abide by strict environmental standards, for example, convincing building supply stores to buy lumber that comes only from sustainable forests.

Scholars have used a range of approaches in the study of advocacy campaigns. For example, a growing number of communication scholars, scientists, and others are now studying the challenge of communicating the risks from climate change to the public as well as barriers to the public’s sense of urgency (Moser & Dilling, 2007). A pivot concern in such studies is the effectiveness of different messages or basic framings in conveying the urgency of climate change (Brulle, 2010; Cox, 2010; Lakoff, 2010). (I look more closely at campaigns and messaging in Chapters 8, 9, and 10.)
7. *Science and risk communication.* Do signs announcing a beach is closed and warning that the water is unsafe adequately inform the public of the risk of water pollution? Did federal regulators ignore warnings about the risks from deepwater oil drilling in the Gulf of Mexico? How can science educators communicate the risks of climate change more clearly to a public worried about the economy or jobs? These questions illustrate a growing interest in public health and science communication—the study of environmental risks and communication about them to affected audiences.

Risk communication encompasses a range of practices—public education campaigns about the risks from eating fish with high levels of mercury; risk communication plans for use after a potential biological attack that unleashes the plague (Casman & Fischhoff, 2008); or guides for scientists, journalists, and educators for communicating about climate change created by the Center for Research on Environmental Decisions at Columbia University (2009) are just a few examples.

Since the late 1980s, scholars also have begun to look at the impact of cultural understandings of risk and the public’s judgment of the acceptability of a risk (Plough & Krimsky, 1987). For example, risk communication scholar Jennifer Hamilton (2003) found that sensitivity to cultural—as opposed to technical—understandings of risk influenced whether the residents living near the polluted Fernald nuclear weapons facility in Ohio accepted or rejected certain methods of cleanup at the site. (I will describe more of the practices of science and risk communication in Chapters 11 and 12.)

**Defining Environmental Communication**

With such a diverse range of topics, the field can appear at first glance to be confusing. If we define *environmental communication* as simply *talk* or the transmission of information about the wide universe of environmental topics—whether it’s global warming or grizzly bear habitat—our definitions will be as varied as the topics for discussion.

A clearer definition takes into account the distinctive roles of language, art, photographs, street protests, and even scientific reports as different forms of *symbolic action.* This term comes from Kenneth Burke (1966), a rhetorical theorist. In his book *Language as Symbolic Action,* Burke stated that even the most unemotional language is necessarily persuasive. This is so because our language and other symbolic acts do something as well as say something.

The view of communication as a form of symbolic action might be clearer if we contrast it with an earlier view, the *Shannon–Weaver model of communication.* Shortly after World War II, Claude Shannon and Warren Weaver (1949) proposed a model that defined human communication as simply the transmission of information from a source to a receiver. There was little effort in this model to account for meaning or for the ways in which communication acts on, or shapes, our awareness. Unlike the Shannon–Weaver model, symbolic action assumes that language and
symbols do more than transmit information: They actively shape our understanding, create meaning, and orient us to a wider world. Burke (1966) went so far as to claim that “much that we take as observations about 'reality' may be but the spinning out of possibilities implicit in our particular choice of terms” (p. 46).

If we focus on symbolic action, then we can offer a richer definition. In this book, I use the phrase environmental communication to mean the pragmatic and constitutive vehicle for our understanding of the environment as well as our relationships to the natural world; it is the symbolic medium that we use in constructing environmental problems and in negotiating society’s different responses to them. Defined this way, environmental communication serves two different functions:

1. Environmental communication is pragmatic. It educates, alerts, persuades, and helps us to solve environmental problems. It is this instrumental sense of communication that probably occurs to us initially. It is the vehicle or means which we use in problem solving and is often part of public education campaigns. For example, a pragmatic function of communication occurs when an environmental group educates its supporters and rallies support for protecting a wilderness area or when the electric utility industry attempts to change public perceptions of coal by buying TV ads promoting “clean coal” as an energy source.

