



Introduction

Annelie Sjölander-Lindqvist

This book is a collection of chapters that explores and discusses the influential and pervasive role of communication on issues pertaining to the environment. Every day we read, hear, or see communication about environmental issues: in regular news media, on Facebook, through tweets, on TV, at work, at school, or at parties. While there are countertendencies and a movement that denies climate change and downplays environmental issues, the issues of climate change, loss of biodiversity, and overexploitation of natural resources continue to make up a large proportional part of the societal debate. Issues related to the environment are truly global and influence people all over the world in the contemporary epoch of the Anthropocene—but both consequences and responses to environmental crisis differ depending on local politics and local dependency on the environment, as well as cultural understandings.

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A. Sjölander-Lindqvist (✉)

School of Global Studies & Gothenburg Research Institute, University of Gothenburg, Göteborg, Sweden

e-mail: annelie.sjolander-lindqvist@gu.se

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USA. The session “Anthropological Contribution to Environmental Communication” grew from the concern about sustainability and the wish to explore the different ways individuals and collectives experience, understand, and act upon environmental challenges. The contributions to this volume proceed from the premise that anthropology is well positioned to contribute to the study of environmental communication.

Anthropology’s focus on the holistic dimensions of the human condition, its interest in understanding humankind’s cultural variation wherever it occurs, and its sensitivity to both similarities and differences, while never losing sight of the powers of politics, ideologies, economies, and ecologies, provide a solid foundation for such a contribution. This book tries to make sense of how an anthropological perspective can further our understanding of the diversity of environmental communication and the different ways people—verbally and non-verbally—communicate about and with their surrounding environments. An important aspect lies in the discussion of the communicative prospects for sustainability, seeking to bring anthropology into more theoretically and empirically productive engagement with the study of environmental communication.

ENVIRONMENTAL COMMUNICATION

Within the overall argument for much-needed transformative environmental change (Díaz et al., 2019; Sygna et al., 2013; United Nations, 2015)—be it radical through deep systematic and structural shifts that challenge our assumptions, beliefs, and values (Armitage et al., 2017) or gradual through changes to the existing order rather than a radical rebuilding of it (Armstrong, 2006)—communication remains a crucial and critical element. This is reflected, for example, in the utilization of communication as a strategy to inspire people to behave in ways less destructive to the environment (e.g. McAfee et al., 2019) and the prevalent employment of collaborative- and partnership-directed governance processes to spur new insights and ideas, and to increase political legitimacy (e.g. Chaffe et al., 2016; Sandström et al., 2018; Valadez, 2018). Other examples are provided by the role of artistic media and games in spurring awareness of environmental concerns and swaying public opinion (Brady, 2011; Fjællingsdal & Klöckner, 2020; Morrison, 2018). The study of negotiations and struggles surrounding the construction of biogas plants and other ecological modernization projects and plans is another field of interest with relevance for environmental communication, where

the intent is to discern the role of intersubjective communication in issues pertaining to the environment (e.g. Alarcón, 2015; Alarcón, chapter “Power, Conflicts, and Environmental Communication in the Struggles for Water Justice in Rural Chile: Insights from the Epistemologies of the South and the Anthropology of Power” of this book; Walker et al., 2019). Descriptively speaking, environmental communication can be said to constitute a field of practice, research, and scholarship in the nexus of environment and human communication that “can play an important role [...] in understanding, critically analyzing and facilitating transformations to more sustainable and just societies” (Joosse et al., 2020, p. 10).

Recent years have witnessed a growing interest in the role and societal value of environmental communication research, in particular as scholarship finds that communication can enhance policy implementation (e.g. Senecah, 2004; Zikargae, 2018). Whereas the early years of environmental communication scholarship largely focused on the rhetorical aspects and the concrete practices of communication (e.g. media agenda-setting), the scope has since widened (Cox & Depoe, 2015). Today, the study and practice of environmental communication are more diverse, including but not restricted to community engagement in shared-resource governance, environmental journalism, advocacy campaigns, science communication, risk communication, environmental justice movements, social media messaging, and any other practice where there is a flow of information, unidirectional or interactive listening, public discussion, and debate (Evans Comfort & Park, 2018; Cox, 2013; Hansen & Cox, 2015; Zikargae, 2018). Anders Hansen and Robert Cox (2015, p. 8) argue that the field of environmental communication has consolidated itself “as a distinctive subfield of media and communication research” and advanced the “understanding of the complex processes involved in the social ‘construction’ of the environment as an issue for public and political concern.” As of today, climate change communication, sustainability science, visual communication, and the problematizing of the human–nature binary stand at the forefront of environmental communication scholarship (Cox & Depoe, 2015).

ANTHROPOLOGICAL PERSPECTIVES ON ENVIRONMENTAL COMMUNICATION

Since the early days of anthropology, anthropologists have been interested in human diversity and real-world contexts, what happens between people in certain settings, what drives people's understanding of the surrounding world, and how people act/interact with the environmental surroundings of their homes. Communication stands at the heart of this, or, as proposed by Gregory Bateson in *Steps to an Ecology of Mind* (1972): all kinds of organization are by nature "communicational." Communication can be the sharing of information or a way to convince of or propagate certain actions, but it can also be what Edmund Leach (1976) referred to as "*all the various non-verbal dimensions of culture*" (p. 10). Styles in clothing, ways of eating and cooking, architecture, place names, myths, cosmologies, knowledge and traditions, and body gestures are all reflections of "coded information in a manner analogous to the sounds and words and sentences of a natural language" (Leach, 1976, p. 10).

When information, ideas, and knowledge are transmitted and disseminated, the meanings reach us, the receivers, through symbols and signs, in written, oral, visual, and/or sensorial forms (Turner, 1977). This communication can be clear to the observer, but it can also be indirect and subtle, in disguise. Regardless of the form it takes, the sending and receiving of messages is perceptual, based on recognition and present in almost every moment of our lives. Someone speaks, someone listens, someone acts, someone observes. It is a relational activity that engages our senses, situated and manifested through symbols and behavior. When we move through life and do "our things," we not only talk, see, and hear, but we use all the senses in our communicative acts. When we eat, we use our senses of taste and smell; when we search for remedy for and relief from an illness, touching is an important medium for locating and explaining what may be wrong; when we dance, we reflect concepts of body and space; and when we live up a digital text message with an emoji, we wish to communicate feelings such as joy, disappointment, anger, or happiness. Likewise, when we drive a car, we signal with our blinkers that we are turning right, and when we put up a warning triangle, we tell fellow road users to be alert. During these moments, we establish contact and convey information using various media, and in doing so we exchange views, beliefs, and assumptions that can be explicit or implicit.

Communication is in this sense both imagination and performance, and is not only about the sharing of information. As a relational act, it is also a process where we share, hope that we are being heard, and hope that what we say, intentionally and unintentionally, shall be known, felt, and experienced. What is said, done, and interpreted are all constituent parts of the communication process, whether it is face-to-face discussions at public meetings, political graffiti, alerting risk and danger through information campaigns, or the naming of places to signal proper resource use and importance to local livelihoods. As suggested by Eugene Anderson (2014), we should not only look at what people think, say, and share when it comes to nature and environment, but also acknowledge the interactive context as marking the beginning and the end to the way we imagine ourselves and our place in the world (cf. Abram, 1996).

