

## Creative (Climate) Communications

Conversations about climate change at the science–policy interface and in our lives have been stuck for some time. This handbook integrates lessons from the social sciences and humanities to more effectively make connections through issues, people and things that everyday citizens care about. Readers will come away with an enhanced understanding that there is no “silver bullet” to communications about climate change; instead, a “silver buckshot” approach is needed, where strategies effectively reach different audiences in different contexts. This tactic can then significantly improve efforts that seek meaningful, substantive and sustained responses to contemporary climate challenges. It can also help to effectively recapture a common or middle ground on climate change in the public arena. Readers will be equipped with ideas on how to harness creativity to better understand what kinds of communications work where, when, why and under what conditions in the twenty-first century.

**Maxwell Boykoff** is the Director of the Center for Science and Technology Policy, which is part of the Cooperative Institute for Research in Environmental Sciences at the University of Colorado Boulder. He is also an Associate Professor in the Environmental Studies program at the University of Colorado. Max has ongoing interests in cultural politics and environmental governance; science and environmental communications; science–policy interactions; political economy and the environment; and climate adaptation. He has authored many peer-reviewed journal articles, book chapters and books on these subjects, including *Who Speaks for the Climate? Making Sense of Media Reporting on Climate Change* (2011, Cambridge University Press).

“When it comes to science communication, no topic is more fraught with politics and pitfalls than climate change. Max Boykoff deftly navigates the minefield of climate communication by providing a range of informed perspectives and insights into how to communicate the science and its implications. *Creative (Climate) Communications* is a great resource for practitioners and novices alike.”

Michael E. Mann, Distinguished Professor, Penn State University and co-author  
of *The Madhouse Effect*

“The world failure to act on climate change is not primarily the result of a failure to communicate. But ineffective communication does make it easier for denial and disinformation to reign. This important book helps us to understand what works and what doesn’t work in climate communication, and why. A must-read for anyone involved in this issue.”

Naomi Oreskes, Harvard University

“I appreciate the intent of this book: to make “a creative shift from ‘turning on each other’ to ‘turning to each other’ for support and collaboration.” Nothing short of that will be needed to get through the climate crisis. This is a book that makes real and practical the “cultural turn” in climate communications and asks us to tap our oldest and most unique human capacities to do so: our emotions and our imagination to connect with each other and make sense of the transformative journey we have embarked upon. In doing so, it implores us to be authentic, ambitious, accurate, imaginative and bold in climate communications and this book is just that. A great accomplishment!”

Susanne Moser, independent scholar and consultant

“Effective climate communication is an emerging area that has lacked an authoritative text – until now! This innovative, accessible book unites cutting-edge theory with practice. It synthesizes the peer-reviewed literature, existing approaches to effective climate communication, and representations of climate change in the media. If you’re looking to be informed by the latest theory, research, and practice in climate engagement and outreach, this is a must-read.”

Katharine Hayhoe, Texas Tech University

“With this book Boykoff splendidly articulates the creative thinking and approaches necessary to find common ground and move forward in our engagement with climate change. In an exemplary and engaging style of writing, Boykoff moves with elegant ease and superb scholarly insight through a wealth of research, comment and opinion to interrogate the growing body of knowledge on the successes, failures and challenges of climate change communication. And he proceeds – with an admirable command of contemporary, historical and philosophical context – to offer clear and optimistic guidance on promising pathways to effective engagement on climate change.”

Anders Hansen, University of Leicester

Creative (Climate) Communications  
Productive Pathways for Science, Policy and Society

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I dedicate this book to Monica Boykoff, Elijah Boykoff and Calvin Boykoff.

I also dedicate this work to the memory of Max Thabiso Edkins (1983–2019).

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## Preface

### *Creativity, Collaboration, Confrontation*

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Climate change has become a defining symbol of humans' collective relationship with the environment. Since the 1990s, climate change has become a high-stakes, high-profile and highly politicized venture involving science, policy, culture, psychology, environment and society. Confronting climate change is essentially a collective action problem. Addressing climate change gets to the heart of how we live, work, play and relax in modern life, shaping our everyday lives, lifestyles, relationships and livelihoods.