2. Environmental communication is constitutive. Embedded within the pragmatic role of language and other forms of symbolic action is a subtler level. By constitutive, I mean that our communication about nature also helps us construct or compose representations of nature and environmental problems as subjects for our understanding. Such communication invites a particular perspective, evokes certain values (and not others), and thus creates conscious referents for our attention and understanding. For example, different images or constructions of nature may invite us to perceive forests and rivers as natural resources for use or exploitation, or as vital life support systems (something to protect). While a campaign to protect a wilderness area uses pragmatic communication for planning a press conference, at the same time, it may invoke language that taps into cultural constructions of a pristine or unspoiled nature.

Communication as constitutive also assists us in defining certain subjects as problems. For example, when climate scientists call our attention to tipping points, they are naming thresholds beyond which warming “could trigger a runaway thaw of Greenland’s ice sheet and other abrupt shifts such as a dieback of the Amazon rainforest” (Doyle, 2008). Such communication orients our consciousness of the possibility of an abrupt shift in climate and its effects; it therefore constitutes, or raises, this possibility as a subject for our understanding. Finally, in seeing something as a problem, such communication also associates particular values with these problems—health and well-being, caring, economic prosperity, and so forth. (In Chapter 3, we look closely at this constitutive role of communication in shaping perceptions of a pristine American West in 19th-century art, photographs, and literature.)
Environmental communication as a pragmatic and constitutive vehicle serves as the framework for the chapters in this book and builds on the three core principles:

1. Human communication is a form of symbolic action.
2. Our beliefs, attitudes, and behaviors relating to nature and environmental problems are mediated or influenced by communication.
3. The public sphere emerges as a discursive space in which diverse voices engage the attention of others about environmental concerns.

These principles obviously overlap (see Figure 1.2). As I’ve noted, our communication (as symbolic action) actively shapes our perceptions when we see the natural world through myriad symbols, words, images, or narratives. And, when we communicate publicly with others, we share these understandings and invite reactions to our views.

### Nature, Communication, and the Public Sphere

Let’s explore the three principles that organize the chapters in this book. I’ll introduce and illustrate these briefly here and then draw on them in each of the remaining chapters.

### Human Communication as Symbolic Action

Earlier, I defined environmental communication as a form of symbolic action. Our language and other symbolic acts do something. They actively shape our understanding,
create meaning, and orient us to a wider world. Films, online sites and social media, photographs, popular magazines, and other forms of human symbolic behavior act upon us. They invite us to view the world this way rather than that way to affirm these values and not those. Our stories and words warn us, but they also invite us to celebrate. And, language that invites us to celebrate also leads to real-world outcomes.

Consider the American gray wolf. In late 2008, a federal judge restored protection to wolves in the Northern Rocky Mountains under the nation’s Endangered Species Act (ESA) (Brown, 2008). But, it was not always this way. Wolves had become almost extinct until the federal government initiated a restoration plan in the mid-1990s.

In 1995, former Secretary of Interior Bruce Babbitt delivered a speech celebrating the return of wolves to Yellowstone National Park. Earlier that year, he had carried the first American gray wolf into the transition area in the national park where she would mate with other wolves also being returned. After setting her down, Babbitt recalled, “I looked . . . into the green eyes of this magnificent creature, within this spectacular landscape, and was profoundly moved by the elevating nature of America’s conservation laws: laws with the power to make creation whole” (para. 3).

Babbitt’s purpose in speaking that day was to support the beleaguered ESA, under attack in the Congress at the time. In recalling the biblical story of the flood, Babbitt evoked a powerful narrative for revaluing wolves and other endangered species. In retelling this ancient story to his listeners at Yellowstone, he invited them to embrace a similar ethic in the present day:

And when the waters receded, and the dove flew off to dry land, God set all the creatures free, commanding them to multiply upon the earth.

