Introduction

The complexity of environmental problems, with their intricate connection to the material, cultural, social, economic, political aspects of our lives, invites scholars to bring diverse conceptual, theoretical, and methodological frameworks to the task of understanding and mitigating these expansive concerns. The more perspectives, the more dynamic our understanding of these problems and the greater options available to us for dealing with the most pressing issue of our time.

This chapter explores approaches for analyzing communication that have as their primary goal gaining insight into how communication constructs and influences people's awareness, orientation to, and sense-making of the environment. These humanist and critical approaches are less concerned with unearthing environmental “facts,” but rather focus on understanding how communication functions pragmatically and constitutively. The rigor for these approaches comes both in the close, critical engagement of texts, informed by specific conceptual and/or theoretical insights, and, at other times, in the systemic application of methodology and the use of textual evidence to support claims made by researchers.

Rhetorical criticism, the first approach introduced in this chapter, is primarily used to explain how communication functions through the analysis of symbolic acts and artifacts, broadly referred to as the “texts.” A broad, multifaceted approach, rhetorical criticism encompasses both a hermeneutic orientation as well as more defined methods of critical interpretation when contemplating a text or set of discursive practices, including what have been termed Neo-Aristotelian, genre, feminist, metaphor, cluster, pentadic, narrative, and ideological (Foss, 2009). Each has its perceptual strengths and limitations, leaving it to the discretion of the critic to formulate an interpretive approach that provides the most insight into the subject being analyzed.

Discourse analysis, the second approach examined in this chapter, has an even more extensive reach, spanning humanist, critical/cultural, and social scientific perspectives. Trappes-Lomax (2004) lists the various discourse analysis approaches: pragmatics (including speech act theory and politeness theory), conversation analysis, ethnography of communication, interactional sociolinguistics, systemic-function linguistics (SFL), Birmingham school discourse analysis, text-linguistics, pragmatic and social linguistic approaches to power in language, and critical discourse analysis (2004: 136). In this chapter, I focus generally on the discourse analysis approaches found in environmental communication that come from humanist or critical perspectives.
The rhetorical and discursive approaches discussed here are “sister disciplines” (Milstein 2009). They explore similar subject matter (e.g. discourse and media) and often present complementary findings. They do, however, have different theoretical groundings that are manifested in their various applications. This stems in part from rhetorical criticism being primarily a U.S. approach with its origins in public oratory. Discourse analysis comes principally from a European tradition with its grounding in linguistics. While somewhat unconventional to address these two approaches together, I will focus this discussion on overlapping elements of the two approaches that are the most productive for understanding environmental communication scholarship.

Both approaches are used to investigate texts, symbolic acts, discursive practices, and/or language-in-use that reference or constitute the “environment” or the natural world. The materials for analysis include everyday conversations, corporate and scientific documents, public addresses, print and digital media, political actions, protests, books, websites, images and films, and acts of tourism and consumption. The goal of such analyses are broadly to understand the relationships between the material and the symbolic and the ideological as they are reflected and constructed in a variety of venues and contexts. Rhetorical critics and discourse analysts investigate how discourses socially construct an invested, partial and always subjective understanding of the environment. Scholars also analyze, extend and test existing theories by applying them to environmental case studies. Finally, many scholars intend their research to aid or influence changes in attitudes and practices affecting the environment.

The various modes of analysis within each approach range from a focus on written or spoken words to explorations of the visual, of performance, of hegemonic discourses, or textual fragments. Partially in response to changes in the subject matter and partially in response to a broadening knowledge of the social and political in environmental controversies, practitioners of both methodologies have made a critical—and visual—turn, incorporating European social theorists, such Michel Foucault, Jürgen Habermas, and Roland Barthes. The incorporation of these critical theories have enriched and deepened an appreciation of how power influences the choice of symbols and the construction of meaning.

In the following sections, I define key terms for discourse analysis and rhetorical criticism, offer an introduction to each approach, provide snapshots of the types of environmental communication research being performed, and explain the perspectives and insights revealed in the analyses. While the two approaches function similarly, it is in the application of the various modes of analyses where one can witness their capacity to explain how environmental communication functions.