Buying a detergent labeled as environmentally friendly may be a tacit way of saying “I wish to contribute to sustainability,” and that we, consumers, have faith in the power of everyday life to bring about change in the future (Pink, 2012); when we consume a beer with a logo depicting a local mountain, the brewer speaks to us about a cherished place (Sjölander-Lindqvist et al., 2020a). Others have shown how the ambition to develop roads and other transportation networks, seeking to deliver social integration, economic development, and increased modernization, may paradoxically lead to more deaths; the slow road that has turned into a highway may also become a route punctuated by memorial shrines to commemorate those who have lost their lives to motorized collisions (Harvey & Know, 2015). A toxic spill may become a subject of communication among community members and lead to a recognition of environmental hazards. The trees, the community ponds, and the small brooks in people’s environs serve to tell them about the lives of past generations and the collective and inherited environment (Sjölander-Lindqvist, 2004). Yet other anthropologists have shown how environmental movements who lay claim to authority over landscapes and biodiversity resources essentialize certain values over others, leading to the silencing of different groups who may be dependent on the resources of the forests, the waters, and the agricultural lands for their livelihoods (Heatherington, 2010). Communication may therefore be comforting, contradictory, disturbing, or supportive. It can be a vehicle for positing actions, strategies, policies, and the messages embedded in ideological and worldview-shaped conceptual frames (cf. Lakoff and Johnson, 2003 [1980]; Underhill, 2011),

representing our concerns about the uncertain and the unstable (Sjölander-Lindqvist et al., 2020b).

In his study of climate perceptions in the Peruvian Andes, anthropologist Karsten Paerregaard (2020) finds that “climate communication is a diverse and complex enterprise embedded in a web of social relations and cultural interactions that transform its message and ascribe it new meanings” (p. 123). Werner Krauss and Hans von Storch (2012) suggest that overcoming the discrepancy between the global climate model and the fact that people do not always see climate change as a personal threat or even relevant to them requires a broader knowledge approach (cf. Brevini, 2016). Paerregaard continues, “even though climate change is a global phenomenon, people experience it locally often as part of other processes of change” (p. 123). If climate change is experienced as psychologically distant (Spence et al., 2012), or if the presence of toxics in the immediate local environment is a disregarded risk (Sjölander-Lindqvist, chapter “[Arsenic Fields: Community Understandings of Risk, Place, and Landscape](#)” of this book), it is not because people are ill informed or “irrational” (Spence et al., 2012). Failure may instead lie in the fact that communication about environmental change, risks, and perils has failed in channeling attention in ways that “speak to people” and their concerns (Sjölander-Lindqvist, chapter “[Arsenic Fields: Community Understandings of Risk, Place, and Landscape](#)”).

The difficulty of explaining the environmental hazards of climate change to the public is, as suggested by Cox and Depoe (2015), a topic requiring greater concern. Traditional, single-media-focused communication approaches are less efficient in inspiring the individual to behave in a more climate-friendly way, which poses a challenge for the policy sector to stir up communication to increase awareness about the causes and consequences of climate change (Moser, 2016; Semanza et al., 2008). However, as argued by Cristian Alarcón (chapter “[Power, Conflicts, and Environmental Communication in the Struggles for Water Justice in Rural Chile: Insights from the Epistemologies of the South and the Anthropology of Power](#)” of this book), scholarship should strive to address these questions while being aware of normative priorities, since environmental communication strategies are often accompanied by the implementation of norms on, for example, governance to ensure sustainability (Sjölander-Lindqvist et al., 2020b). The Rio Declaration on Environment and Development, for example, and Agenda 21 refer to democratic decentralization as a key component of good governance. Greater public

engagement through consultation, negotiation, and cooperation in policy design and implementation can generate a more heterogeneous pool of knowledge, which in turn can improve the quality of decisions (Primmer & Kyllönen, 2006).

However, including different ways of knowing requires the involved parties to deal with epistemological as well as practical aspects of relating to different knowledge spheres (Risvoll & Kaarhus, 2020; Sjölander-Lindqvist et al., 2020b). Alarcón cautions us to be aware of how knowledge and power give rise to what he refers to as “communicative and epistemological struggles,” phrased by Andréa Zhouri (2018) as “epistemological violence”: when local and traditional ways of understanding and being in the world are dismissed in consequence of ecological modernization. In line with the debate on ethnographic representations (Clifford & Marcus, 1986; James et al., 1997; Katz, 1992) of the “distinctive manners of imagining the real” (Geertz, 1983; p. 184), both Richard Stoffle and Kathleen Van Vlack, in their contributions to this book, raise the point that we, as scholars, must ask who is speaking and who is considered an expert or authority to avoid the reproduction of discursive colonialism (cf. Kugo, chapter “Community Voices, Practices, and Memories in Environmental Communication: Iliamna Lake Yup’ik Place Names, Alaska” of this book; cf. Wassef, 2001). These thoughts call into question the subject positions associated with power, challenging a utilitarian and normative understanding of environmental communication in the fields of climate change, biodiversity loss, toxic contamination, overuse of natural resources, or any other field where the environment is at stake. Recognizing the physicality of environmental change is not enough: the social, economic, cultural, and political dimensions of environmental management, the positionalities of different actors, and the epistemic status of their ways of knowing must be accounted for.

MAPPING THE CONTRIBUTION

Central to the anthropologically informed inquiry, then, is how we make sense of our world and everyday realities, be it through the eyes of an institutional or residential individual or collective, in the context of climate change, loss of biodiversity or wildlife due to overuse, or changed prospects for livelihoods in consequence of environmental conservation politics. From the outset of our work on forestry, coastal management, fishery, and land use in Europe, North America, and South America, the authors

of this volume are united in the understanding that environmental communication spans both the unique and the conventional, is broad in scope, and includes different ways to communicate environmental issues. As the different cases discussed in this book demonstrate, the ways people make sense of shared spaces and of their experiences and knowledge of living in a certain place can enrich the understanding of environmental communication as a practice and process, framing and conveying intentions, reasons, and arguments for establishing awareness and readiness for action in a changing world. This relates to the issue of the way we understand and represent the environment, and how we have adapted to, and continuously make sense of, environmental circumstances.

This position is directly related to theoretical debates in environmental anthropology concerning the role of the discipline in contributing to just solutions and the imagination of a better future (Kopnina & Shoreman-Quimet, 2013; Kottak, 2010). We know that through formal education, so prevalent in the world today, we can acquire a highly equipped mind and the ability to think analytically and make pragmatic decisions. Still, environmental challenges remain, and though sustainable development has long been on the agenda, we are far from achieving sustainability. Such challenges call for an attentiveness to the particular and the micro level, awareness of other, more macro levels, and a comparative focus to understand variations and similarities in the cultural signification of existence and experience. In this endeavor, we move toward understanding the myriad ways of life and a more expansive understanding of environmental communication. Seeing communication as an intrinsic part of the human condition and environment as a culturally specific context and the product of particular historical and cultural configurations (Bateson, 1972; Fitzgerald, 1993; Leach, 1976; Titsworth et al., 2021) lends the perspective that any arena and setting provides a window into different spoken and unspoken registers of meaning. These meanings emerge from human engagement with the landscape and reflect understandings of human existence and human society (Ingold, 2000; Rival, 2001), and come into being through concerted, fortuitous, embodied, and lived practices. What the contributions to this book have to say is that we need to acknowledge the experiential, deep-rooted, and symbolic meanings people hold.

