PART I

Communicating for/About the Environment

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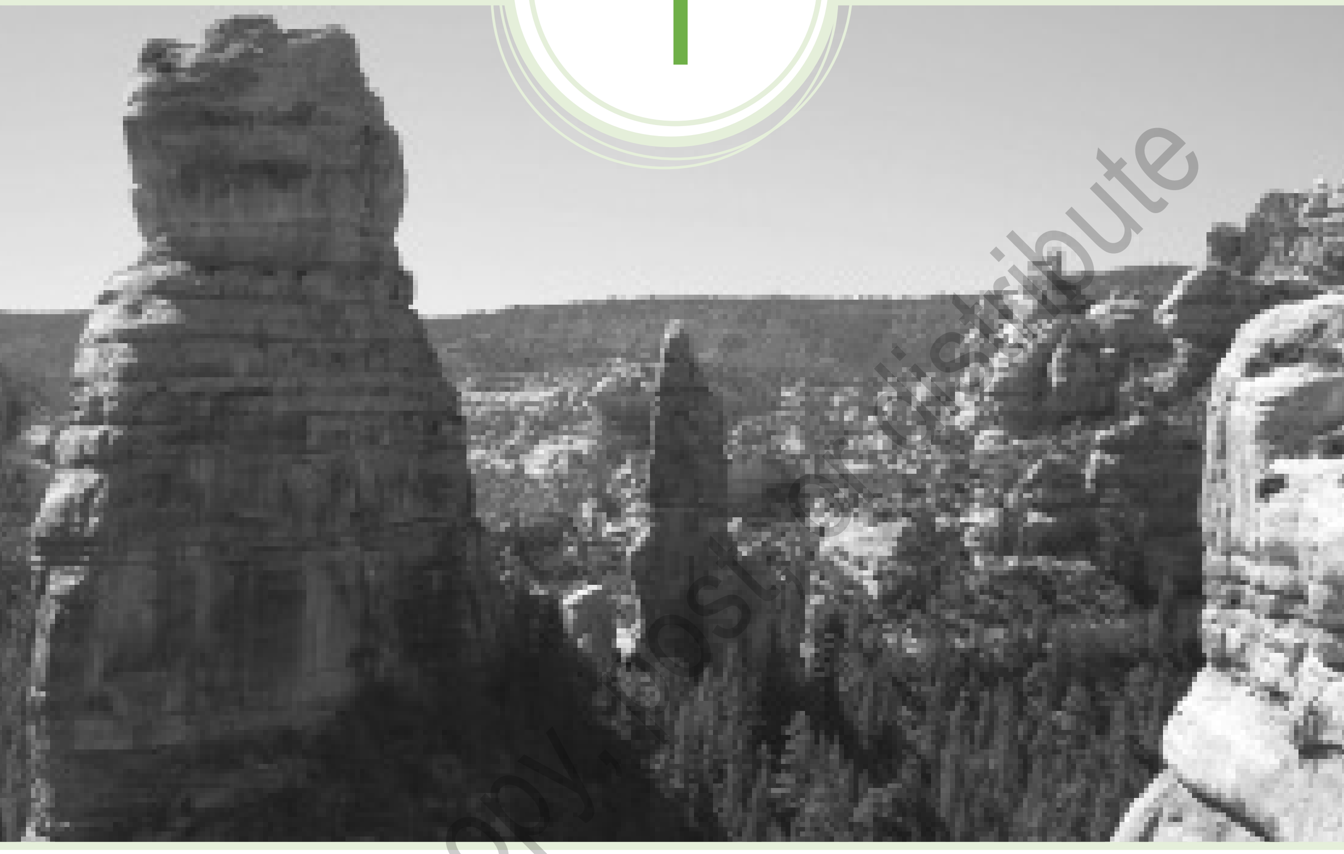

Defining Environmental Communication

Learning Objectives

After studying this chapter, you should be able to

LO 1-1: Define Key Terms, including *environmental communication*.

LO 1-2: Summarize the key voices and perspectives of environmental communication.

LO 1-3: Identify how environmental communication may function pragmatically and/or constitutively.

LO 1-4: Compare how crisis and care are ethics that guide environmental communication.

LO 1-5: Judge the ways individual and systemic change matter to the environment.

We all engage in environmental communication every day—whether or not we are bringing a reusable water bottle to class, debating with a peer about the ethics of eating plant-based burgers, checking an app to see if the air quality is healthy enough to bike outside, joining a campus protest about divesting from fossil fuel industries, and/or voting for candidates who support climate action through the Green New Deal and/or the Paris Agreement. No matter what we do, we are using verbal or nonverbal communication to reflect our attitudes about the environment. We also are shaped by countless environmental communication practices every day—from our peers, family, religious leaders, teachers, journalists, bloggers, politicians, corporations, entertainers, and more.

This chapter describes environmental communication as a subject of study and a set of practices that matter, shaping the world in which we live. As a timely and significant field of study, our understanding of the environment and our actions within it depend not only on the information and technology available but also on the ways in which communication shapes our environmental values, choices, and actions in news, films, social networks, public debate, popular culture, everyday conversations, and more.

Studying Environmental Communication

The words *nature* and *environment* are contested terms whose meanings have evolved throughout history. We trace some of these ideas in Chapter 2. Before that, we want to introduce a specific way in which we come to know about—and relate to—the environment: the study of communication.

Photo 1.1 The first part of this book defines the field of environmental communication and provides a brief history of key terms we use to communicate for/about the environment, such as "nature" or "the commons," to illustrate how intertwined our understanding of "the environment" is with communication. When you look at a landscape with red rock, high plateau, and juniper forests like Bears Ears National Monument (pictured here), what words, feelings, and events do you associate with it? How is its value communicated or not to you? Does knowing Indigenous tribes such as the Navajo Nation, Ute Mountain Ute Tribe, and Hopi Nation have sacred stories and historical artifacts tied to the landscape shape your feelings about its value? Why or why not?

U.S. Forest Service

What Is "Environmental Communication"?

At first glance, a definition of *environmental communication* can be confusing if we define it simply as information or "talk" about environmental topics—water pollution, forests, climate change, pesticides, grizzly bears, and more. A clearer definition takes into account the roles of language, visual images, protests, music, or even scientific reports as different forms of **symbolic action**. This term comes from rhetorical theorist Kenneth Burke (1966). In his book *Language as Symbolic Action*, Burke stated that even the seemingly most unemotional language is necessarily persuasive. This is so because our language and other symbolic acts *do* something, as well as *say* something. Language actively shapes our understanding, creates meaning, and orients 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). From this perspective, communication may focus on what we express (emotions, information, hierarchies, power, etc.), how we express it (in which style, through which media, when, by whom, and where, etc.), and/or with what *consequences* (cultural norms, political decisions, popular trends, etc.).