**Rhetorical criticism**

**Rhetoric**

The study of rhetoric is usually said to have begun in early Greece with the writings of philosophers Plato, Isocrates, and Aristotle (fourth century BCE), and continues to the present. Aristotle defined rhetoric as, “the faculty of observing in any given case the available means of persuasion” (Herrick, 2009: 77). Other definitions also emphasize rhetoric’s ability to influence audiences, for example, Francis Bacon’s eloquent statement of rhetoric as the application of reason “for the better moving of the will” (1828).

Contemporarily, Hauser explains that rhetoric is an “instrumental use of language.” “Its goal is to influence human choices on specific matters that require immediate attention” (1986: 11). Foss expands the notion of rhetoric, arguing that to view it solely as a means of persuasion limits its capacity to invite interaction and understanding. She chooses to define it more broadly as the “human use of symbols to communicate” (2009: 3).

Often citing Kenneth Burke (1966), rhetoric scholars also agree that, in the same act of inviting, informing or persuading, rhetoric also socially constructs meaning based on linguistic and other symbolic choices. Burke, in his theory of terministic screens, maintains that language always reflects, selects, and
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deflects a particular reality. But as the use of certain symbols becomes normalized and naturalized, the inherent partiality of the rhetorical construction (in shaping an audience’s perception) may be overlooked, necessitating a critic to explain and clarify rhetoric’s influence.

Critical approaches

Rhetorical criticism is broadly considered to be “the business of identifying the complications of rhetoric and then unpacking or explaining them in a comprehensive and efficient manner” (Hart and Daughton, 2005: 22). In accounting for such “complications,” critics have engaged a range of texts and discursive practices from an interpretative, or hermeneutic, fashion (Ricoeur, 1974; Hyde and Smith, 1979), as a “critical rhetoric” (McKerrow, 1989) and as a “[q]ualitative research method that is designed for the systematic investigation and explanation of symbolic acts and artifacts for the purpose of understanding rhetorical processes” (Foss, 2009: 6). With the origins of rhetoric grounded in the speeches of ancient Greece, the first texts chosen by early critics explored the spoken argument. Just as more contemporary critics have expanded to encompass many forms of symbolic representations, environmental communication scholars have also extended the range of texts considered, including advertisements, government and corporate documents, websites, news reports, protests, photographs, literature, films, and books.

Noting concerns that a critic applying a predetermined approach potentially limits findings, Foss (2009) maintained that most scholars use a generative approach to rhetorical criticism. Instead of starting with a particular method, such critics generate “units of analysis or an explanation from [the] artifact rather than from previously developed, formal methods of criticism” (2009: 387). This also allows critics to adapt and adopt forms of analysis that are capable of explaining the symbolic workings of nontraditional rhetorical texts, such as image events (discussed below) that would be difficult to analyze if restricted to language-focused methods.

A more recent approach to rhetorical criticism has been termed “critical rhetoric,” explained by McKerrow (1989) as a method for analysis influenced by social theorist Michel Foucault (1926–1984) that has as its primary purpose the critique of domination and freedom: an analysis of the discourse of power. McKerrow argues that critical rhetoric’s purpose is to “understand the integration of power/knowledge in society—what possibilities for change the integration invites or inhibits and what intervention strategies might be considered appropriate to effect social change” (1989: 91). Coming to environmental communication through engagement with environmental issues and/or with an awareness that many existing systems and organizations function to the detriment of the environment, scholars of environmental rhetoric often bring such a critical rhetoric perspective to their research.

In the following section, I provide examples of some of the analyses taking place in environmental communication, paying special attention to the research questions the authors are addressing and how the methodological choices they make aid in their analyses.

Rhetorical criticism in practice

One of the first examples of environmental rhetorical criticism in the U.S. was Christine Oravec’s (1981) study of the persuasive strategies used by California preservationist John Muir in his natural history essays. Oravec began her analysis by asking how a literary writer so profoundly altered people’s understanding of nature that legislators who had never set foot in the region voted to set aside Yosemite Valley for preservation. Closely analyzing the essays written by Muir in the years surrounding the campaign for Yosemite as a National Park, she found two rhetorical strategies at play.