Peter Jordan's (2003) study of Siberian Khanty hunter-fisher-gatherers provides an ethnographic portrait of how local communities are engaged in what he calls "dialogues of place" when people interact with places in the landscape. "Life is a state of dialogue" (p. 281), taking place

symbolically and materially at both individual and collective levels, Jordan argues. Every animal and fish is part of the landscape, and individuals need to interact with these animals and take care of them and the landscape to maintain the totality of life. The islands, the waters, the rapids, and the high grounds are the venues and the locales for “a communicative relationship of obligation and reciprocity,” which is a basic condition for the welfare of Khanty communities. The Khanty community is just one of many examples of how generations of people have contributed to creating the ways our cultures interact with and adapt to environments on a trial-and-error basis (Mesoudi et al., 2006). The exploration of how communities ideographically record environmental phenomena and keep their experiences and knowledges in the collective consciousness proves important in learning about the causality of temporal and spatial relationships, often in a complex chain of meaningfully interconnected, yet discrete things.

More than many other conventional disciplines, anthropology and its interest in and concern for humankind and the everyday, as it unfolds in different settings and contexts, can reveal more of the inner world of both the generations who have long been in immediate contact with the organically changing environment and all those other actors involved in imagining the everyday and the future. How people modify, symbolize, and adapt to their immediate surroundings has been a central part of anthropology since early on. What we do and why are questions whose answers lie in ideas, aspirations, norms, and values, sometimes shared, at other times disputed. These are all parts and dimensions of what creates and reaffirms life, as well as the creativity involved in developing ways of living. The way that people learn about their environment and develop elaborate co-adaptations with it is discussed in the book *Man's Role in Changing the Face of the Earth* (Thomas Jr. et al., 1956). Its chapters present various academic findings that suggest humans can and do influence natural processes and are not just passive components of the Earth's ecosystem. Omer Stewart contributed a chapter based on his fieldwork, arguing that Native Americans used fire to shape their ecosystems in the High Plains of North America (1956) (cf. Stewart et al., 2002). This debate continues today (James & Marcus, 2006; Stewart et al., 2002), as demonstrated, for example, in Minh Nguyen's study (2016) of migrant waste traders who regenerate and revalue urban space through pioneering local trade in recyclable waste as a means to earn an income and sustain their livelihoods. This points to the importance of engaging with local matters, stressing close

ethnographic attention to the everydayness of the individual and the collective—from households, neighborhoods, and villages and to all other spaces where human experience and consciousness unfold, in any form it may be represented and made sense of.

Anthropology has long championed “the other’s view of the world.” Beginning as the study of non-Western small-scale societies, anthropology acknowledges cross-cultural understanding through focusing on a plurality of voices to offer nuanced perspectives and knowledge regarding the ways people around the world see and think of the world, what they say about their lives, and why they do what they do. Åsa Boholm (2015) defines this task as reconciling emic and etic perspectives. This is not only central to anthropological scientific inquiry; it is perhaps even more important in a world periled by environmental and social challenges, where there is a risk that practical executions of environmental-protection visions may lead to people and their concerns, needs, and knowledge (continuously) being (even more) marginalized (e.g. Kellert et al., 2000; Lam et al., 2020; Sjölander-Lindqvist, 2008, 2009; Sjölander-Lindqvist et al., 2020b). While just, equitable, and sustainable transformation is a significant element in policy and politics, realizing these goals is another matter. In a time of changing climate and scarcity we might be more likely to see exacerbated conflicts and inequality in terms of power distribution, social, and economic gains (Blythe et al., 2018; Lam et al., 2020).

Embracing the diversity of values is fundamental to achieving societal goals for sustainability (Pascual et al., 2014). The prospects for realizing crucial and just change lie in an inclusive incorporation of different values—be they, for example, instrumental or utilitarian values (to achieve human ends), intrinsic/ethical values (inherent to nature), or a combination of the two. Comprehending the depth of the perception of the environment held by the person “across the table” requires cross-cultural understanding. Regardless of the point of departure or focus, communication is a crucial tool for channeling attention to environmental perils and the communicative aspects of change and existence. Here lies the importance of acknowledging how different groups speak about and understand the environment, and how to represent this to others.

This reflects the need for cross-cultural understanding and the role of language. Overly technical jargon or an unfamiliar native language or dialect can lead to misinterpretation, which can in turn prevent the message of the communication from being turned into the action that the sender wanted (Boholm, 2015). Considering that language is often designed to

reduce, filter, and control the communication of ideas (e.g. Sjölander-Lindqvist et al., 2020b), it can, together with unconscious and conscious bias, create barriers, as language is also the performance of identity (Bassiouny, 2018), while a dialect can be a way to resist power. Take, for example, how conversational practice and dialectal difference in Mesoamerica encode and mark colonial resistance, revealing an unbreakable link between traditional culture, identity, and present-day life (Romero, 2015). Therefore, while an approach for change can be designed with the best intentions, it may not be truly transformative for the targeted groups and communities due to neocolonialism. This was the case in Mozambique, for example, where cultural and historical power dynamics have impacted health communication (MacLeod & MacDonald, 2018). Historically rooted friction and suspicion can lead language to reduce the contents of the mind, leaving communication incomplete and ambiguous (Dávid-Barrett & Dunbar, 2016). To reveal other mental worlds, distinct cultural configurations, and different taxonomies, we need to direct our attention to the importance of environmental issues as a source of collective representations of local mental worlds and the immanent values held in relation to the environment. Here, an anthropological approach to communication can complement the field of environmental communication, shedding light on the need for us to realize that the loss of local culture and environment changes the consistency of values and actions. The anthropological gaze provides insight into which impacts are significant to culture and environment.

Over the years, the contributors to this volume have met and conversed with local residents, community members, agency officials, NGO representatives, foresters, farmers, and fishermen. And the list of all who have contributed their time and effort to make our research possible does not, of course, end here. Our interest in thought and action, in the shared and the disputed, echoes plural meanings and tacitly held assumptions about existence and society. Our interest in the observation, interpretation, and analysis of relationships, experience, conceptual structures, ideas, assumptions, aspirations, and values can be summarized as striving to understand what makes life. Another way of describing this thesis is that anthropologists, by collecting information which may be sampled using various methods, “pin down facts about people” (Sobo & de Munck, 1998, p. 16) in order to describe the variety of culture and society. Often, we have not only met our informants and talked to them formally and informally; some of us have engaged in workshops and focus groups, and we may, through

the method of participant observations, have been engaged in various parts of local life. During these meetings, many of our informants have shared their feelings, concerns, and fears with us. This lies at the center of anthropology: when our informants tell us their stories about life as it unfolds in their own social and organizational setting—their family, household, village, neighborhood, or their wider area—we are offered glimpses of their life worlds and lived realities.