The bad news is that this is a daunting venture, bigger than any one particular way to solve it or one particular way to even communicate effectively about it. The good news is that there are many ways that individuals, collectives, businesses, organizations and institutions are stepping into the challenge and working in different ways to creatively find resonant ways to connect with different sectors of society. Through new and enterprising communication approaches, these address a range of objectives. Among them, goals of communication efforts include improving education and literacy, helping mobilize more effective advocacy efforts, prompting individual- to collective-scale awareness raising and behavior change, and promoting cultural change. These are burgeoning spaces of engagement. Today, many people, collectives, businesses and institutions are creating content, giving advice on what content to create and researching the efficacy of this content for different segments of public citizens.

In this book, I address key themes in creative climate communications as I track, appraise and evaluate various creative communications on climate change. I highlight how and why certain approaches find success with selected audiences as I critique approaches that fall short in a variety of critical ways. This work is motivated in part by an argument put forward by Dan Kahan (2015a) to gain “satisfactory insight” into the science of science

communication through scientific approaches to evaluation (p. 1). Dan Kahan has taken up the “science of science communication” while this project takes a different tactic through creative climate communications. Moreover, Stephen Schneider (2001) – one of the most effective climate communicators in the past decades – argued for moving beyond platitudes to show, through detailed empirical examples, what works in different circumstances. Similarly, Dan Kahan and Katherine Carpenter (2017) have commented that empirical research is “essential to distinguish the mechanisms that are true from the vast set of those that are merely plausible but untrue, lest researchers and real-world communicators drown in a veritable sea of just-so stories” (p. 310).

Reckless speculation masked as scholarship can be damaging; however, there is a danger of too narrowly defining legitimate scholarship through quantitative (over qualitative) approaches to research in these areas. As such, while this book values and highlights empirical research into these arenas of creative climate communication, it also values storytelling and other ways of examining and knowing about these phenomena. For example, it is a mistake to impose hypothesis testing on creative artists and practitioners as the requisite pathway to knowing what communication strategies are effective in selected audiences. To do so is to alienate a key set of communicators needed to confront these communication challenges. In this book, I therefore take up the position that hypothesis testing and storytelling both can contribute substantively, and at times complementarily, to better understand the efficacy of creative climate communications as both arts and the sciences together.

This project is also motivated in part by comments from Amy Luers (2013), who has also called on researchers to “evaluate what works and share what we learn” ( p. 13). In that spirit, I deliberately deploy extensive citations to take advantage of this long-form book artefact and provide opportunities for you, the reader, to follow up on research, ideas, concepts and cases that pique your interest. While this might be a little cumbersome for the casual reader, I hope it ultimately makes this text a more useful resource for all readers. Misplaced name-dropping (and hero worship) can be both distracting and annoying. But I aim for this pathway of crediting many researchers and practitioners by name to help readers more capably dig into how they may then choose to approach their own communications efforts. I also recount numerous research projects that I have been involved in in recent years. I hope that this cataloguing – evidenced by an extensive reference list at the end of this volume – can catalyze further explorations and research endeavors into these spaces. This pathway also aspires to help you to see how diverse and multimodal approaches have found success in creatively communicating about climate change on multiple scales with different people in the public arena.

Many scholars (including myself) have (vigorously) researched and debated the extent to which media representations and portrayals are potentially conduits to attitudinal and behavioral change. However, there remains a dearth of systematic analyses regarding how creative climate communications elicit varying levels of awareness and engagement. Beyond examining the mechanisms of news media communications on climate change (Boykoff, 2011), we need to continue to expand our experimentation with ways that conversations about climate change can become present and meaningful in our everyday lives. Adam Corner from the Climate Outreach in the United Kingdom (UK) has commented, “There’s a real kind of absence of inspiring programming or engagement to go with all this amazing science we’re producing” (Sobel Fitts, 2014).

Creative and participatory communications and representations can be ignored or dismissed in shaping climate science, governance and everyday cultural politics at our peril. Denigrating views and demeaning utterances about creative climate communications as a sideshow or mere “jawboning” are the views of yesteryear. Through interdisciplinary engagements, this book takes stock of lessons learned from the past few decades of research and practices, in order to inform effective ways to move forward. I have therefore endeavored to write a cogent and central text to anchor us in creative climate communications research and practice going forward.