First, Muir incorporated elements of the sublime response in his writing, a religious feeling akin to seeing the face of God. It required “the immediate apprehension of a sublime object; a sense of overwhelming personal insignificance akin to awe; and ultimately a kind of spiritual exaltation” (1981: 248).
Second, Oravec argued that Muir needed to create a literary persona that would “identify the readers’ more or less passive literary experience with the activity of the figure,” in many cases that of a “true mountaineer” (248). The reader was encouraged to see, hear, smell, and experience that which Muir was describing, at times speaking directly to “you.”

These rhetorical strategies turned the audience from inert readers to dynamic participants, feeling the overwhelming awe and wonder that comes when one is in physical contact with the natural world. Oravec’s explanation of the sublime response allowed her to investigate and explain the rhetorical strategies used by Muir as well as provide insights into the reasons for his literature’s success in changing public and political opinion.

Rhetorical criticism also allows scholars to move beyond the texts or impact of one speaker, author, or “rhetor.” Killingsworth and Palmer (1995), for example, began by asking what it is in the messages and style of environmental writers and thinkers that leads to calls of “hysteria” from their opposition. Instead of beginning with a close examination of the text, they embarked on a genealogical analysis (Foucault, 1978) of hysteria in order to comprehend its current application to environmentalists. They argued that their goal was not to “create an accurate, one-to-one correspondence in the analogy between the discourse of environmental crisis and the discourse of hysteria … but rather to use the psychoanalytic model to display and examine the motions at work in the environmental debate” (Killingsworth and Palmer, 1995: 3).

Their analysis found similarities in environmental discourses that had been labeled hysterical: they address human health; they publicly challenge “the value and direction of technological development”; and they use apocalyptic rhetoric in their appeals (1995: 2). Killingsworth and Palmer argued that just as “hysterics” before Freud were often diagnosed as faking their physical symptoms because of the complexity of the mind–body connections, environmental rhetors, such as Rachel Carson and Paul Erlich, are deemed hysterical because of the complexity of proving the relationship between human actions and environmental outcomes. They warn that as hysterics have lashed out at individuals in an unconscious attempt to overwhelm, overpower, and subdue their bodies, rhetorical acts, such as Carson’s castigation of “Neanderthal” science and scientists who do not recognize toxins at work in the environment, may come from the same unconscious desire to control outcomes, but may in fact be detrimental to the movement because it does not attempt to “rehabilitate or convert the other side” (1995: 15). As with Oravec’s use of the sublime, Killingsworth and Palmer’s work illustrates the flexibility of rhetorical criticism as a method of critique as it allows for the use of concepts outside the communication discipline to function as conceptual frameworks for analysis.

In the next two examples, the authors examine the strengths and weaknesses of traditional rhetorical concepts and approaches by applying them to contemporary environmental texts. In these projects, both the rhetorical concept and the text were laid open for critique. In the first, Foust and Murphy (2009) conducted a frame analysis of newspaper articles that featured discussions of climate change in order to understand how apocalyptic claims function in global warming discourse. When performing a frame analysis, critics examine how a rhetor’s choice of symbols (words, images, layout, etc.), shape the audiences’ understanding of the content, often precluding other equally viable readings. A close analysis of the frame further “permits critics to identify constitutive structures in a discourse, but also to consider the structures’ possible impacts in terms of agency, public opinion, policy, and democracy” (2009: 152). This approach is one that is commonly seen in both rhetorical criticism and discourse analysis research, especially in media studies.

Examining the news content that used the terms “catastrophe” in the text and “global warming” or “climate change” in the title, Foust and Murphy found two variations in the apocalyptic rhetoric. They argued that a tragic apocalyptic frame leads the reader to believe that human fate is sealed, while the comic frame argues that, while flawed, humans still have the capacity to influence the outcome of global warming. In conclusion, they contended that the comic frame allows for continued engagement and action from the audience and advocate its use in global warming discourse.
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Using the rhetoric surrounding the asbestos contamination in Libby, Montana as his case study, Schwarze countered that melodrama can, in certain circumstances, “transform ambiguous and unrecognized environmental conditions into public problems; it can call attention to how distorted notions of the public interest conceal environmental degradation; and, it can overcome public indifference to environmental problems by amplifying their moral and emotional dimensions” (2006: 240). He concluded with a call for critics to avoid discounting rhetorical approaches without evaluating them within a particular context. This is especially true in environmental controversies where the rhetorical tactics of the marginalized may be judged differently when wielded by those in power.