When shown a hatch to a rustic cellar, we may be told about how the small and empty well in the rather cramped room used to supply fresh potable water not only to one family, but also to two additional family farms during dry summers. These stories—as well as the many that we share with you in this book—are telling examples of the meanings we attribute to our surroundings over the course of life. What the story of the small well tells us is that it did not only serve as a resource for drinking water, but the well was also a symbol signifying community life, lived reality, and identity (Sjölander-Lindqvist, 2004). Everyone can easily remember similar events when we, through our own actions, perceived and experienced the dynamics of our surrounding environment or culture. Culturally and socially rooted, these occasions unfold and conventionalize beliefs, values, norms, and knowledge. These moments define and figure meaning, making the exchange of experience, memories, and knowledge actionable and applicable.

It can be expected that the assessment of the experience of human cultures, that is, the cognitive, behavioral, embodied, and material outcome of humanity's previous interactions with the environment, will with equal significance affect the attitudes we adopt in the future (Morin, 2016). As an example of this, if we accept the value of stone arches only as rock formations and subject to the continual degradation of natural processes, we will adopt reductive narratives in environmental communication (Stoffle, chapter “[Living Stone Bridges: Epistemological Divides in Heritage Environmental Communication](#)” of this book). However, if we accept the role of the stone arch as a cultural representation of life, experience, and knowledge, hiding behind the horizon, changing, shaping, and offering messages, shade, or shelter, we also accept that our forests, the trees, the waters, the mountains, and the lands surrounding us signify and embed experience and knowledge, thereby rendering meaning to the ways we exist and act. The anthropological view of environmental communication is that is contingent and embedded, driven by contextual probabilities and attributes.

This creates what Toda (1976) refers to as a “nested” situation. This “nestedness” is a way of formulating the core of anthropological exploration; situations and activities where interaction among both human and non-human entities will be confined by socially and culturally framed tangibles and intangibles, emotions, and value-driven circumstances. As phrased by anthropologist Victoria Strang (2004), any situation is “the result of specific social, spatial, economic and political arrangements, cosmological and religious beliefs, knowledges and material culture, as well as ecological constraints and opportunities” (p. 5, cf. Brondizio et al., 2009). The nested character of life requires that we not only translate between languages, but also tolerate, acknowledge, and appreciate social and cultural variation and interpersonal interaction to better understand what drives our actions in the world, be it lived as a farmer, a hunter, a manager, an academic, or all of them combined. These are all contexts of learning that are provided to us when we approach and encounter different settings and meet different people, who all have their own unique experiences and knowledge, and are situational, located, and far from conforming to one another. As described by Arturo Escobar (2001), “place continues to be important in the lives of many people, perhaps most, if we understand by place the experience of a particular location with some measure of groundedness (however, unstable), sense of boundaries (however, permeable), and connection to everyday life, even if its identity is constructed, traversed by power, and never fixed” (p. 140).

Our focus is to add perspectives to environmental communication by utilizing insights from anthropology. This book proposes a closer look at the ordinary and the particular, going behind and beyond environmental advocacy rhetoric, emphasizing stronger anthropological engagement to develop understanding and knowledge of the co-constructive character of environmental communication practice. Our task, however, is not only to describe and compare; it is equally important for the anthropologist to explain and demonstrate how different elements are tied together. This interconnectedness is perhaps even more important to understanding the complexities of environmental communication and moving toward reinvigorated anthropological studies attending to the nuances of the verbally and non-verbally expressed and communication as basic to human life and culture. We suggest it is necessary to be conscious of the conceptual and the practical, as well as the verbal and the non-verbal, in order to understand how we, as human beings, create and express meaning (Hylland Eriksen, 1991; Ingold, 2010; Geertz, 1973; Worth & Adair, 1975).

By exploring the different ways people's voices are communicated, perceived, and manifested, be they in reference to facts, shared or disputed values, sameness and difference in terms of interests and goals, about the untold, or ignoring the possible existence of other ways of conceptualizing the world, this book recognizes and appreciates the world as seen, as experienced and known, as felt by human senses, and as presented and represented to ourselves and others. Communication may take forms verbal, non-verbal, situated, spatial, temporal, and sensorial, and a message may be one or all of these at the same time. As such, communication is a constant becoming, marking the beginning and the end to the way we imagine ourselves and our place in the world.

THE CHAPTERS

The ensuing chapters will take you to different places around the world (see world map on p. v), and we will see how anthropological theory and method can extend our knowledge about environmental communication, the different forms it takes, and what informs the communication process. These case studies demonstrate how communication, at the nexus of the environment and the human, can be about an intention to inform about policies and incentives in a collaborative- and partnership-directed governance process, and how environmental communication can also be about imagining what makes us, human beings, rooted in the world. Drawing on ethnographic methods in critical explorations, the contributors to this volume make both direct and indirect reference to the importance of the richness of details provided in the field using participant observations, in-depth interviews, informal conversations, and other field techniques. The details that the anthropologist gathers are crucial to the understanding of the contextual value-driven circumstances and the formal and informal rules, resources, and norms encountered when accessing a particular bounded cultural setting such as a local community, a governance process, or an impact assessment procedure. Under the well-established concept of "thick description" (Geertz, 1973), the anthropologist strives toward grasping what is getting said and the importance of what is said, be it through the spoken word or through the occurrence of a particular tradition, the implementation of a policy, or simply anything that occurs within the ordinary and the everyday. Whereas some refer to such ethnographic exploration as a way of describing other people's lives through observing, participating, listening, and asking (Bate, 1997; Hammersley & Atkinson,

1995; Ingold, 2008; LeCompte & Schensul, 2013), it is also a framework allowing the anthropologist to compare and critically contribute to the understanding of the human condition, being in the world, and knowing the world (Ingold, 2008; Schensul & LeCompte, 2016).

Now for a closer look at the case studies themselves. In the chapter “[Dancing with Lava: Indigenous Interactions with an Active Volcano in Arizona](#)”, Kathleen Van Vlack brings us to Southwest of the United States, specifically to northern Arizona and the Little Springs Lava Flow, which is a remnant of an active volcano. In her chapter, Van Vlack explores the issues of how different groups make sense of the active volcano and their ensuing different understandings of place and landscape—from the perspective of archeologists who have visited the area to record data on the volcanic eruption as a means to understand American Indian lifestyles and behavioral responses that occurred before, during, and after the event, to the Kaibab Band of Paiute Indians’ interpretation of the lava flow and volcanic fields’ significance in relation to the ways they have interacted with the landscape. By situating the case study in a historical context, highlighting how geology has influenced the landscape and which features have important ceremonial meaning to the Southern Paiutes, Van Vlack critically reflects on the role of knowledge and who is given voice to explain the past. This epistemology-influenced debate on whether the volcano is a risk to humans (as argued by the scientific community) or a landscape intimately connected to American Indian history and their cultural heritage (as argued by the Paiutes) lays important groundwork for the discussion of how ideology, ways of knowing, and worldview-shaped concepts lay claims to authority over representation and over landscapes themselves.