The view of communication as a form of symbolic action might be clearer if we contrast it with an earlier view. After World War II, Warren Weaver attempted to translate the work of Claude Elwood Shannon, a founder of information theory. Shannon himself imagined communication as a process of decrypting—that is, trying to clarify a complex message. When communication scholars refer to a "Shannon–Weaver model of communication," it is used to symbolize how communication can be imagined as the transmission of information from a source to a receiver through a specific channel to be decoded (Shannon & Weaver, 1949). Though Shannon and Weaver were interested in the infrastructure of telephone systems, David Berlo (1960) and others drew on their research to promote a "sender-message-channel-receiver" (SMCR) model of communication. There was, however, little effort in this model to account for meaning or reception; instead, the focus was on what information was being shared, with whom, and how.

Unlike the SMCR, symbolic action assumes that communication does more than transmit information one way, from experts to lay audiences. Sometimes, we misunderstand what someone is communicating. Sometimes, we reject what we're told. Sometimes, we reach consensus through dialogue with others. Although information is important, it is not the only facet relevant to communication that affects, moves, or persuades us (or not). We will revisit this point in Chapter 10 when we address the *information deficit model* in science and climate communication.

By focusing on symbolic action, then, we can offer a more robust definition of environmental communication that better reflects the complicated world in which we live. In this book, we use the phrase **environmental communication** to mean *the pragmatic and constitutive modes of expression—the naming, shaping, orienting, and negotiating—of our ecological relationships in the world, including those with nonhuman systems, elements, and species*. Defined this way, environmental communication serves two different functions:

1. *Environmental communication is* ***pragmatic****:* It consists of verbal and nonverbal modes of interaction that convey an instrumental purpose. Pragmatic communication greets, informs, demands, promises, requests,

educates, alerts, persuades, rejects, and more. For example, a pragmatic function of communication occurs when an environmental organization educates its supporters and rallies public support for a political candidate or when a grocery store uses advertising to persuade you to buy their reusable bag. Signs stating "Turn off the lights," "Volunteer to clean up this beach," "Vote for this candidate," or "Recycle" also are explicit pragmatic appeals.

2. *Environmental communication is* ***constitutive****:* It entails verbal and nonverbal modes of interaction that *shape*, *orient*, and *negotiate* meaning, values, and relationships. Constitutive communication invites a particular perspective, evokes certain beliefs and feelings (and not others), fosters particular ways of relating to others, and thus creates palpable feelings that may move us.

Let's think about these two functions a little further. Consider plastic, which long has been identified as an environmental problem: it creates waste for limited landfill space, litters our oceans and lands, harms wildlife, travels into our human bloodstream, and contributes to global greenhouse gases when produced, as plastics are a product of petrochemicals. Recent bans focusing on "single-use plastics"—such as plastic bags, bottles, and packaging—aim to reduce these negative impacts. In 2002, Bangladesh was the first country to ban single-use plastic bags, and the trend is growing, particularly in the Global South where plastic is wreaking havoc on human health and ecosystems. From this perspective, the bans are pragmatic communication acts that reduce plastic.

Yet, in 2018, when plastic straw bans starting gaining traction in the United States, a range of cultural reactions occurred that might help us realize the significance of constitutive communication functions; while some imagined these bans as inroads to reducing pollution, others thought plastic straw bans constituted ablism by ignoring people with disabilities,

ACT LOCALLY!

NEWS THAT IS PRAGMATIC AND CONSTITUTIVE

Although the two functions of environmental communication—*pragmatic* and *constitutive*—are important, they can be difficult to distinguish sometimes.

Science Daily (https://www.sciencedaily.com/news/earth_climate/) reports the latest news about environmental and climate events, ranging from record-breaking emissions of powerful, heat-trapping methane gas to beluga whales forming social networks beyond family ties. These and other interesting reports reflect both pragmatic and constitutive dimensions of communication.

Check out the site and select one of the latest reports that interest you to identify:

- *Pragmatic* functions, or what "informs, demands, promises, requests, educates, alerts, persuades, rejects, portions, and more," and
- *Constitutive* functions, or what "shapes, orients, and negotiates meaning, values, and relationships [or] invites a particular perspective, evokes certain beliefs and feelings."

Do others agree with your findings? How would you explain your reasons for identifying each of these functions?

scapegoating larger systemic changes on individual consumer choices, and others believed the bans were an attack on freedom itself (see the sold-out straws with the words "Make Straws Great Again"). How people constitute the meaning of a plastic straw when they see one being used in public now reflects how people imagine the *meaning* of plastic straw use, not just whether or not it is used. Constitutive communication, therefore, can have profound effects on when we do or do not define certain elements as "problems" or "solutions."

Ways of Studying Environmental Communication

Since the 1980s, environmental communication has proliferated as a professional field. Associated with such disciplines as communication, media, journalism, and environmental studies, it has emerged as a broad and vibrant area of study. We identify 10 general approaches existing today. This list is not exhaustive, but it provides touchstones to launch a wider range of thinking about environmental communication as a vibrant, interdisciplinary, multimodal field of study.

While we primarily focus on (1) rhetoric, cultural studies, and media in this textbook as vital perspectives in environmental communication, we also address and engage research from a range of approaches, including: (2) environmental interpersonal and intercultural identities; (3) green advertising, public relations, and design; (4) environmental journalism and mass media studies; (5) science and climate communication; (6) green applied media and arts; (7) public health and environmental risk communication; (8) green governance and public participation; (9) environmental organizational communication; and (10) environmental law and policy. To elaborate more on each of these 10 approaches:

1. *Environmental rhetoric, cultural studies, and media* involve a range of communicative phenomena—language, discourse, visual texts, popular culture, place, environmental advocacy campaigns, movements, staged performances, and/or controversies in a public sphere. For such studies, thinking about context, voice, creativity, systems, structures, and judgment are vital. Such an approach bridges fiction and nonfiction; individual and collective expression; verbal and nonverbal interactions; communication face-to-face or face-to-screen; concerns for meaning, materiality, and affect; and more. As the primary orientation of this textbook, we introduce this approach in Parts I and II of the textbook.

Less interested in universal claims, rhetoric, cultural studies, and media explore the relationship among bodies, institutions, and power within specific situations or conjunctures. Topics vary widely, including but not limited to: the promise and perils of apocalyptic rhetoric in South Africa (noted in Chapter 3); ways to analyze green popular media (Chapter 4); studying advocacy campaigns (Chapter 5); the role of digital memes in reflecting and shaping culture (Chapter 6); the use of market pressure to persuade institutions (Chapter 7); the use of media to reclaim public spaces for engagement (Chapter 7); the environmental justice movement's foregrounding of the relationship between racial injustices and environmental degradation (Chapter 8); the cultural salience of climate fiction (Chapter 10); and how Indigenous storytelling and faith in regeneration have shaped not only our past but our futures (Chapter 2 and Epilogue).