Finally, in Image Politics: The New Rhetoric of Environmental Activism (1999), Kevin Michael DeLuca also questions disciplinary practice when he asked what are appropriate texts for rhetorical criticism scholarship. He argued that rhetorical critics have not taken images or radical political actions seriously enough in their research. Both have been characterized as illustrations or spectacles that are meant to draw attention to the “real” rhetoric (rational, reasoned, written, or verbal discourse), and that even when critics ostensibly maintain that they are analyzing images or acts of protests, they often center on the words that surround them more than images/acts themselves. In response, he offered an analysis of “image events” in which people engage in public acts, “employing the consequent publicity as a social medium through which to hold corporations and states accountable, help form public opinions, and constitute their own identities as subaltern counterparts” (1999: 22).

Most importantly to DeLuca, image events are social and political “critique through spectacle, not critique versus spectacle” (22). He offered for analysis Greenpeace’s anti-whaling campaign in which people on rubber dinghies place themselves between the whaling ship and the whales and EarthFirsts! Redwood Summer, where activists in California sat in trees slated for logging, often putting their lives at risk for the forest. He contended that image events are “the primary rhetorical activity of environmental groups that are radically changing public consciousness” (1999: 14) and are therefore worthy of critical attention as to the ways they function as “mind bombs” that transform the way people see the world. Allowing the image events to motivate the analysis, DeLuca employs a fusion of postmodern theory, media theory, and cultural studies for his analysis.

As illustrated through these examples of rhetorical criticism, the approach has the flexibility and breadth to allow for close analyses of particular texts and can also track and reveal environmental discourses as they appear in multiple venues. Traditional rhetorical concepts (tragic frame), theories, and ideas from other disciplines (hysteria) can be brought to bear in order to better understand how environmental communication functions. The approach allows scholars to use their findings to critique the efficacy of environmental public discourse as well as use them to reflexively analyze how critics work. Rhetorical criticism analyses tie the specific use of symbols to larger environmental and disciplinary understandings.

Discourse analysis

Discourse

James Paul Gee, in his foundational work in discourse analysis, differentiated between what he referred to as “little d” and “big D” discourse. “Little d” discourse is language-in-use—“connected stretches of language that make sense, like conversations, stories, reports, arguments, essays” (Gee, 1990: 142). Capital D
“Discourses” are symbolic guides that attempt to simplify and explain the world around us. They are a “set of meanings, metaphors, representations, images, stories, statements, and so on that in some way together produce a particular version of events” (Gee, 1999: 201). As scripts, they provide order and insight for the vast amounts of data that perpetually engage us. A person who subscribes to a particular discourse is able to take fragments of information and create meaning through their placement within the discourse’s narrative (Dryzek, 1997: 9). Dryzek added, “Each discourse rests on assumptions, judgments, and contentions that provide the basic terms for analysis, debates, agreements, and disagreements” (1997: 9).

Discourses can also tell us who we are, how we should act, and define our place of existence and our purpose. “These discourses project certain social values and ideas and in turn contribute to the (re) production of social life” (Hansen and Machin, 2008: 779). Discourses are manifest in language, and, therefore, analyses of language use can reveal the discourses that inform their construction. This revelation is important as discourses, such as neoliberalism, become normalized, naturalized, or “common sense,” they maintain power over our sense of “reality,” but fail to call attention to themselves as human constructs. Analysis is then essential for unpacking and revealing the powerful and at times elusive discourses that underlie and motivate human thought and action.

**Method**

Discourse analysis is the “study of language in use” (Gee and Handford, 2012: 1). It shares many of the same assumptions as those found in rhetorical criticism: that “language is ambiguous”; it is always “in the world”; the way we use language is inseparable from who we are and the different social groups to which we belong (Jones, 2012). Combining its roots in linguistics, philosophy, and sociology, discourse analysis examines the socially constructed meanings and relationships found in language. As Gee and Handford explain, “‘Discourse analysis’ covers both pragmatics (the study of contextually specific meanings of language in use) and the study of ‘texts’ (the study of how sentences and utterances pattern together to create meaning across multiple sentences or utterances)” (2012: 1). Additionally, discourse analysis unearths the discursive logic often hidden within a text, takes it apart, shows the reader how it works, and then puts it back together again in a way that makes what was previously invisible, visible (Carbaugh and Cerulli, 2013: 11).