In the chapter “[Arsenic Fields: Community Understandings of Risk, Place, and Landscape](#)”, Annelie Sjölander-Lindqvist discusses similar issues when she brings the reader to central Sweden in Northern Europe and explores how a contaminated community makes sense of living on or very near to arsenic fields. This chapter also attests to the role of the state in place and identity, as the plans for soil remediation, situated in the context of environmental and public health, establish a fluid zone of interpretation and reflection on collective identity, the role of collective memory in instilling a sense of community, and the sense of self in an ever-changing world. Similar to Van Vlack’s study, Sjölander-Lindqvist finds the importance of addressing environmental communication from the perspective of temporality, as meaning evolves over time and by means of shared experiences,

through which meaning is not only created and known, but also instilled with symbolic power. These various arrangements, or frameworks of meaning and rationales of action, become mobilized and contested in everyday life.

The chapter “[Cultural Transmission in Slovak Mountain Regions: Local Knowledge as Symbolic Argumentation](#)” takes us to Central Europe and the mountain regions of south-central Slovakia, where Ivan Murin provides us with a detailed case study on the challenges of adaptation when a new generation returns to a land their ancestors had cultivated and then left due to demographic change and state intervention. Murin’s case study is not only a reflection on the consequences of modernist development, he also presents an exploratory model for how people returning to their ancestral roots can re-learn and re-connect to their heritage, entering into a process in which they can reverse the interrupted transmission of knowledge and instead re-adapt. This case of cultural transmission is also a perceptive insight into one of anthropology’s core subjects, that of intercultural communication, but with a particular focus on intergenerational communication and how anthropologists can facilitate connection to a place lost, but cherished and vividly present in the collective memory of the returning generation.

In the chapter “[Community Voices, Practices, and Memories in Environmental Communication: Iliamna Lake Yup’ik Place Names, Alaska](#)”, Yoko Kugo also takes on this role of facilitating intergenerational communication in her study of how place names are a form of communication between people and landscape, reflecting not only the geographical features of land but also relating to individual and collective memories. As in Murin’s preceding chapter, Kugo’s study is about heritage preservation and how anthropologists can be communicative supporters who help community members reflect on the meanings of their surrounding landscape. Kugo shows us how certain Indigenous place names can convey environmental and spatial information, but also emphasize the temporal and spiritual relationships between the people and the land. Kugo’s study also illustrates how active engagement and participation in daily life are core to the centrality of listening and asking about the visual, the directional, and the historical, both for the anthropologist but also, most importantly, for those who have lived, and live, in the landscape. This is an example of another kind of environmental communication, a form of communication in which place names provides the local community with

a route to maintaining a healthy reciprocal relationship between the human and animal worlds, as well as between the living and spiritual worlds.

In the chapter “[Demographic Change and Local Community Sustainability: Heritagization of Land Abandonment Symbols](#)”, we return to south-central Slovakia and how the future of cultural landscapes is linked to current global challenges. In this case study, Ivan Murin, Jan Horský, and Ján Aláč discuss how an abandoned landscape is also an environmental problem, which, as we know, is a long-standing trend around the world. The authors rightfully ask: What happens when social learning and cultural transmission of knowledge, the sharing and acquisition of experiences and local and traditional knowledge, are put to a stop due to political, economic, and demographic change? In some Slovak regions, one such immense phenomenon was depopulation and the replacement of family farms with large-scale state-run agricultural production units. As argued by the authors, although the new generations made short-term economic progress, this arrangement proved unsustainable in the end. In the next generations, the virtue of communal sharing of the land and the associated and essential dimension of sociability were lost. The authors bring us to the cemetery to discuss how this lost heritage can be re-created through the restoration of tombstones, as these carry signs and symbols that can support the remembrance of life, death, and what was important to the local farming community.

After this second European stopover, we return in the chapter “[Living Stone Bridges: Epistemological Divides in Heritage Environmental Communication](#)” to the United States and the Natural Bridges National Monument, a protected area in southern Utah. Here, Richard Stoffle shows that environmental communication is complex and fraught by epistemological divides. Discussing the case of massive stone bridges and the diverging understandings of what makes up the world and the purpose of a particular landscape feature, he finds it opportune to address the phenomenology of landscape. This is particularly important in cases where there are no material resources or artifacts to link the discussion to anything other than the natural landscape. This makes environmental communication an intriguingly difficult project, as the parties need to turn to phenomenology in defining the heritage value of the natural resources. This is where different ways of knowing meet: the knowledge based in experience and intimate dialogue between a feature in the landscape and the native resident versus science-based knowledge that has developed through the making of hard evidence (cf. Scott, 1998). This juxtaposition

serves to highlight how and why heritage in combination with the concept of environmental communication can be utilized to advance the communication of different environmental perceptions.

We return to Sweden in the chapter “‘The Sea Has No Boundaries’: Collaboration and Communication Between Actors in Coastal Planning on the Swedish West Coast”, where Simon Larsson and Annelie Sjölander-Lindqvist study environmental communication as an intra- and inter-organizational phenomenon. They direct our attention to Sweden’s West Coast, the challenges of coordinating spatial planning in a governance setting, and the difficulties involved in developing and coming to agreements about plans conceived to cope with the sustainable development of coastal and marine areas. Approaching the planning process as a continuous interaction between actors, they find that the established institutional division of roles and responsibilities, as well as current legislation, creates challenges for cooperation and producing outcomes in a collaborative governance setting. Seeing the collaboration and the dialogue as a setting where meanings both drive interaction and are themselves negotiated during such interaction, they identify a place where anthropology meets the field of environmental communication. The anthropological gaze, focusing on working beliefs rather than relying on ready-made categories to analyze social institutions, highlights how environmental communication procedures operate interactively and articulate condensed and ontologically situated meanings through administrative actions aimed at negotiated decisions.

Finally, in the chapter “Power, Conflicts, and Environmental Communication in the Struggles for Water Justice in Rural Chile: Insights from the Epistemologies of the South and the Anthropology of Power”, we cross the Atlantic once again and arrive in Chile, where Cristian Alarcón takes inspiration from the anthropology of power and the epistemologies of the South in analyzing struggles for water justice and water democracy in the country. He uses this case study to argue more broadly for the relevance of a conflict- and power-oriented conceptualization of environmental communication, since this form of communication is situated in struggles around the present and the future of human–environment interaction. These struggles are implicated in a context of who is given the right to use the water: Is it the people who use it or the actor who owns the resource? As Alarcón argues, the struggles are entangled in a neoliberal conflict constituted by the negotiation of the boundaries of hegemonic political and social power and knowledge. Through the use of

environmental communication, people demand a renegotiation of the structural conditions underlying and restricting the consumptive use and management of water resources. This chapter shows how environmental conflict is not only “ingrained in struggles over the meaning and materiality of social-ecological conflicts today” (p. 216), but also how environmental communication is normatively ingrained in the contingencies of epistemology, socio-ecological relations and issues of power, and discursively dispersed rights systems.