2. Environmental communication research focused on *environmental interpersonal and intercultural identities,* may involve assessing one's ecological footprint, autoethnography, consumption studies, a sense of self-in-place (Cantrill, 1998), environmental education practices, social interactions, or studying groups' environmental attitudes and practices in comparison to those from other cultures or identity groups. This approach might also focus on intercultural distinctions and dialogues, such as varying perspectives on discourses of dwelling (Carbaugh & Cerulli, 2012) or ways of engaging the nonhuman (Salvador & Clarke, 2011; see also Chapters 7 and 13). Most recently, contributors to the *Routledge Handbook of Ecocultural Identity* (2020) unpack the ecological contexts and constraints that contribute to, and constrain, our identities or "selves." For example, the conflicting social and environmental conditions along the U.S.–Mexico border aid us in understanding that "ecocultural identities for border residents, crossers, inhabitants—human and more-than-human—are constituted and complicated by a variety of tensions that must be negotiated" (Tarin, Upton, & Sowards, 2020, p. 53).

Although the emphasis of this book is on interactions in the public sphere, we hope that bringing in our own stories and inviting you to "Act Locally!" in each chapter will help open up opportunities for you to make connections between personal and public life, to integrate course content with the personal and social implications of caring (or not) about the values of and connections between the environment, communication, and the public sphere.

3. *Green advertising, public relations (PR), and design* includes marketing, branding, and public negotiations of organizational reputation. In Chapter 4, we focus on green advertising and sustainability discourses to introduce these concepts and how they are used both by private industry and nonprofits. We note how at times, this work serves anti-environmental goals of greenwashing or image repair after environmental damages and, at other times, how advertising and public relations can be used to promote pro-environmental behaviors and attitudes.

4. *Environmental journalism and mass media studies* includes the professional training of those who create our news. As we discuss in Chapter 9, while journalism continues to go through major transformations due to changing media technologies and owners of media outlets, journalists continue to play a vital role in the public sphere. We address both their resilient power to set agendas and gatekeep, as well as the field's ethical debates around ethical crisis reporting and a duty to publicize accurate information in an age rife with dangerous rhetoric. In the Epilogue, we also introduce speculative journalism as a new trend in the field.

5. *Science and climate communication* focuses on how science historically has developed within specific cultural contexts, as well as the ways scientists are perceived and engage publics. Given its complexity and urgency, climate communication has emerged as a robust area of specialty within this area. Drawing more on a social scientific perspective, this approach includes discourse analysis of mainstream news coverage of environmental topics, studies of the social construction and/or framing of the environment in the media, visual green brands, and environmental media effects, including framing, cultivation analysis, and narrative analysis (Boykoff, 2007; Carvalho

& Peterson, 2012). While this perspective is integrated throughout, this edition of the textbook has a new Chapter 10 focused on science and climate communication.

6. *Green applied media and arts* is a broad umbrella term for those environmental practitioners and scholars who focus on *production*: in a specific medium, its circulation, its intermediation, and/or technology-based arts (including photo imaging, video, digital designs, sound, and live performance). Green applied media and arts could involve, for example, a campaign to increase sustainable practices in popular culture media companies, community poetry slam performances to inspire open discussion about public health risks, or making a mural or zine to raise awareness about farmworker lives in the Global South. As one significant example, in Chapter 10, we discuss further collaborations between environmental scientists and artists who aim to raise climate awareness through designing natural-material sculptures, digital photography, or museum exhibits.

7. *Public health and environmental risk communication* explore a range of subjects, from personal choices about technology and interpersonal communication in labs and hospital rooms to risk assessments of environmental policy makers. These approaches focus less on public and popular discourses and more on personal or technical discourse communities, such as doctor–patient interactions, public health campaigns, and how scientists may communicate more effectively with the public. Some of this scholarship values structural critique, such as Mohan Dutta's (2015) compelling communication research in Southeast Asia on how subaltern communities can embrace a culture-centered approach to public health decisions related to agriculture. Chapter 11 focuses on this approach.

8. *Green governance and public participation in environmental decision-making* draws on an interdisciplinary approach, including rhetoric, discourse studies, social interaction, and organizational communication, and reflects a commitment to democratic practices, principally ways to resolve or navigate controversies over public goods and the commons. When protest has not been successful or is desired to be avoided, studies of public participation inquire about the ways in which various stakeholders (for example, loggers, forest activists, and businesses) contribute to decisions about environmental policies and projects; studies include the diverse voices and interactions (verbal and nonverbal) that shape choices, such as management of a community's water supply (Sprain, Carcasson, & Merolla, 2014). While integrated throughout the book, Chapter 12 focuses on rights of public participation, legal barriers, and the international growth of public participation.

9. *Environmental organizational communication studies* inquire how certain institutions or networks talk about or organize around environmental matters. This area explores the hierarchal language, stories, rituals, roles, and/or rules of environmental and anti-environmental discourse affecting both our public and our everyday lives. Notable research includes, for example, scholarship on the discourses surrounding the U.S. government's production of nuclear energy and debates over the disposal of nuclear waste (B. C. Taylor, Kinsella, Depoe, & Metzler, 2007). In Chapter 12, for example, we engage how government secrecy in the name of military security limits public access to information (Kinsella, 2018) and how translation of technical information for publics may be done more ethically by paying more attention to culture (Mitra, 2018).

10. *Environmental law and policy* focuses on litigation and policy as significant solutions to managing the checks and balances of power shaping environmental policy, enforcement, and harms. Rhetoric was invented for courts, to allow people to assess evidence, craft arguments, and make civic judgments. While relevant policies are noted throughout, we discuss national and international legal cases toward the conclusion of this book; in Chapter 13 we consider how a range of timely ethical decisions are being made in courtrooms: from who can protest where to who has a voice in the courts to how long of a timeline we should use when adjudicating environmental decisions.

Given the breadth of these 10 approaches, can there be a common thread in their undertakings? We believe that there is, and we propose in the next section that this tread is *an ethical dynamic or dialectic between crisis and care*, which defines environmental communication.

The Ethics of Crisis and Care

In the inaugural issue of the journal *Environmental Communication: A Journal of Nature and Culture*, Cox (2007) proposed that environmental communication is a **crisis discipline**. This argument drew on the Society for Conservation Biology's stance that, like cancer biology, conservation biology has an ethical norm as a "crisis-oriented" discipline in addressing the threat of species extinction. Similarly, we embrace a crisis discipline frame for environmental communication as a field—and practice—dedicated to addressing some of the greatest challenges of our times, but a frame that also foregrounds the *ethical* implications of this orientation.

While work in environmental communication addresses cancer, climate chaos, disappearance of wildlife habitat, toxic pollution, and more as crises, we also believe the stakes of such crises invite a dialogue or dynamic relationship with an ethic of concern or care. As Cox (2007) observed,

> scholars, teachers, and practitioners have a duty to educate, question, critically evaluate, or otherwise speak in appropriate forums when social/symbolic representations of "environment," knowledge claims, or other communication practices are constrained or suborned for harmful or unsustainable policies toward human communities and the natural world. Relatedly, we have a responsibility through our work to identify and recommend practices that fulfill the first normative tenet: *to enhance the ability of society to respond appropriately to environmental signals relevant to the well-being of both human civilization and natural biological systems*. (p. 16, emphasis in original)

This ethical duty gives value to humans and nonhuman systems, as well as to our communication both inside and outside the academy. It assists those who want to assert that environmental communication scholarship is contributing not solely to existing literature, but also to the wider struggles of which research is a part.