Then, in the words of the covenant with Noah, “when the rainbow appears in the clouds, I will see it and remember the everlasting covenant between me and all living things on earth.”
Thus we are instructed that this everlasting covenant was made to protect the whole of creation. . . . We are living between the flood and the rainbow: between the threats to creation on the one side and God’s covenant to protect life on the other. (Babbitt, 1995, paras. 34–36, 56)

Because communication provides us with a means of sense making about the world, it orients us toward events, people, wildlife, and choices that we encounter. And, because different individuals (and generations) value nature in different ways, we find our voices to be part of a conversation about which meaning of nature is the best or the most useful. Secretary Babbitt invoked an ancient story of survival to invite the American public to appreciate anew the ESA. So, too, our own communication mediates or helps us to make sense of the different narratives, ideologies, and appeals that people use to define what they believe is right, feasible, ethical, or just common sense.

Human communication therefore is symbolic action because we draw upon language and other symbols to construct a framework for understanding and valuing and to bring the wider world to others’ attention. I explore this aspect of communication more closely in Chapters 2 and 3.

Figure 1.3 Secretary of Interior Bruce Babbitt, releasing the first American gray wolf into Yellowstone National Park in 1995.
Mediating “Nature”

It may seem odd to place “nature” in quotation marks. The natural world definitely exists: Forests are logged or left standing; streams may be polluted or clean; and large glaciers in Antarctica are calving into the Southern ocean. So, what’s going on? As one of my students asked me, “What does communication have to do with nature or the study of environmental problems?” My answer to her question takes us into the heart of this book.

Simply put, whatever else nature and the environment may be, they are entangled with our very human ways of interacting with, and knowing, the natural world. At a very basic level, our beliefs, attitudes, and behaviors toward nature are mediated by human modes of representation—by our language, television, film, photos, art, and contemplation (Cox, 2007, p. 12). *Mediating* is another way of saying that the acts of pointing to and naming something in the world are our means for recognizing and understanding it. As Tema Milstein (2011) explains, “Pointing and naming generate certain kinds of ecocultural knowledge that constitute aspects of nature as considered, unique, sorted, or marked” (p. 4).

When we name the natural world, we also orient ourselves in this world. We become located or interested in it; we have a view onto this world. As Christine Oravec (2004) observed in her essay on Utah’s Cedar Breaks National Monument, this act of naming is not only a mode by which we socially construct and know the natural world, but it orients us and thus “influences our interaction with it” (p. 3).

For instance, is *wilderness* a place of primeval beauty, or is it a territory that is dark, dangerous, and alien to humans? Early settlers in New England viewed North American forests as forbidding and dangerous. The Puritan writer Michael Wigglesworth named or described the region as

> A waste and howling wilderness,
> Where none inhabited
> But hellish fiends, and brutish men
> That Devils worshiped. (quoted in Nash, 2001, p. 36)

As a result of these different orientations to the natural world, writers, scientists, business leaders, citizens, poets, and conservationists have fought for centuries over whether forests should be logged, rivers dammed, air quality regulated, and endangered species protected.

Consider the weather (and climate): The last two winters in the United States and Europe have been harsh, with record cold temperatures and blizzards. As I write, in winter 2011, another snowstorm is pounding the Midwest in the United States. As you might imagine, the search for the cause of such cold weather invites caustic remarks, such as “Where’s that global warming?” as well as competing narratives about climate change from skeptics and climate scientists. Conservative FOX TV
commentator Glenn Beck (2011), for example, quipped, “Um . . . if the globe is warming why is my car buried under all this snow?” (para. 1). On the other hand, National Oceanic and Atmospheric Administration (NOAA) scientists offered this interpretation: The winds that normally circle the North Pole (the Polar Vortex) act as a fence keeping cold air in; however, when “this circle of winds . . . breaks down, cold air spills south,” while warmer air rushes in (Schoop, 2011). (I suspect many of you also encounter very different views about weather and its relation to global warming!)