Gee and Handford divide discourse analysis into four categories. The first continues the close association with linguistics, with a particular emphasis on grammar and structure. The second looks at themes or images within an oral or written text, with the third focusing on the description and explanation of discourse’s function. The fourth type, often called critical discourse analysis, is “interested in tying language to politically, socially, or culturally contentious issues and in intervening in these issues in some way” (Gee and Handford, 2012: 5).

Critical Discourse Analysis (CDA) is a wedding of linguistic and social approaches that, according to Stamou and Paraskevopoulos (2004), works to rectify the shortcomings of both. They argue that linguistic discourse analysis, with its focus on the linguistic text, “has failed to account for its social nature.” Social discourse analysis, on the other hand, has “neglected the role of language” in shaping symbolically constructed reality (2004: 107). CDA then has “the goal of looking beyond texts and taking into account institutional and sociocultural contexts.” It involves “questioning the role of discourse in the production and transformation of social representations of reality, as well as social relations” (Carvalho, 2008). As we will see in the following examples, the reach of discourse analysis approaches allows for multiple perspectives and insights when analyzing environmental communication.

**Discourse analysis in practice**

Seeking to understand how visitors negotiate the “duality” and potential contradiction of ecotourism (tourism and environmentalism), Stamou and Paraskevopoulos (2004) employed a lexical analysis to
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examine language found within guest books from two visitor centers at a Greek nature reserve. With a lexical analysis, the researcher focuses on the specific word choice of the text producers. Stamou and Paraskevopoulos maintained that it “is through vocabulary that text producers and consumers identify different discourses, whereas speakers summarize their representational image via some key words” (2004: 111–112). After charting the terms used in the guestbook on a tourism–environmental continuum, with the middle representing both activities, they found that a few of the “images” constructed through the guests’ language were in the middle of the continuum, leaving the researchers to conclude that the discourse constructed “a dualism rather than a duality of ecotourism, and thus favoring their competition rather than their reconciliation” (2004: 124). The lexical analysis (similar in some ways to rhetorical criticism’s close textual and cluster analyses) allows the researcher to make claims to the perspectives and intentionality of the text producers based on the interdependent relationship between individuals’ worldview and their word choice.

Moving from a focused investigation of word choice to one that looks more broadly at the social construction of an environmental issue, Carvalho (2005) used CDA to answer the question: “How is political governance of climate change constructed in and by the media?” (2005: 3). Carvalho employed an analysis of discursive strategies that, like the emphasis on persuasion found in much of the rhetorical criticism research, are understood as “forms of (discursive) manipulation of ‘reality’ by social actors in order to achieve a certain goal” (2005: 3). Her texts for analysis were three British “quality” newspapers’ coverage of climate change. Carvalho focused on the newspapers’ responses to “critical discourse moments” which are particular events that “challenge existing discursive positions and constructs or, in contrast, may contribute to their further sedimentation” (2005: 6). She complemented the specificity of that analysis with a longitudinal study looking at the evolution of climate change coverage over the period of her case study. This allowed Carvalho to make claims about the government’s influence that she would have been unable to do with a smaller set of texts or a limited timeframe. She found that the government’s discursive framework directly impacts the language used by the three newspapers, both in being shaped by and departing from the prevailing government frame.

Carbaugh and Cerulli (2013) differ substantially in their means of analysis from the previous examples. They examine discourse collected through ethnographic interviews (as opposed to public, written or spoken texts) and use a cultural discourse analysis approach. The goal of their work is to explore “human relations with nature, while embracing cultural and linguistic variability in these processes” (2013: 8). They do this through their study of discourses of dwelling or “place,” specifically for this project, nontraditional hunters’ descriptions of New England hunting grounds.