FINAL NOTE

A final note on the contributions to this book and what unites the different case studies: Environmental communication in its truest sense is made up of individuals who hold collectively shared, particular ideas, assumptions, and values, encompassing various meanings, aspirations, and intentions of those involved. Each actor, each individual, each sector, and each representative have their own set of criteria concerning what constitutes valid or valuable knowledge of aspects relating to the issue of concern in the dialogue.

In addition to being informed politically and regulatorily, environmental communication is also guided by sector- and locale-specific norms and values, as well as differently construed ideas of temporality and heritage, exposing contrasting ideas of the past, present, and future. All the case studies are also embedded in temporality, and arguments for specific actions and worldviews display time horizons that differ according to divergent understandings of science, epistemological premises, values, and value priorities. These ideas and images are concomitant with how place and landscape are tied to local history, collective memory, and knowledge, and how people, over time, by using natural resources, establish meaning-building relationships with one another and with their environments (Stoffle et al., 2013). The dimension of time is showing itself to be a potentially critical variable in understanding what makes up environmental communication.

The issue of epistemology is also a pertinent theme in the book. In the coming chapters, we will see divides between science on the one hand and Local, Traditional, and Indigenous knowledge on the other, each way of knowing grounded in different epistemological and ontological assumptions. The assumed objectivity of science tends to give it a powerful voice to speak for the environment and how it should be managed

(Sjölander-Lindqvist et al., 2020b), thereby normalizing particular policies for environmental management and authorizing certain experts to act in management (Goldman et al., 2011). The result tends to be the establishment of a knowledge hierarchy where, for example, experience-based knowledge is considered subordinate and local livelihood-based discourses are dismissed, while scientific models and experts' understanding are seen as providing superior knowledge for handling pressing issues (Agrawal, 2005; Sjölander-Lindqvist, 2008) as well as overall environmental interpretation despite conventions and agreements to include different ways of knowing (Sjölander-Lindqvist et al., 2020b). Knowledge is henceforth both repressive and productive, and environmental communication is a site of power where truths are made, circulated, and remade. It has elsewhere been discussed how policies have "social lives of their own" (Sjölander-Lindqvist, 2015; cf. Appadurai, 1986), and the same can be argued in the case of environmental communication, as it is a process through which knowledge, interests, and values are constantly upheld, demarcated, and negotiated.

This emphasizes the plurality of the concept of environmental communication itself. In 2010, Chris Shore, an anthropologist dedicated to the study of policies and policy work, defined the task of anthropology as examining practices "in work" and focusing on "the conditions that create and sustain them and the kinds of relations and subjects they produce" (p. 213; cf. Shore et al., 2011). I would like to borrow this thought from Shore and open the floor for further anthropological engagement with environmental communication from the perspective that anthropology can, and should, approach environmental communication as a cultural process that occurs in different contexts.

Any critical analysis of communication at the nexus of the human and the environmental, and the practices undertaken within this relational node, involves capturing and representing the meanings of particular situations and clarifying their conditions and unique circumstances. This requires sensitivity to the tangible and associative values of those concerned and involved, and to the circulating discourses, multiple contestations, and regimes of power enacted and confirmed within the field of environmental communication.

This requires the ability and the patience to become familiar with the realities of a bounded cultural setting in order to describe it and proceed with analysis. And that involves speaking with people about their way of perceiving events and, as the various cases in this book demonstrate,

interrogating their ideas and understandings of the material and the immaterial, the exceptional and unusual occurrences, as well as the ordinary occurrences of everyday life. That is, life and environmental communication as lived, interpreted, and given meaning. Such a perspective lends importance to how ethnographic methods, with their holistic scope, can contribute to the vital acknowledgment of embedded, locally specific perceptions in the narratives shared during fieldwork. We are thus deeply indebted to the field locations, informants, and all the other participants that make anthropological inquiry possible.

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REFERENCES

- Abram, D. (1996). *The spell of the sensuous: Perception and language in a more-than-human world*. Pantheon Books.
- Agrawal, A. (2005). *Environmentality: Technologies of government and the making of subjects*. Duke University Press.
- Alarcón, C. (2015). *Forests at the limits*. Doctoral thesis, Swedish University of Agricultural Sciences. Retrieved from https://pub.epsilon.slu.se/11926/1/alarcon_ferrari_c_150223.pdf
- Anderson, E. N. (2014). *Caring for place: Ecology, ideology, and emotion in traditional landscape management*. Left Coast Press.
- Appadurai, A. (Ed.). (1986). *The social life of things: Commodities in cultural perspective*. The Press Syndicate of the University of Cambridge.
- Armitage, D., Charles, A., & Berkes, F. (2017). *Governing the Coastal Commons: Communities, resilience and transformation*. Routledge.
- Armstrong, A. (2006). Ethical issues in water use and sustainability. *Area*, 38(1), 9–15. <https://doi.org/10.1111/j.1475-4762.2006.00657.x>
- Bassiouny, R. (Ed.). (2018). *Identity and dialect performance: A study of communities and dialects*. Routledge.
- Bate, S. P. (1997). Whatever happened to organizational ethnography? A review of the field of organizational ethnography and anthropological studies. *Human Relations*, 50(9), 1147–1175.

- Bateson, G. (1972). *Steps to an ecology of mind: Collected essays in anthropology, psychiatry, evolution, and epistemology*. Jason Aronson.
- Blythe, J., Silver, J., Evans, L., Armitage, D., Bennett, N. J., Moore, M.-L., Morrison, T. H., & Brown, K. (2018). The dark side of transformation: Latent risks in contemporary sustainability discourse. *Antipode*, 50(5), 1206–1223.
- Boholm, Å. (2015). *Anthropology and risk*. Earthscan.
- Brady, M. J. (2011). Mediating indigenous voice in the museum: Narratives of place, land, and environment in new exhibition practice. *Environmental Communication*, 5(2), 202–220. <https://doi.org/10.1080/17524032.2011.562649>
- Brevini, B. (2016). The value of environmental communication research. *The International Communication Gazette*, 78(7), 684–687. <https://doi.org/10.1177/1748048516655728>
- Brondizio, E. S., Ostrom, E., & Young, O. R. (2009). Connectivity and the governance of multilevel social-ecological systems: The role of social capital. *Annual Review of Environment and Resources*, 34(1), 253–278.
- Chaffé, B. C., Garmestani, A. S., Gunderson, L. H., Benson, M. H., Angeler, D. C., Arnold, C. A., Cosens, B., Craig, R. K., Ruhl, J. B., & Allen, C. R. (2016). Transformative environmental governance. *Annual Review of Environment and Resources*, 41(1), 399–423.
- Cox, R. (2013). *Environmental communication and the public sphere*. SAGE.
- Cox, R., & Depoe, S. (2015). Emergence and growth of the “field” of environmental communication. In A. Hansen & R. Cox (Eds.), *The Routledge handbook of environment and communication* (pp. 13–25). Routledge.
- Dávid-Barrett, T., & Dunbar, R. (2016). Language as a coordination tool evolves slowly. *Royal Society Open Science*, 3, 160259.
- Díaz, S., Settele, J., Brondizio, E. S., Ngo, H. T., Agard, J., Arneth, A., Balvanera, P., Brauman, K. A., Butchart, S. H. M., Chan, K. M. A., Garibaldi, L. A., Ichii, K., Liu, J., Subramanian, S. M., Midgley, G. F., Miloslavich, P., Molnár, Z., Obura, D., Pfaff, A., Polasky, S., Purvis, A., Razaque, J., Reyers, B., Chowdhury, R. R., Shin, Y.-S., Visseren-Hamakers, I., Willis, K. J., & Zayas, C. N. (2019). Pervasive human-driven decline of life on Earth points to the need for transformative change. *Science*, 366(6471), eaax3100. <https://doi.org/10.1126/science.aax3100>
- Escobar, A. (2001). Culture sits in places: Reflections on globalism and subaltern strategies of localization. *Political Geography*, 20(2), 139–174. [https://doi.org/10.1016/S0962-6298\(00\)00064-0](https://doi.org/10.1016/S0962-6298(00)00064-0)
- Evans Comfort, S., & Park, Y. P. (2018). On the field of environmental communication: A systematic review of the peer-reviewed literature. *Environmental Communication*, 12(7), 862–875. <https://doi.org/10.1080/17524032.2018.1514315>