For those enduring frigid winters, Glenn Beck’s sarcasm makes “common sense.” For some, it is counterintuitive to believe the Earth is warming when they can see and experience cold weather personally. Yet, climate scientists insist such localized weather does not contradict research that, globally, the Earth is continuing to warm. While parts of the United States and Europe were shivering, for example, northeastern Canada and Greenland were experiencing 15°F to 20°F warmer temperatures than normal (Gillis, 2011). And, National Aeronautics and Space Administration (NASA) scientists concluded that 2010 tied 2005 as the warmest year, and 2001–2010 as the warmest decade since measurements began in 1880 (National Aeronautics and Space Administration, 2011).

In their own way, commentators like Beck and climate scientists are offering their construction or view of complex, atmospheric systems, that is, the weather and what it means. And, depending on which view we adopt in our own sense-making about climate change, we will have differing beliefs and will be likely to act in different ways. This is what I meant earlier in saying that our beliefs, attitudes, and behaviors relating to nature are mediated by communication.

My point is that, although nature invites different responses from us, it is, in itself, politically silent. Ultimately, it is we—through our symbolic actions—who invest its seasons and species with meaning and value. Similarly, some problems become problems only when someone identifies a threat to important values we hold. Decisions to preserve habitat for endangered species or impose regulations on greenhouse gases seldom result from scientific study alone. Instead, our decisions to take action arise from a crucible of debate and (often) controversy in the wider public sphere.

**Public Sphere as Discursive Space**

A third theme central to this book is the idea of the public sphere or, more accurately, public spheres. Earlier, I defined the public sphere as the realm of influence that is created when individuals engage others in communication—through conversation, argument, debate, or questioning—about subjects of shared concern or topics that affect a wider community. The public comes into being in our everyday conversations as well as in more formal interactions when we talk about the environment. And, the public sphere is not just words: Visual and nonverbal symbolic actions, such as marches, banners, YouTube videos, photographs, and Earth First! tree sits, also have prompted debate and questioning of environmental policy as readily as editorials, speeches, and TV newscasts.
The German social theorist Jürgen Habermas (1974) offered a similar definition when he observed that “a portion of the public sphere comes into being in every conversation in which private individuals assemble to form a public body” (p. 49). As we engage others in conversation, questioning, or debate, we translate our private concerns into public matters and thus create spheres of influence that affect how we and others view the environment and our relation to it. Such translations of private concerns into public matters occur in a range of forums and practices that give rise to something akin to an environmental public sphere—from a talk at a local ecology club to a scientist’s testimony before a congressional committee. In public hearings, newspaper editorials, online alerts, speeches at rallies, street festivals, and countless other occasions in which we engage others in conversation, debate, or other forms of symbolic actions, the public sphere emerges as a potential sphere of influence.

But, private concerns are not always translated into public action, and technical information about the environment may remain in scientific journals, proprietary files of corporations, or other private sources. Therefore, it is important to note that two other spheres of influence exist parallel to the public sphere. Communication scholar Thomas Goodnight (1982) named these areas of influence the personal and technical spheres. For example, two strangers arguing at an airport bar is a relatively private affair, whereas the technical findings of biology that influenced Rachael Carson’s (1962) discussion of dichlorodiphenyltrichloroethane (DDT) in *Silent Spring* were originally limited to technical journals. Yet Carson’s book presented this scientific information in a context that engaged the attention—and debate—of millions of readers and scores of public officials. In doing this, *Silent Spring* gave rise to a sphere of influence as she translated technical matters into subjects of public interest.

Goodnight cautioned that, in contemporary society, information needed for judgments about the environment and other technical subjects may cause both private and public conversations to defer to scientific or technical authority. The danger in such situations obviously is that the public sphere can decline. It can lose its relevance as a sphere of influence that exists in a democracy to mediate among differing viewpoints and interests. Goodnight (1982) himself feared that “the public sphere is being steadily eroded by the elevation of the personal and technical groundings of argument” (p. 223).