Carbaugh and Cerulli maintain that communication is “doubly placed” in that communication happens in and is affected by place and that communication is used to construct people’s understanding of it. They explore the cultural knowledge of place created through the interaction of five “discursive hubs,” namely, identity, action, feeling, relating, and dwelling, all made explicit in people’s communication practices. As with the analyses discussed previously, the authors are attempting to understand and interpret the underlying discourses that influence humans’ attitudes and actions. In this case, the authors are focusing on the “cultural logic in the discourse” and making its “radiants of belief and of value, more readily visible for consideration” (2013: 16). The approach outlined by Carbaugh and Cerulli differs most greatly from rhetorical criticism and the other examples of discourse analysis in that they focus on the cultural codes at play within an individual’s language as revealed through interviews and critical evaluation.

Hansen and Machin (2008) show us yet another means to analyzing discourse, this one concentrating on visual images as a subject for examination. Following the lead of Kress and van Leeuwen (2006) who examine the language of visual design, the authors contended that “just as we can describe the way that discourses are signified in texts through lexical and grammatical choices so we can look at the visual semiotic choices that realize these in images” (2008: 777). They used a visual approach to explain how
discourses presented in the media “might shape public perceptions of the environment and green issues” (2008: 777). Taking a multimodal CDA approach, which allows the researchers to look at “modes” beyond written and spoken language, they examined how the Getty’s “Green Collection” of images construct a particular environmental discourse, one, they argued, that is more in harmony with marketing than raising concern for environmental degradation (2008: 778). They contended that a multimodal CDA approach allowed them to “analyse the way that Getty images and the terms available for searching the images, convey particular kinds of scripts, values and identities and what kinds of social relations these favour” (2008: 781). As with DeLuca’s work in rhetorical criticism, Hansen and Machin are expanding the parameters of discourse analysis from language to images in order to maintain the relevancy and applicability of their chosen method for the most current iterations of environmental communication.

This review of environmental critical and discursive scholarship is in no way attempting to be encyclopedic. Instead, it provides examples that can be used to argue for the breadth, depth, and significance of these methods as a means for investigating environmental communication.

**Conclusion**

In her analysis of global warming discourse, Livesey (2002) demonstrated how rhetorical and discursive methods can reveal distinct aspects of the same set of “texts.” She applied Kenneth Burke’s dramatistic approach for her rhetorical critique and Michel Foucault’s theories as the framework for her discourse analysis. Livesey (2002) concluded that rhetorical criticism provides insight into the use of symbols for persuasion, noting specifically how the “rhetor” uses language to influence the “audience’s” actions and attitudes through tactics such as identification. The focus of rhetorical criticism, she argued, is on how symbols function in a specific controversy—a micro level of analysis.

Using Foucault’s theories to analyze the same set of texts, she maintained that discourse analysis reveals how language reflects and reproduces “taken-for-granted realities that govern practice in the wider social arena” (2002: 140). Discourse analysis, she contended, explains how larger social systems manifest themselves in a particular text—a macro level of analysis.

While her work provides an interesting point for comparison, it restricts the breadth and complexity of both approaches by making methodological-level claims using only two theories/theorists. Livesey recognized this limitation. She observed that many rhetorical critics have begun to embrace the practices and theories of the social, cultural, and critical scholars, contending that “the lines between rhetorical analysis influenced by Burke and Foucauldian-inspired discourse analysis have started to blur” (2002: 140).

Livesey’s analysis does however provide a useful framework for understanding the significance and impact of rhetorical and discursive approaches to researching environmental communication. They both explore the use of symbols and explain how those symbols function within the particular context, often illustrated through a case study. They reveal how the language used within that context influences, and is influenced, by larger cultural, political, economic, and/or social systems in play. Because they are not restricted by the need to limit variables and replicate findings, these methods are well suited to investigate and reveal the complex relationship between the symbolic and the material environment.

**Note**

1 Kenneth Burke explains the comic and tragic frame in *Attitudes Towards History* (1984).

**Further reading**

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Enviropop provides excellent examples of rhetorical criticism’s use for analyzing nontraditional texts: Hallmark cards, television shows, and SUV advertisements, to name a few.


The authors use a linguistic foundation to explore the rhetoric of science, environmental narratives, metaphor, temporal dimensions, and ethno-ecology.


Dryzek’s book provides a big-picture explanation of environmental discourses by charting them into categories for analysis and comparison: problem solver, survivalist, sustainability, and green radical orientations.

References