- Fitzgerald, T. K. (1993). *Metaphors of identity: A culture-communication dialogue*. State University of New York Press.
- Fjællingsdal, K. S., & Klöckner, C. A. (2020). Green across the board: Board games as tools for dialogue and simplified environmental communication. *Simulation & Gaming*, 51(5), 632–652. <https://doi.org/10.1177/1046878120925133>
- Geertz, C. (1973). *The interpretation of cultures*. Basic Books.
- Geertz, C. (1983). *Local knowledge: Further essays in interpretative anthropology*. Basic Books.
- Goldman, M. J., Nadasdy, P., & Turner, M. D. (Eds.). (2011). *Knowing nature: Conversations at the intersection of political ecology and science studies*. The University of Chicago Press.
- Hammersley, M., & Atkinson, P. (1995). *Ethnography: Principles in action* (2nd ed.). Routledge.
- Hansen, A., & Cox, R. (2015). Introduction: Environment and communication. In A. Hansen & R. Cox (Eds.), *The Routledge handbook of environment and communication* (pp. 1–10). Routledge.
- Harvey, P., & Know, H. (2015). *Roads: An anthropology of infrastructure and expertise*. Cornell University Press.
- Heatherington, T. (2010). *Wild Sardinia: Indigeneity & the global dreamtimes of environmentalism*. University of Washington Press.
- Hyland Eriksen, T. (1991). The challenges of anthropology. *International Journal of Pluralism and Economics Education*, 1(3), 194–202.
- Ingold, T. (2000). *The perception of the environment: Essays in livelihood, dwelling and skill*. Routledge.
- Ingold, T. (2008). Anthropology is not ethnography. *Proceedings of the British Academy*, 154, 69–92.
- Ingold, T. (2010). Anthropology comes to life. *General Anthropology*, 17(1), 1–4.
- James, A., Hockey, J., & Dawson, A. (1997). *After writing culture: Epistemology and praxis in contemporary anthropology*. Routledge.
- James, A., & Marcus, A. (2006). The human role in changing fluvial systems: Retrospect, inventory and prospect. *Geomorphology*, 79(3), 152–171.
- Joosse, S., Powell, S., Bergeå, H., Böhm, S., Calderón, C., Caselunghe, E., Fischer, A., Grubbström, A., Hallgren, L., Holmgren, S., Löf, A., Nordström Källström, H., Raitio, K., Senecah, S., Söderlund Kanarp, C., von Essen, E., Westberg, L., & Westin, M. (2020). Critical, engaged and change-oriented scholarship in environmental communication: Six methodological dilemmas to think with. *Environmental Communication*, 14(6), 758–771. <https://doi.org/10.1080/17524032.2020.1725588>
- Jordan, P. (2003). *Material culture and sacred landscape: The anthropology of the Siberian Khanty*. Altamira Press.

- Katz, C. (1992). All the world is staged: Intellectuals and the projects of ethnography. *Environment and Planning D: Society and Space*, 19, 495–510.
- Kellert, S. R., Mehta, J. N., Ebbin, S. A., & Lichtenfeld, L. L. (2000). Community natural resource management: Promise, rhetoric, and reality. *Society & Natural Resources*, 13(8), 705–715. <https://doi.org/10.1080/089419200750035575>
- Kopnina, H., & Shoreman-Ouimet, E. (Eds.). (2013). *Environmental anthropology: Future directions*. Routledge.
- Kottak, C. P. (2010). *Anthropology: Appreciating human diversity* (14th ed.). McGraw-Hill.
- Krauss, W., & von Storch, H. (2012). Post-normal practices between regional climate services and local knowledge. *Nature and Culture*, 7(2), 213–230. <https://doi.org/10.3167/nc.2012.070206>
- Lakoff, G., & Johnson, M. (2003[1980]). *Metaphors we live by*. Chicago: University Chicago Press.
- Lam, D., Hinz, E., Lang, D., Tengö, M., von Wehrden, H., & Martín-López, B. (2020). Indigenous and local knowledge in sustainability transformations research: A literature review. *Ecology and Society*, 25(1), 3. <https://doi.org/10.5751/ES-11305-250103>
- Leach, E. (1976). *Culture and communication: The logic by which symbols are connected*. Cambridge University Press.
- LeCompte, M. D., & Schensul, J. J. (2013). *Analysis and interpretation of ethnographic data: A mixed methods approach*. AltaMira Press.
- MacLeod, M., & Macdonald, I. (2018). Learning from the locals: How can co-design support malaria education in a post-colonial environment? *Design for Health*, 2(1), 163–185. <https://doi.org/10.1080/24735132.2018.1451676>
- McAfee, D., Doubleday, Z. A., Geiger, N., & Connell, S. D. (2019). Everyone loves a success story: Optimism inspires conservation engagement. *BioScience*, 69(4), 274–281. <https://doi.org/10.1093/biosci/biz019>
- Mesoudi, A., Whiten, A., & Dunbar, R. (2006). A bias for social information in human cultural transmission. *British Journal of Psychology*, 2006, 405–423.
- Morin, O. (2016). *How traditions live and die*. Oxford University Press.
- Morrison, G. (2018). *Art and the environment: Museums adjust to a new climate*. Last retrieved February 14, 2021, from <https://www.sothebys.com/en/articles/art-and-the-environment-museums-adjust-to-a-new-climate>
- Moser, S. C. (2016). Reflections on climate change communication research and practice in the second decade of the 21st century: What more is there to say? *WIREs Climate Change*, 7(3), 345–369. <https://doi.org/10.1002/wcc.403>
- Nguyen, M. T. N. (2016). Trading in broken things: Gendered performances and spatial practices in a northern Vietnamese rural-urban waste economy. *American Ethnologist*, 43(1), 116–129. <https://doi.org/10.1111/amet.12267>
- Paerregaard, K. (2020). Communicating the inevitable: Climate awareness, climate discord, and climate research in Peru's highland communities.