The idea of the public sphere itself is often misunderstood. Three common misconceptions occur about it. These are the beliefs that the public sphere is (a) only an official site or forum for government decision making, (b) a monolithic or ideal collection of all citizens, and (c) a form of “rational” or technical communication. Each of these ideas is a misunderstanding of the public sphere.

First, the public sphere is not only, or even primarily, an official space. Although there are forums and state-sponsored spaces such as public hearings that invite citizens to communicate about the environment, these official sites do not exhaust the public sphere. In fact, discussion and debate about environmental concerns more often occur outside of government meeting rooms and courts. The early fifth-century (BCE) Greeks called these meeting spaces of everyday life *agoras*, the public squares or marketplaces where citizens gathered to exchange ideas about the life of their community. At the
dawn of one of the first experiments in democracy, Greek citizens believed they needed certain skills to voice their concerns publicly and influence the judgment of others, skills they called the art of rhetoric. (I return to this background in Chapter 3.)

Second, the public sphere is neither monolithic nor a uniform assemblage of all citizens in the abstract. As the realm of influence that is created when individuals engage others discursively, a public sphere assumes concrete and local forms: They include calls to talk radio programs, blogs, letters to the editor of newspapers, or local meetings where citizens question public officials, for example, about risks to their health from contaminated well water. As Habermas (1974) might remind us, the public sphere comes into existence whenever individuals share, question, argue, mourn, or celebrate with others about their shared concerns.

Third, far from elite conversation or “rational” forms of communication, the public sphere is most often the arena in which popular, passionate, and democratic communication occurs, as well as reasoned or technical discourse. Such a view of the public sphere acknowledges the diverse voices and styles that characterize a robust, participatory democracy. In fact, in this book, I introduce the voices of ordinary citizens and the special challenges they face in gaining a hearing about matters of environmental and personal survival in their communities.

Diverse Voices in a “Green” Public Sphere

The landscape of environmental politics and public affairs can be as diverse, controversial, colorful, and complex as an Amazonian rainforest or the Galapagos Islands’ ecology. Whether at press conferences, in local community centers, on blogs, or in corporate-sponsored TV ads, individuals and groups speaking about the environment appear today in diverse sites and public spaces.

In this final section, I’ll describe some of the major sources, or voices, communicating about environmental issues in the public sphere. I use Myerson and Rydin’s (1991) concept of voices to stress the different concerns (for example, the “anxious citizen voice” or “expert voice”) that place certain “voices in relation to other voices” (pp. 5, 6). These include the voices of:

1. Citizens and community groups
2. Environmental groups
3. Scientists and scientific discourse
4. Corporations and lobbyists
5. Anti-environmentalist and climate change critics
6. News media and environmental journalists
7. Public officials
These seven voices also include multiple, specific roles or professional tasks—writers, press officers, group spokespersons, information technology specialists, communication directors, marketing and campaign consultants, and other communication roles.

**Citizens and Community Groups**

Local residents who complain to public officials about pollution or other environmental problems and who organize their neighbors to take action are the most common and effective sources of environmental change. Some are motivated by urban sprawl or development projects that destroy their homes as well as green spaces in their cities. Others, who may live near an oil refinery or chemical plant, may be motivated by noxious fumes to organize resistance to the industry’s lax air-quality permit.

In 1978, Lois Gibbs and her neighbors in the working-class community of Love Canal in upstate New York became concerned when, after they noticed odors and oily substances surfacing in the school’s playground, their children developed headaches and became sick. Gibbs also had read a newspaper report that Hooker Chemical Company, a subsidiary of Occidental Petroleum, had buried dangerous chemicals on land it later sold to the local school board (Center for Health, Environment, and Justice, 2003).