More recently, while we endorse the field as a crisis discipline, we also embrace environmental communication as a "care discipline" (Pezzullo, 2017a). As a **care discipline**, environmental communication involves research devoted to unearthing human and nonhuman interconnections, interdependence, biodiversity, and system limits. This means that we have not only a duty to *prevent* harm but also a duty to *honor* the people, places, and nonhuman species with which we share our world. This ethic may be witnessed in Indigenous and feminist thought (Whyte & Cuomo, 2015), documentaries, and stage performances that express, for example, a love of place, the cultural centrality of a particular food, the millions who visit national parks annually as tourists with limited vacation time and money, animal studies of affectionate interspecies relations, and intergenerational rights policy in international law.

As a care discipline, there are phrases circulating in environmental discourse that capture this sentiment, including the goal of *not just surviving but thriving* and of *not just bouncing back from a disaster but bouncing forward as well*. These discourses aim to foster a world that exceeds reactionary practices and includes hope for generative community building in which our dreams and ideals may help shape our plans and platforms. Although dialogue that allows *only* space for happiness and optimism can feel oppressive, the opposite also rings true: Creating spaces that enable only sadness and cynicism can feel oppressive as well.

Crisis is a vital motivation for environmental communication, but other drives are important as well, including those spaces (environments) and conversations that are inspirational, healing, spiritual, profitable, and/or transformative. By coupling crisis and care as a dynamic and intertwined dialectic, we arguably might enable recognition of existing and emergent environmental communication on the wider range of emotional, physical, and political responses that warrant our attention.

ANOTHER VIEWPOINT

ECOLOGICAL FOOTPRINT AND CORPORATE ACCOUNTABILITY

A lot of environmental textbooks start with self-reflection, which always is a good idea: who you are, where you grew up, and how you live will shape how you engage the themes of environmental communication. However, too often, those conversations produce feelings of individual guilt about one's individual "ecological footprint" and forget that what we need for a more sustainable planet is systemic or structural change that exceeds any one individual.

The Political Economy Research Institute (PERI) at the University of Massachusetts Amherst provides annual databases on the top corporate air and water polluters and top greenhouse gas emitters. In 2019, for example, they found the top air polluters to be Huntsman, Boeing, LyondellBasell, and DowDuPont. For more details and other tables (on water polluters and more) see: https://www.peri.umass.edu/top-100-polluter-indexes

Meanwhile, *The Guardian* reported on the Climate Accountability Institute's list of the 20 fossil fuels companies who have contributed the most to our climate crisis. To name just the top four: Saudi Aramco, Chevron, Gazprom, and ExxonMobil (M. Taylor & Watts, 2019).

What do you think are the limits and possibilities of focusing on our individual practices and/or focusing on corporate accountability?

Source: Matthew Taylor and JoNathan Watts (2019, October 9). Revealed: The 20 firms behind a third of all carbon emissions. *The Guardian*. https://www.theguardian.com/environment/2019/oct/09/revealed-20-firms-third-carbon-emissions

Let's now bring to these perspectives on the field of environmental communication three core principles that serve as the framework for the remaining chapters of this book:

1. Human communication is *symbolic action.*
2. As a result, our beliefs, choices, and behaviors about the *environment* are imagined, shared, and judged through *communication.*
3. The *public sphere* (or spheres) is a discursive space in which competing voices engage each other about environmental matters as a cornerstone of democratic life.

Communication, the Environment, and the Public Sphere

The three principles organizing the chapters in this book obviously overlap (for example, our beliefs about an environmental topic occur as we converse with others in public spaces), but here, we want to introduce and illustrate these three briefly and then draw on them in each of the remaining chapters.

Communication as Symbolic Action: Wolves

Earlier, we defined *environmental communication* as a form of *symbolic action*. Whether considered as *pragmatic* or *constitutive* functions, our symbolic acts *do* something. Films, websites, apps, photographs, popular magazines, and other forms of human symbolic behavior are produced by us and move us.

As such, communication leads to real-world outcomes. Consider the American gray wolf. Concern for the extinction of wolves has not always been a concern of many Americans. Wolves, for example, had been extirpated from the Northern Rocky Mountains by the mid-20th century through intensive "predator control" (trapping, poisoning, or shooting). It was not until the mid-1990s that the U.S. Fish and Wildlife Service initiated a restoration plan for wolves.

In 1995, Secretary of the Interior Bruce Babbitt celebrated the return of the first American gray wolf to Yellowstone National Park in a speech marking the event. Earlier that year, he had helped carry and release the wolf into the transition area in the park where she would mate with other wolves also being returned. After setting down the wolf, Babbitt (1995) 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 Endangered Species Act, which was under attack in the Congress at the time. In recalling a Judeo- Christian biblical story of a flood, Babbitt evoked a powerful cultural narrative for revaluing wolves and other endangered species for his audience. In retelling this ancient story, he invited them to embrace a similar ethic in the present day:

> 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, para. 56)

Communication orients us toward events, people, and, yes, wildlife. And because different individuals may value nature in diverse ways, we find our voices to be a part of a conversation with others. Secretary Babbitt invoked an ancient story of survival to invite the American public to appreciate anew the Endangered Species Act. So, too, our own contemporary communication helps us make sense of our own relationships with nature, what we value, and how we shall act.

Wolf reintroduction policies continue to be negotiated in the United States, from children's books to state and federal wildlife debates. How people debate the reintroduction of wolves reflects the dual functions of symbolic action we highlighted earlier. Wolf policy might be a pragmatic debate with a clear decision (will we or won't we?), yet the discourse creating the grounds for those judgments is constitutive: What does a wolf symbolize? Are wolves a keystone species in an ecosystem? Are they a predator of livestock and, therefore, livelihoods? Does "the fierce green fire" in their eyes hold intrinsic value and insight beyond human comprehension (Leopold, 1949, p. 138)? Almost every Indigenous North American tribe integrates the wolf in their foundational cultural stories: as ancestors, gods, guardians, healers, and more—do you believe wolves hold spiritual knowledge? Your responses to these questions constitute what a wolf means to you and shapes whether you might support wolf reintroduction.

U.S. National Park Service, U.S. Public Domain

Photo 1.2 U.S. Secretary of the Interior Bruce Babbitt, releasing the first American gray wolf back into Yellowstone National Park in 1995. States and various organizations continue to debate wolf reintroduction as a result of the pragmatic and constitutive communication associated with the species.

Human communication, therefore, is symbolic action because we draw on symbols to construct a framework for understanding and valuing and to bring the wider world to others' attention.