In the chapters that follow, I wrestle with various dimensions of climate communication, exploring ways to harness creativity to better understand what endeavors work where, with whom (what audiences), when and why. I explore elements and realities that constitute shared twenty-first-century communications ecosystems. In Chapter 1, I lay a foundation for effective communication by understanding intersecting dimensions of intended and perceived audiences. I also consider elements of trust along with who might be creative and effective messengers in the context of a post-truth Anthropocene era. After I initially explore these notions, Chapter 2 then considers how we have come to know what we know about climate change. In this chapter, I explore the value of narratives and stories in meeting people where they are and finding common ground on climate change. I also contend with an argument invoked through the title: effective communications about climate change sometimes may importantly involve *not* invoking the term “climate” or “climate change” explicitly. In Chapter 3, I interrogate how and why the deficit model of communication persists, and how this persistence stands in the way of more effective and creative climate communication. The chapter is animated by considerations of how dissent from climate contrarian (or “denier”) voices persist and find traction. I make the case that dominant information-deficit model approaches

to climate communication counterproductively provide oxygen to breathe more life into counterproductive claims. An expanded approach can then stifle the efficacy of outlier assertions. In Chapter 4, I focus on ways in which experiential, visceral, emotional and aesthetic learning informs scientific ways of knowing about climate change. To illustrate, I explore how comedy can be an effective vehicle for creative climate communications. Through Chapter 5, I consider the importance of framing in context. I explore how framing for selected audiences has functioned through the “More than Scientists” collaboration with “Inside the Greenhouse.” I also look at different scalar approaches where climate communication seeks to create change. This offers opportunities to consider consumption issues and the oft-focused locus of agency at the individual. It also provides a good space to consider climate communication strategies such as “consensus messaging.” In Chapter 6, I analyze the flavors of climate advocacy in today’s highly politicized communications environment. Here I trace a current engagement gap, drawing on survey research and exploring the influence of certain climate science communicators to better make sense of the promises and pitfalls of advocacy through climate communications. In Chapter 7, I situate the value of experimentation in these areas of creative climate communication. I explore numerous examples of forays into these spaces and then assemble features on a “road map” along with “rules of the road” to help guide ongoing creative climate communications. In Chapter 8, I ponder how younger people today are grappling with these issues and consider how they may face them in the decades to come. I link these inquiries to intersecting routes of communication about decarbonization and sustainability. In taking up this set of considerations, I pull in intergenerational and intragenerational equity questions about who has a voice and how, going forward in creative (climate) communications.

As the book proceeds, case study examples in Chapters 4 and 5 reveal that I am not only an (armchair) analyst and researcher but also a participant in experimentation, mainly through the Inside the Greenhouse (ITG) project at the University of Colorado Boulder. With Professor Beth Osnes from the Theatre Department and Professor Rebecca Safran from the Department of Ecology and Evolutionary Biology, we cofounded ITG in 2012. We designed ITG to facilitate and support creative storytelling about issues surrounding climate change through video, theatre, dance and writing to help connect wider and new audiences to climate change in resonant and meaningful ways. In the process, we have also worked to build competence, confidence and capacity of undergraduate and graduate students as emergent communicators and leaders in the new millennium. As such, this project has sought to create cultures of participation and productive collaboration among students, interfacing with the

larger community and world in retelling the stories of climate change and to become meaningful and sustaining content producers. In 2018, Professor Phaedra Pezzullo from the Department of Communication joined the project, adding insights from her experiences and research. The chosen title of the ITG initiative acknowledges that, to varying degrees, we are all implicated in, part of and responsible for greenhouse gas emissions into the atmosphere. Through the development and experimentation with creative modes to communication, we treat this “greenhouse” as a living laboratory, an intentional place for growing new ideas and evaluating possibilities to confront climate change through a range of mitigation and adaptation strategies. Through commitments to meet people where they are on climate change, the ITG project draws on students’ strengths and perspectives to consider the complexity of climate change in new ways. In so doing, ITG offers direct links between the natural and social sciences and arts to communicate, imagine and work toward a more resilient and sustainable future.

Overall, by systematically scrutinizing these linkages and fissures in awareness as well as engagement with climate mitigation and adaptation themes, I hope this book will be valuable to you: researchers, students, practitioners and members of the public citizenry who are interested in **creatively** and **collaboratively confronting** persistent (climate) communication challenges and improving climate communication outcomes.

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