Despite an initial denial of the problem by state officials, Gibbs and her neighbors sought media coverage, carried symbolic coffins to the state capital, marched on Mother’s Day, and pressed health officials to take their concerns seriously. Finally, in 1982, the residents succeeded in persuading the federal government to relocate those who wanted to leave Love Canal. The U.S. Justice Department also prosecuted Hooker Chemical Company, imposing large fines (Shabecoff, 2003, pp. 227–229). As a result, Love Canal became a symbol of toxic waste sites and fueled a citizens’ anti-toxics movement in the United States.

Lois Gibbs’s story is not unique. In rural towns in Louisiana, in inner-city neighborhoods in Detroit and Los Angeles, on Native American reservations in New Mexico, and in communities throughout the country, citizens and community groups have launched campaigns to clean up polluting plants and halt mining operations on sacred tribal lands. As they do, activists and residents face the challenges of finding their voices and the resources to express their concerns and persuade others to join them in demanding accountability of public officials.

**Environmental Groups**

Environmental and allied concerns such as health and social justice groups are frequent sources of communication about the environment. This diverse movement comprises a wide array of groups and networks, both online and on the ground. And, each has its own focus and mode of communication. They range from thousands of grassroots groups to regional and national environmental organizations
such as the Natural Resources Defense Council, Sierra Club, Audubon Society, and National Wildlife Federation to international groups such as Conservation International, Greenpeace, World Wildlife Fund, and groups across the planet fighting unsustainable development in their communities. Online networks have proliferated by the tens of thousands, included global networks like 350.org, linking other groups in the fight against climate change.

These groups address a diversity of issues and often differ in their modes of advocacy. For example, the Sierra Club and Natural Resources Defense Council focus on climate change through their advocacy campaigns and lobbying of the U.S. Congress on energy policy. On the other hand, the Nature Conservancy and local conservancy groups protect endangered habitat on private lands by purchasing the properties themselves. Other groups such as Greenpeace and Rainforest Action Network use “image events” (DeLuca, 1999) to shine the spotlight of media attention on concerns as diverse as global warming, illegal whaling, and the destruction of tropical rainforests.

Scientists and Scientific Discourse

The warming of the Earth’s atmosphere first came to the public’s attention when climate scientists testified before the U.S. Congress in 1988. Since then, scientific reports, such as the periodic assessments of Intergovernmental Panel on Climate Change (IPCC), have prompted spirited public debate over appropriate steps that national governments should take to prevent a “dangerous anthropogenic interference” with the global climate (Mann, 2009, para. 1). As we shall see in succeeding chapters, the work of climate scientists has become a fiercely contested site in today’s public sphere, as environmentalists, public health officials, ideological skeptics, political adversaries, and others question, dispute, or urge action by Congress to adopt clean energy policies. (The IPCC’s next report is scheduled for release by 2014.)

As in the case of climate change, scientific reports have led to other important investigations of—and debate about—problems affecting human health and Earth’s biodiversity. From asthma in children caused by air pollution and mercury poisoning in fish to the accelerating loss of species of plants and animals, scientific research and the alerts of scientists have contributed substantially to public awareness and to debate about environmental policy.

As we’ll see in Chapter 11, research by environmental scientists is sometimes disputed or ignored, the findings distorted by radio talk show hosts, ideological skeptics, and affected businesses. For example, the respected journal Science described a campaign by partisans to discredit the work of atmospheric scientists on ozone depletion in the 1990s (Taubes, 1993). In this and other chapters, I’ll describe the importance of science communication as well as the ways in which environmental sciences themselves have become a site of controversy in recent years.
Corporations and Lobbyists

Environmental historian Samuel Hays (2000) reports that, as new environmental sciences began to document the environmental and health risks from industrial products, the affected businesses challenged the science “at every step, questioning both the methods and research designs that were used and the conclusions that were drawn” (p. 222). As part of this opposition, industries organized trade associations to defend their practices and to lobby against environmental regulations.