Why Communication Matters to "the Environment"

It may seem odd to place "the environment" in quotation marks. After all, the environment exists: Lead in water can cause brain damage, large glaciers in Antarctica are calving into the Southern Ocean due to planetary warming, and we need oxygen to breathe. So, what's going on?

Simply put, whatever else "the environment" may be, it is deeply entangled with our very human ways of interacting with, knowing, and addressing the wider world. As Arne Naess (2000) once exclaimed, "Having been taken at least twice by avalanches, I have never felt them to be social constructions. But every word I utter about them may have social origins" (p. 335). At a basic level, our beliefs, attitudes, and behaviors toward the environment are shaped by human ways of communicating.

Public Spheres as Democratic Spaces

A third principle central to this book is the idea of the public sphere—or, more accurately, public spheres. Earlier, we defined a *public sphere* as the forums and interactions in which different individuals engage each other about subjects of shared concern or that affect a wider community, from neighborhoods to international relations.

Jürgen Habermas (1974) offered a similar definition of the ideal of the public sphere 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 with others, we translate our private or technical topics into public ones and, thus, create circles of influence that affect how we imagine the environment and our relationships within 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 campus environmental forum to a scientist's testimony before a congressional committee. In public hearings, newspaper editorials, blog posts, speeches at rallies, street festivals, and countless other occasions in which we engage others in conversation or debate, 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 or proprietary files of corporations. Therefore, it is important to note that other spheres of influence exist parallel to the public sphere. Thomas Goodnight (1982), for example, named two other areas of influence the *personal* and *technical* spheres; the personal is one's private opinion, and the technical is scientific, specialized knowledge. The public sphere, the primary focus of this book, is collective opinion, knowledge, and action. All spheres shape the world we live in, but all do not carry the same values, particularly when considering democratic governance.

Of course, personal and public actions are not an either/or choice. Perhaps more than any environmental question we have received over the years has been about our personal choices: do we eat meat? How many children do we (want to) have, if any? How often do we fly? Do we bike or take public transportation to work? Do we vote? These are important questions, especially for people who live in the heavy consumption landscape of the United States; however, as we witnessed with COVID-19, individuals needed to change our behaviors—and governments and private institutions needed to create public and corporate policies to help society respond to the crisis. Without both personal and public action, we would risk more lives.

With this in mind, we do want to consider how some use *scapegoating* to deflect accountability. **Scapegoating** is the unmerited blaming of a particular person or action instead of addressing systemic or structural changes, as well as those most responsible. In studying a range of scapegoating discourses related to environmental communication, Casey R. Schmitt (2019) argues they not only deflect but also distract by taking "potential attention from the more aggravating, complex, or unsolvable environmental challenges by instead offering an immediately satisfying morality tale" (p. 160).

Part of what we hope you will develop through reading this book is a distinction between when ecological blame holds merit and when it is *scapegoating*. Should we hold our parent or guardian who doesn't recycle to the same level of accountability as ExxonMobil for climate chaos? Should we ban plastic bags or straws to address ocean pollution? Do children have more asthma in places with greater air pollution? All of these questions involve making a judgment based on what we have learned through our personal experiences and debate in public spheres.

The idea of the public sphere itself, however, can be misunderstood. We want to dispel a few misconceptions early on. First, the public sphere is not only, or even primarily, an official space. Although there are officially sponsored spaces such as public hearings that invite citizens to communicate about the environment, these forums do not exhaust the public sphere. In fact, discussion and debate about environmental concerns often occur outside of government meeting rooms and courts. The early 5th-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. Similarly, we find everyday spaces and opportunities today, publicly, to voice our concerns and influence the judgment of others about environmental concerns, from social media apps to marches in the streets.

Second, the public sphere is neither monolithic nor a uniform, risk-free assembly of all citizens. As realms of influence are created when individuals engage others, public spheres may assume concrete and local forms, including calls to talk radio programs, blogs, letters to the editor of newspapers, or local meetings where citizens question public officials. Rarely does every person impacted participate equally or is every idea expressed. When we address environmental racism in this textbook, for example, we will consider how white supremacy in the United States has marginalized Black, Indigenous, and People of Color voices. While it is risky for anyone to speak for the environment, it is not equally risky for all. For now, suffice it to say that globally, environmentalists continue to struggle to be heard and to face violence or undue influence. (See also "FYI: Global Perspective: Killing Environmental Advocates.")

Third, far from elite conversation or "rational" forms of communication based on norms of which cultures and bodies are imaged as "reasonable" or not, public spheres are most often the arenas in which popular, passionate, and democratic communication occurs. Such a view of the public sphere acknowledges the *diverse* voices and styles that characterize a robust,

FYI GLOBAL PERSPECTIVE

KILLING ENVIRONMENTAL ADVOCATES

On February 5, 2020, the body of Raúl Hernández, an environmental defender of the El Campanario monarch butterfly sanctuary in Central Mexico, was found. "His body reportedly showed visible signs of torture. Hernández is now the second fatality in the local community of conservationists after fellow environment defender, Homero Gómez González, was found in a well in central Mexico" ("Second Mexican Defender of Monarch Butterflies Found Dead," 2020, paras. 1–3).

"Their deaths of are part of a growing trend in the assassination, violence and intimidation of people defending the environment, in Mexico and globally. Relatives told local media that Gómez González had received threats from an organized crime gang warning him to stop his campaign against illegal logging" ("Second Mexican Defender," 2020).

"Between 2002 and 2017, 1,558 people in 50 countries were killed for defending their environments and lands. . . . 'Environmental defenders' here refers to people engaged in protecting land, forests, water and other natural resources. This includes community activists, members of social movements, lawyers, journalists, non-governmental organization staff, Indigenous peoples, members of traditional, peasant and agrarian communities, and those who resist forced eviction or other violent interventions. These people take peaceful action, either voluntarily or professionally, to protect the environment or land rights" (Butt, Lambrick, Menton, & Renwick, 2019, p. 742).

The international watchdog group Global Witness (2020) reported, "2019 shows the highest number yet have been murdered in a single year. 212 land and environmental defenders were killed in 2019—an average of more than four people a week." To find out more, including their campaign to amplify voices of environmental and land defenders threatened, go to their website: https://act.globalwitness.org/page/64717/subscribe/1

participatory democracy. In fact, in this book, we introduce the voices of everyday people and the special challenges they face in gaining a hearing about matters of environmental and personal survival in their communities. Before identifying some of the key voices of environmental communication, let us consider how behaviors and values matter to the ways we express our environmental perspectives.

The Attitude–Behavior Gap and the Importance of Values

While communication choices we discuss in this textbook can be used to support environmental values or to counter them, our decisions about environmental communication in our everyday lives and most spectacular moments often reflect our beliefs. When they do not, they also matter.