- Environmental Communication*, 14(1), 112–125. <https://doi.org/10.1080/175240.32.2019.1626754>
- Pascual, U., Phelps, J., Garmendia, E., Brown, K., Corbera, E., Martin, A., Gomez-Baggethun, E., & Muradian, R. (2014). Social equity matters in payments for ecosystem services. *BioScience*, 64(11), 1027–1036.
- Pink, S. (2012). *Situating Everyday Life: Practices and Places*. London: Sage.
- Primmer, E., & Kyllönen, S. (2006). Goals for public participation implied by sustainable development, and the preparatory process of the Finnish National Forest Programme. *Forest Policy Economics*, 8, 838–853. <https://doi.org/10.1016/j.forpol.2005.01.002>
- Risvoll, C., & Kaarhus, R. (2020). Struggling with ‘clear zoning’: Dilemmas of carnivore-pastoral coexistence in Nordland, northern Norway. In A. Breilid & R. Krøvel (Eds.), *Indigenous knowledges and the sustainable development agenda* (pp. 185–206). Routledge.
- Rival, L. (Ed.). (2001). *The social life of trees: Anthropological perspectives on tree symbolism* (2nd ed.). Berg.
- Romero, S. (2015). *Language and ethnicity among the K’ichee’ Maya*. The University of Utah Press.
- Sandström, C., Sjölander-Lindqvist, A., Pellikka, J., Hiedanpää, J., Krange, O., & Skogen, K. (2018). Between politics and management: Governing large carnivores in Fennoscandia. In T. Hovardas (Ed.), *Large carnivore conservation and management: Human dimensions* (pp. 269–290). Routledge.
- Schensul, J. J., & LeCompte, M. D. (2016). *Ethnography in action: A mixed methods approach*. Rowman & Littlefield.
- Scott, J. C. (1998). *Seeing like a state*. Yale University Press.
- Semanza, J. C., Hall, D. E., Wilson, D. J., Bontempo, B. D., Sailor, D. J., & George, L. A. (2008). Public perception of climate change: Voluntary mitigation and barriers to behavior change. *American Journal of Preventive Medicine*, 35(5), 479–487. <https://doi.org/10.1016/j.amepre.2008.08.020>
- Senecah, S. (2004). *The environmental communication yearbook*. Lawrence Erlbaum Associated Publishers.
- Shore, C. (2010). Locating the work of policy. In H. Colebatch, R. Hoppe, & M. Noordegraaf (Eds.), *Working for policy* (pp. 211–226). Amsterdam University Press.
- Shore, C., Wright, S., & Però, D. (Eds.). (2011). *Policy worlds: Anthropology and analysis of contemporary power*. Berghahn.
- Sjölander-Lindqvist, A. (2004). Visualizing lace and belonging: Landscape redefined in a Swedish farming community. In Å. Boholm & R. E. Lofstedt (Eds.), *Facility siting: Risk, power and identity in land-use planning*. Earthscan.
- Sjölander-Lindqvist, A. (2008). Identity, science and politics indivisible: The Swedish wolf controversy deconstructed. *Journal of Environmental Policy and Planning*, 10(1), 71–94.

- Sjölander-Lindqvist, A. (2009). Social-natural landscape reorganised: Swedish forest-edge farmers and wolf recovery. *Conservation and Society*, 7(2), 130–140.
- Sjölander-Lindqvist, A. (2015). Balancing differentiated interests and conceptualizations in environmental management. *Journal of Organizational Ethnography*, 4(3), 306–323.
- Sjölander-Lindqvist, A., Skoglund, W., & Laven, D. (2020a). Craft beer – building social terroir through connecting people, place and business. *Journal of Place Management and Development*, 13(2), 149–162.
- Sjölander-Lindqvist, A., Risvoll, C., Kaarhus, R., Lundberg, A. K., & Sandström, C. (2020b). Knowledge claims and struggles in decentralized large carnivore governance: Insights from Norway and Sweden. *Frontiers in Ecology and Evolution*, 8, 120. <https://doi.org/10.3389/fevo.2020.00120>
- Sobo, E. J., & de Munck, V. C. (1998). The forest of methods. In V. C. de Munck & E. J. Sobo (Eds.), *Using methods in the field: A practical introduction and casebook* (pp. 13–37). Altamira Press.
- Spence, A., Poortinga, W., & Pidgeon, N. (2012). The psychological distance of climate change. *Risk Analysis*, 32(6), 957–972. <https://doi.org/10.1111/j.1539-6924.2011.01695.x>
- Stewart, O., Lewis, H., & Anderson, K. (2002). *Forgotten fires: Native Americans and the transient wilderness*. University of Oklahoma Press.
- Stoffle, R. W., Stoffle, B. R., & Sjölander-Lindqvist, A. (2013). Contested time horizons. In A. Bond, A. Morrison-Saunders, & R. Howitt (Eds.), *Sustainability assessment: Pluralism, practice and progress* (pp. 51–67). Routledge.
- Strang, V. (2004). *The meaning of water*. Berg.
- Sygnä, L., O'Brien, K., & Wolf, J. (2013). *A changing environment for human security: Transformative approaches to research, policy, and action*. Earthscan.
- Thomas, W. L., Sauer, C. O., Bates, M., & Mumford, L. (1956). *Man's role in changing the face of the earth*. University of Chicago Press.
- Titworth, S., Hosek, A., Pearson, J., & Nelson, P. (2021). *Human communication* (7th ed.). McGraw Hill.
- Toda, M. (1976). The decision process: A perspective. *International Journal of General Systems*, 3(2), 79–88.
- Turner, V. (1977). Process, system, and symbol: A new anthropological synthesis. *Discoveries and Interpretations: Studies in Contemporary Scholarship*, 106(3), 61–80.
- UN. (2015). *Transforming our world: The 2030 agenda for sustainable development*. United Nations.
- Underhill, J. W. (2011). *Creating worldviews: Metaphor, ideology and language*. Edinburgh University Press.
- Valadez, J. M. (2018). *Deliberative democracy, political legitimacy, and self-determination in multicultural societies*. Routledge.

- Walker, J. M. M., Godley, B. J., & Nuno, A. (2019). Media framing of the Cayman Turtle Farm: Implications for conservation conflicts. *Journal for Nature Conservation*, 48, 61–70. <https://doi.org/10.1016/j.jnc.2019.01.001>
- Wassef, N. (2001). On selective consumerism: Egyptian women and ethnographic representations. *Feminist Review*, 69, 111–123. <https://doi.org/10.1080/014177800110070148>
- Worth, S., & Adair, J. (1975). *Through Navajo eyes: An exploration in film communication and anthropology*. Indiana University Press.
- Zhou, A. (2018). Megaprojects, epistemological violence and environmental conflicts in Brazil. *Perfiles Económicos*, 5, 7–33.
- Zikargae, M. H. (2018). Analysis of environmental communication and its implication for sustainable development in Ethiopia. *Science of the Total Environment*, 634, 1593–1600. <https://doi.org/10.1016/j.scitotenv.2018.04.050>

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