Organized corporate opposition to environmental measures appears to be based on two factors: (1) restrictions on the traditional uses of land (for example, mining, logging, or oil and gas drilling) and (2) threats to the economic interests of newer industries such as petrochemicals, energy production, computers, and transportation. Worried by the threat of tighter limits on air and water discharges from factories and refineries, many corporations have formed trade associations such as the Business Round Table and the Chemical Manufacturers Association to conduct PR campaigns or lobby Congress on behalf of their industries. For example, the
American Coalition for Clean Coal Electricity, a coal and electricity-generating industry group, has been active online and on TV, airing extensive ads promoting coal as a “clean energy” source.

Finally, some large corporations recently have begun to go green—improving their operations and committing to standards for sustainability (lower energy use and lower impact on natural resources) in their operations. Others, however, have skillfully adopted practices of “green marketing” that give false appearances of environmental values.

Anti-Environmentalists and Climate Change Critics

Although it may be difficult to conceive of groups that are opposed to protection of the environment (clean air, healthy forests, safe drinking water, and so on), a backlash against government regulations and even environmental science has arisen periodically in U.S. politics. This is often fueled by the perception that environmental regulations harm economic growth and jobs.

One early expression of this opposition was the Sagebrush Rebellion in the 1970s and 1980s, fueled by traditional users of public lands and natural resources in the West. Environmental journalist Philip Shabecoff (2003) reported that “the [cattle] stockmen, miners, and other range users, long accustomed to treating the public lands as a private fiefdom, reacted angrily to what they perceived as a threat to their rights and their livelihood” (p. 155). In response, sagebrush rebels “evoked states’ rights, the free market, and . . . attacked, sometimes physically, and vilified federal land managers and sought to discredit conservationists as un-American left-wingers” (p. 155).

By the 1990s, offshoots of the Sagebrush Rebellion became Wise Use groups, or property rights groups. These groups objected to restrictions on the use of their property for such purposes as protection of wetlands or habitat for endangered species. They include groups like Ron Arnold’s Center for the Defense of Free Enterprise (which is opposed to environmental regulations generally). Arnold, a controversial figure in the anti-environmentalist movement, once told a reporter, “Our goal is to destroy environmentalism once and for all” (Rawe & Field, 1992, in Helvarg, 2004, p. 7).

More recently, climate change skeptics have opposed the science, and many of the policies being proposed to reduce greenhouse gases or enable communities to adapt to climate change. Using online sites, conservative think tanks (Jacques, Dunlap, & Freeman, 2008), and films like The Great Global Warming Swindle, such skeptics have fueled debate and sometimes stalled government action on climate change in the United States.

News Media and Environmental Journalists

It would be difficult to overstate the impact of news media on the public’s understanding of environmental concerns. Media not only report events but act as conduits

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for other voices seeking to influence public attitudes. These voices include scientists, corporate spokespersons, environmentalists, and citizen groups. News media also exert influence through their agenda-setting role or their effect on the public’s perception of the salience or importance of issues. As journalism scholar Bernard Cohen (1963) first explained, the news media filter or select issues for attention and therefore set the public’s agenda, telling people not what to think but what to think about. For example, the public’s concern about pollution and harm to Gulf Coast economies soared after extensive news coverage of the millions of gallons of oil that spilled from the BP Deepwater Horizon well in 2010.

Although the BP Deepwater Horizon oil spill story focused on a single, dramatic event that fulfilled criteria for newsworthiness, most environmental topics, even quite serious ones, are less dramatic. As a result, media often have discretion in choosing what events or information to cover and also how to frame or package a news story. Indeed, the many voices and platforms that distribute news and information—from newspapers to blogs and Internet news sites—illustrate a wide range of approaches to environmental concerns. They range from a business story about how “Climate Change May Cause ‘Massive’ Food Disruptions” to a story in the New York Times about Congress’s plans to “slash EPA’s budget by $3 billion and defund the agency’s climate program” (Nelson & Chemnick, 2011, para. 2).