The Attitude–Behavior Gap

People generally favor environmental amenities such as clean air and water, chemical-free food, parks, and open spaces. Yet these attitudes don't always predict what people actually will do. Kollmuss and Agyeman (2002) found that we engage in environmental behaviors that demand the least cost, in money, but also "the time and effort needed to undertake a pro-environmental behavior"; while many of us recycle (low cost), we may "not necessarily engage in activities that are more costly and inconvenient such as driving or flying less" (p. 252).

Social scientists call this disconnect the **attitude–behavior gap**. Although individuals may have favorable systems of beliefs or values about environmental issues, they may not take corresponding action(s); their practice (*behavior*), therefore, is disconnected from their systems of beliefs and values (*attitudes*). We may, for example, believe disposable paper cups are bad for the environment but resist doing anything about it (e.g., bringing a reusable mug to the coffee shop). More troubling, while many individuals believe global climate change is real and happening now, they may not feel any urgency to change their behaviors or speak out (Moser, 2010). Scientists who surveyed attitudes in coastal North Carolina, for example, found that "even if they understood the science of climate change, few elected leaders or planning officials surveyed were willing to take action to adapt to sea-level rise or other effects of global warming" (Bolstad, 2017, para. 1). Finally, this gap is also seen in consumer behavior. Research by OgilvyEarth (2011) found a "green gap" in Americans' buying behavior: Although "82% of Americans have good green intentions . . . only 16% are dedicated to fulfilling these intentions" (para. 3).

One of the reasons behavior-change campaigns often fail is that they assume that providing information—educating people—is enough. Simply knowing that better insulation in our attics will save us money on our energy bills, for example, is usually not enough to persuade us to purchase (and install) higher R-rated (energy-efficient) insulation. The reason, Merrian Fuller, a researcher at the Lawrence Berkeley National Laboratory, explained, is that when information campaigns "address the issue of energy efficiency benefits, they . . . neglect the issue of how to motivate consumers" to actually take action (quoted in Mandel, 2010, para. 9). The results of Fuller's study point to the importance of emotional, as well as educational, elements in designing messages that expect people to take an action. Further, researchers have found that ethnicity, gender, age, and political orientation shape environmental beliefs and behaviors (Johnson, Bowker, & Cordell, 2004).

Another reason for gaps, then, is that individual choices are shaped by structures. For example, if you want to buy an electric car but there are no electric cars being sold where you live, then you face a greater barrier. Likewise, if you need that car to travel far distances, you will need a reliable e-car recharging infrastructure. As another example, if you care about public health but your job is in a factory that has poor air quality, it is not always easy to leave that job and find another where your workplace can reflect your attitude. Further, if you want to initiate a local community garden, you need access to space and local ordinances to allow it. Environmental matters, therefore, are not just individual behavior choices.

Environmental Values

While our beliefs often don't directly influence our behaviors, our values and cultural norms do play a role. Indeed, there is a great deal of evidence that pro-environmental behaviors are related to certain values (Bolstad, 2017; Crompton, 2008; Schultz & Zelezny 2003). This was the finding in a survey of planning officials. Observing that more reports about global warming were "probably not going to make the difference in [getting] people to take adaptive action," lead scientist Brian Bulla concluded, "We don't make rational decisions, we make value-based decisions. . . . [So] we've got to think about things a little differently" (quoted in Bolstad, 2017, para. 3). In an earlier, classic study of the environmental movement, Stern, Dietz, Abel, Guagnano, and Kalof (1999) found that "individuals who accept a movement's basic values, believe that valued objects are threatened, and believe that their actions can help restore those values" are more likely to feel an obligation to act or provide support for the movement (p. 81).

Research suggests there are three broad categories of values associated with environmental behaviors (Farrior, 2005, p. 11):

1. Self or *egoistic concerns* focusing on the self (health, quality of life, prosperity, convenience)
2. *Social–altruistic concerns* focusing on other people (children, family, community, humanity)
3. *Biospheric concerns* focusing on the well-being of living things (plants, animals)

Some people, therefore, may be concerned about water pollution because of **egoistic concerns**, that is, values that center around oneself (such as: "I don't want to drink polluted water because it might harm me"). Others may be motivated by **social–altruistic concerns**, that is, values that are motivated by the care of others (such as: "I don't want my children or my neighbors to drink polluted water because it might harm them"). Finally, others may be concerned due to **biospheric concerns** (or what some call "ecocentric"), that is, values that are motivated by care of a sentient being or ecosystem (such as: "I don't want that polluted water to harm marine animals" or "If that water is polluted, it will harm the fish, the mammals that use the waterway, and impact entire food webs").

This finding presents an interesting dilemma for some advocates. For example, in arguing for the value of wilderness, the radical group Earth First! (2017) publicly rejects *egocentric concerns* for wilderness. Instead, the group voices a *biospheric concern* in its messaging. In declaring "No Compromise in Defense of Mother Earth," the group explains,

> Guided by a philosophy of deep ecology, Earth First! does not accept a human- centered worldview of "nature for people's sake." Instead, we believe that life exists for its own sake, that industrial civilization and its philosophy are anti-Earth, anti- woman and anti-liberty to put it simply, the Earth must come first. (paras. 5–6)

EarthFirst!, therefore, potentially faces a dilemma: Can appeals to *biospheric concerns* still gain a hearing from those motivated principally by *social–altruistic* or *egoistic concerns*? Or must wilderness advocates appeal to these other concerns to mobilize broader support from wider publics?

Now that we have introduced some of the behavioral and value-related choices of environmental communication, let us consider some of the range of environmental voices we hear in public spheres.

Diverse Environmental Voices in the Public Sphere

The landscape of environmental communication is complex, as is the possibility of having one's voice heard. Not merely predicated upon whether or not one can speak, as communication scholar Eric King Watts (2001) emphasizes, "**voice**" is as an embodied, ethical, and emotional occurrence of expression that cannot be heard or ignored void of communal contexts and commitments. Whether or not someone feels capable of expressing his or her voice and feels heard is connected to the health of the public sphere. While Watts's research has focused on race and conservative voices, his argument is relevant to the ways in which environmental communication scholars have long studied voice (Peeples & Depoe, 2014).

We all have a voice that constitutes, negotiates, and/or rejects environmental communication in public spheres. Consider, for example, the ways health professionals prescribe exercise or asthma inhalers, when weather forecasters link major storms to longer climate change patterns, how teachers design lesson plans on the water cycle, when faith leaders perform sermons or pray for the environment, and more.

In this final section, we describe just some of the voices you may hear in the public sphere on environmental matters. Individuals in these nine groups take on multiple communication roles—writers, press officers, group spokespersons, community or campus organizers, information technology specialists, communication directors, marketing and campaign consultants, and more. As we discuss in the book, their embodied identities and styles of communicating matter to the ways in which they are heard or not. In this introduction to the topic, we want to emphasize how various voices in public spheres that communicate about the environment may be motivated for different reasons and play different roles.