Public Officials

At the heart of debates over the environment are public officials at every level of government—both elected and appointed persons—whose roles are to shape or enforce local ordinances, enact state and national laws, and develop and enforce environmental regulations. Such individuals are at the heart of the political and legislative process because it is they who must reconcile the arguments and interests of the diverse voices speaking for or against specific measures. For legislators, particularly, this is “characteristically, a balancing act,” as they must “reconcile a variety of contending forces [who are] affected in various ways” by a proposed law (Miller, 2009, p. 41).

As we shall see throughout this book, public officials are, therefore, the audience for a range of environmental communication practices—for example, citizens testifying before state regulators about permits for a coal-fired power plant or industries’ advocacy campaigns to mobilize public opinion in hopes of persuading members of Congress to preserve tax breaks for oil companies or extend tax credits for wind and solar energy groups.

Less visible to the public, but arguably as important as legislators, are environmental regulators. These are the professional staff whose role is to ensure that laws are actually implemented and enforced. As political scientist Norman Miller (2009) explains, public officials “must turn to engineers, scientists, land use planners, lawyers, economists, and other specialists . . . to set protocols, standards,” and so forth to ensure that a law can be carried out (p. 38). The wordings of these regulations frequently have powerful
implications for industry, local communities, or the public’s health. As a result, interested parties often attempt to persuade regulators to adopt a certain definition, interpreting the intent of a statute favorably to their interests.

**SUMMARY**

This chapter described the emerging field of environmental communication, its major areas of study, and the principal concepts around which the chapters of this book will be organized:

- The field of environmental communication consists of several major areas of study, including: environmental rhetoric and the social–symbolic “construction” of nature, public participation in environmental decision making, environmental collaboration and conflict resolution, media and environmental journalism, representations of nature in corporate advertising and popular culture, advocacy campaigns and message construction, and science and risk communication.
- The term *environmental communication* itself was defined as the pragmatic and constitutive vehicle for our understanding of the environment as well as our relationships to the natural world; it is the symbolic medium that we use in constructing environmental problems and in negotiating society’s different responses to them.
- Using this definition, the framework for the chapters in this book builds on three core principles:

  1. Human communication is a form of symbolic action.
  2. Our beliefs, attitudes, and behaviors relating to nature and environmental problems are mediated or influenced by communication.
  3. The public sphere emerges as a discursive space for communication about the environment.

Now that you have learned something about environmental communication and its practices, I hope you’ll feel inspired to join the public conversations about the environment that are already in progress. Along the way, I hope you’ll discover your own voice in speaking on behalf of the natural world and your own communities.

**SUGGESTED RESOURCES**

Chapter 1  Study and Practice of Environmental Communication

- Visit the website for the International Environmental Communication Association (http://environmentalcomm.org) for information about programs, research, conferences, and courses.

### KEY TERMS

- Agenda setting 31
- Collaboration 15
- Constitutive 19
- Environmental communication 19
- Pragmatic 19
- Public sphere 24
- Shannon–Weaver model of communication 18
- Symbolic action 20
- Sagebrush Rebellion 30
- Wise Use groups 30

### DISCUSSION QUESTIONS

1. Is nature ethically and politically silent? What does this mean? If nature is politically silent, does this mean it has no value apart from human meaning?

2. The rhetorical theorist Kenneth Burke (1966) claims that, “Much that we take as observations about ‘reality’ may be but the spinning out of possibilities implicit in our particular choice of terms.” Does this mean we cannot know “reality” outside of the words we use to describe it? What did Burke mean by this?

3. In our society, whose voices are heard most often about environmental issues? What influence do corporations, TV personalities, and partisan blogs have in the political process? Are there still openings for ordinary citizens, scientists, or environmental groups to be heard?

### REFERENCES


“Wilderness . . . is so heavily freighted with meaning of a personal, symbolic, and changing kind as to resist easy definition” (Nash, 2001, p. 1).

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