Citizens and Civil Society

Everyday people who engage public officials about the local environment—such as dealing with asbestos in their children's school or establishing a neighborhood park—and who organize their neighbors to take action are the common sources of environmental change. Citizens or residents of a community linked by common interests and activities are considered part of **civil society**. Consider individuals such as yourself, as well as groups with which you might or might not interact, such as gardening collectives, labor unions, religious communities, and informal neighborhood interactions. Let us explore how this nongovernmental activity comes to matter to the public sphere with an extended example.

In 1978, European American 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 local school's playground, their children developed headaches and became sick. At first, these illnesses were just private concerns: *My kid doesn't feel well.* Then, Gibbs began talking with some of her neighbors about their similar struggles, which made her begin to think this was a public issue, something worth thinking about as more than just her private family but related to her larger community. She also read in a newspaper report that Hooker Chemical Company, a subsidiary of Occidental Petroleum, had buried dangerous chemicals on land it later sold to the school board (Center for Health,

Photo by -/AFP via Getty Images

Photo 1.3 Environmental communication includes anti-environmental communication; however, sometimes, some acts that appear anti-environmental are not. In 2018, for example, thousands swarmed the streets of Paris, France, wearing yellow vests (*gilets jaunes*) to protest the idea that one can address climate change without addressing social inequities. French President "Macron was demanding that the working class sacrifice while the rich were getting tax cuts, public services were being eroded, and green investment was nowhere to be seen" (Kinnenberg, 2019).

Environment & Justice, 2003), giving her a source of pollution to make what once were private health concerns feel like a matter for political debate.

Despite an initial denial of the problem by state officials, including bias against the possibility that housewives might be experts worth hearing, Gibbs and her neighbors sought media coverage, carried symbolic coffins to the state capital, marched on Mother's Day, and lobbied health officials to take their concerns seriously. Finally, in 1982, the residents succeeded in persuading the federal government to relocate many of 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).

Today, Lois Gibbs leads a nongovernmental organization, the Center for Health, Environment & Justice (CHEJ), to provide a clearinghouse of technical and firsthand knowledge to those seeking help in assessing risks (see http://chej.org) and is considered part of a broader anti-toxics public health movement. We note this to illustrate that while we are listing diverse voices, social actors sometimes overlap or transition between categories.

Nongovernmental Organizations and Movements

The United Nations defines a **nongovernmental organization (NGO)** as a nonprofit, voluntary citizens' group that is organized locally, nationally, or internationally to advocate in the public sphere. Environmental NGOs and broader social movements are among the most visible sources of environmental communication in public spheres. These groups come in a wide array of organizational types and networks, online and on the ground, well-established and emergent or new.

NGOs range from grassroots groups in local communities to nationwide and internationally established organizations. In every country, NGOs exist to advocate for a wide range of environmental concerns and hopes. In India, for example, Navdanya, meaning "nine seeds" (navdanya.org), is a women-centered movement for protecting native seeds and biological diversity, while the African Conservation Foundation (africanconservation.org) is a continent-wide effort to protect Africa's endangered wildlife and their habitats. Other groups, such as Greenpeace (greenpeace.org) and Avaaz (avaaz.org), organize on an international scale in the fight against climate change and for environmental sustainability. Notably, students and campus groups have been at the forefront of environmental change throughout history. We will discuss many of these examples of grassroots actions as vital modes of environmental advocacy throughout this textbook.

Anti-environmental NGOs and movements also exist. Sometimes, these are grassroots-driven, and sometimes, they are industry front groups attempting to sound like civil society voices. Though this book primarily focuses on the wide range of environmental advocates, we also bring your attention to voices like those who oppose wolf reintroduction or actions to address climate change to emphasize the ways in which the public sphere is a space of contest, in which the challenge is not just deciding what you want to communicate but also finding ways to move others who may not agree. Finding common ground with those who might seem to disagree can be an important first step for NGOs and social movements working across political affiliations.

Politicians and Public Officials

Governments are organized at a wide range of scale, including but not limited to cities, states, nations, and intergovernmental organizations. Within any of these governing bodies, there is a range of public figures in charge of managing and communicating about environmental matters, including politicians and public officials. Politicians and public officials are charged with making decisions about public goods, such as utilities, public squares, national forests, and more, as well as making decisions about private interests. They also reflect whether or not a society is democratic, legislating, judging, policing, and protecting access to public goods, public speech, public participation, public spaces, public policy, and other elements that indicate the health of a democracy. While publics may exist without a government, governmental support can ideally enable under-heard, more diverse voices to have greater opportunities to be heard. This is why key modes of environmental advocacy include **electioneering**, mobilizing voters for candidates and referenda, and **lobbying**, influencing laws or government regulations through direct written or oral communication with public officials after analyzing policy options. Furthermore, the environment is a significant topic in most elections; the voices running for office or working in government, therefore, reflect the whole spectrum of political opinions, including anti-environmental backlash.

Businesses

The United Nations organizes environmental and other intergovernmental decision-making around three sectors: civil society and NGOs, governments, and business. The business sector represents corporations or what sometimes is referred to as “the private sector.” This realm of public life is referred to as “private” because, unlike governments, these organizations have little legal requirement to make decisions, knowledge, or opinions public.

As with all other voices we note here, the voices of corporations span the spectrum of environmental communication. Some corporations are building solar panels as thin as hair, selling recycled products, and imagining how to improve the public sphere by making Election Day a day off from work. Other businesses may prioritize private financial gain over improving the world we all live in, launch disinformation campaigns, avoid paying taxes for the greater good, pollute, and impede environmental legislation. No matter the intent or impact, the voices of businesses in the public sphere are undeniably present, from lobbying governments on decision-making to promoting public relations through multimedia campaigns. This also is why, as we will discuss later in the textbook, market pressure as a mode of environmental advocacy increasingly is a popular strategy, including boycotts and divest and reinvest climate campaigns.

Scientists and Scholars

Much of what we know and believe about communication, the environment, and the public sphere has been established and studied by scientists and other scholars. In public spheres more broadly, environmental scholars play many roles: as organizers and advisors in civil society, with NGOs, as consultants for governments and businesses, and in communicating their findings in published reports, public testimony, editorials, blogs, documentaries, performances, and more.

In 2011, environmental scholars and practitioners established the International Environmental Communication Association (theieca.org) to coordinate research worldwide. Interest has grown not only in North America, the United Kingdom, and Europe, where “environmental communication has grown substantially as a field” (Carvalho, 2009, para. 1), but also throughout the world. We draw on these voices throughout the book.

Notably, scientists working for universities, governments, and corporations face different limitations and possibilities when communicating in the public sphere than in other areas. Climate scientists, for example, have provided vital research and testimony that has shaped public understanding of anthropogenic climate change, prompting public debate over actions by governments. Early warnings of scientists have contributed substantially to public awareness, debate, and corrective actions on everything from asthma in children to how species may adapt, resist, and evolve in relation to climate changes. Scientists also can help us, for example, identify keystone species and make connections between plankton in the ocean and our ability to breathe. Given the resistance to science that many have observed, particularly since the 2016 U.S. presidential election, more and more climate scientists specifically are considering how to improve the communication of their findings to the public in more effective and urgent ways. We address this topic in Chapter 10.

Journalists

As we address in Chapter 9, it would be difficult to overstate the impact of journalism—both “old” and new—on environmental communication and the public sphere. Journalists not only share information but also may act as conduits to amplify other voices—citizens, public officials, corporate spokespersons, academics, and more—seeking to influence public attitudes and decisions about environmental matters. A healthy democracy long has been gauged by the health of the press.

Journalism has gone through a great transformation in our lifetime, given changes in communication technologies. With more people having greater access to share information more quickly, over farther distances, the role of journalists has adapted. Today, most of us do not worry about a lack of information; instead, the greater challenge is figuring out how to sort through, critically think about, and make judgments about environmental news. Who can we trust not to be driven by bias over evidence? Which sources of information can help us make links to causes and outcomes instead of just presenting isolated segments that can grab our attention momentarily? How will news organizations raise funds for long-term investigative research to hold governments and industry accountable?

Communication Professionals and Creatives

In addition to journalists, there are numerous other applied communication professionals who shape the public sphere, including artists, performers, media producers, public relations officers, advertisers, and more. If you tell people you want to become a communication professional or creative, they often think you're learning to become a newscaster. Some are, but the field is much broader. In fact, there might not be a major industry today that doesn't employ communication professionals, including "education, health, finance, not-for-profits, the government, and sports," who have skills such as: "writing, graphic design, public speaking, research, video editing, blogging, social media strategy, community engagement . . . , data analytics,

iStock/Suvra Kanti Das

Photo 1.4 Companies tell us plastic can be recycled, but what does that mean? Decisions about waste do not just "go away" after you throw them in a bin—waste moves. This is a picture from a plastic recycling factory in Dhaka, Bangladesh. "The plastics industry accounts for 1 per cent of Bangladesh's gross domestic product. Its domestic market value is about $1,000 million and the sector employs about five million people" (Islam, 2020).

photography, search engine optimization, coding" and more (Clivane, 2017). Many students who have learned from this textbook, for example, have gone on to be hired in careers such as environmental nonprofit organizer, green advertising, and environmental lobbyists.

Lawyers and Judges

As noted previously, environmental communication also is negotiated in the courts. Litigating, that is, seeking legal remedies through the courts for compliance with existing standards or to set new ones, is a vital mode of environmental advocacy. We provide examples throughout the textbook, particularly in Chapter 13, that illustrate how, in making arguments in courts and delivering judgments, litigation has been an essential sphere of environmental communication. Although Hollywood films have popularized the idea of a white lawyer savior willing to risk everything to save a community (Pezzullo, 2006), most court cases require many years of labor, community investment in collecting evidence, and do not guarantee success. Nevertheless, for example, 2020 saw three legal victories against pipelines that were won in courtrooms and celebrated by grassroots communities who had protested or otherwise resisted their development: Dakota Access pipeline, Keystone XK oil pipeline, and the Atlantic Coast Pipeline (Hansman, 2020).

Places and Nonhuman Species

We open and close this book acknowledging and thinking about all the sentient life that communicates to us. Both of us live with four-legged family members who often are some of the first to communicate with us in the morning (expressing "Feed us" and "Let me outside" through snuggles, meows, and whimpers). Some might think these interactions are private, not relevant to the public sphere. Yet, environmental communication would not exist without places we love (for respite, that we call "home," etc.) or nonhuman species (who doesn't associate environmentalism with saving trees or whales?). While we tend to emphasize human voices in this textbook, environmentalists tend to agree that the nonhuman also speaks into publics, shaping—for example—our moods, our ability to breathe, and our sense of companionship.

Summary

This chapter defined environmental communication, its major areas of study, and the principal concepts around which the chapters of this book are organized:

- The term *environmental communication* itself was defined as the *pragmatic and constitutive modes of expression—the naming, shaping, orienting, and negotiating—of our ecological relationships in the world, including those with nonhuman systems, elements, and species.*
- Using this definition, the framework for the chapters in this book builds on three core principles:
  1. Human communication is symbolic action.
  2. As a result, our beliefs, choices, and behaviors about the environment are imagined, shared, and judged through communication.
  3. The public sphere (or spheres) is a discursive space in which

competing voices engage each other about environmental matters as a cornerstone of democratic life.

Now that you've learned something about the field of environmental communication, we hope you're ready to engage the range of topics—from the challenge of communicating about climate change to your right to know about pollution in your community—that make up the practice of speaking for/about the environment. And along the way, we hope you'll feel inspired to join the public conversations about environmental crisis and care.

Suggested Resources

- On how carbon footprint apps often are used as corporate advertising to focus publics on individual change rather than systemic change, see: Kaufman, M. (2020). The carbon footprint sham: A 'successful deceptive' PR campaign. *Mashable*. Retrieved from https://mashable.com/feature/carbon-footprint-pr-campaign-sham/
- On where plastic bag bans have been established internationally and state by state, see: Reusethisbag.com (2020). A new study on plastic bag bans. https://www.reusethisbag.com/articles/where-are-plastic-bags-banned-around-the-world/
- The following book explores how people give voice to, and listen to the voices of, the environment: Peeples, J., & Depoe, S. (Eds.). (2014). *Voice and environmental communication*. Basingstoke, UK: Palgrave Macmillan.
- Follow or subscribe to an environmental daily news site, like one of the following: Environmental News Network (enn.com), Grist (grist.org), *The Guardian*'s Climate Change page (theguardian.com/environment/climate-change), or Al Jazeera's Environment News page (aljazeera.com/topics/categories/environ-ment.html).

Key Terms

Attitude–behavior gap 16
Biospheric concerns 17
Care discipline 9
Civil society 18
Constitutive 5
Crisis discipline 9
Egoistic concerns 17
Electioneering 20
Environmental communication 4
Lobbying 20
Nongovernmental organization (NGO) 19
Pragmatic 4
Scapegoating 14
Social–altruistic concerns 17
Symbolic action 4
Voice 18

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? Which environmental voices are you trying to hear?
2. 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? Do you agree or disagree?
3. Starting in this chapter and in the rest of the book, we will highlight “another viewpoint” to consider a range of perspectives on environmental communication topics that we address. With some people living in segregated neighborhoods and many using personalized digital media newsfeeds, do we hear a diversity of voices in our everyday lives? What steps do you take to hear voices and opinions that differ from your own? Do you feel you ever benefit from *dissoi logoi* or do you only learn from people who already agree with you?
4. In class or at home, watch this toy store ad on YouTube: https://www.youtube.com/watch?v=WHhBaU4cFDQ. Pragmatically, this company wants its audience to go to its toy stores and buy more toys that it sells; what is less obvious is the constitutive communication of the ad, deliberate or not: How does the company constitute its toys in contrast to nature? What assumptions does it make? What stereotypes does it reinforce or challenge about children?