### CREATING A CLIMATE FOR CHANGE

### Communicating Climate Change and Facilitating Social Change

The need for effective communication, public outreach, and education to increase support for policy, collective action, and behavior change is everpresent, and is perhaps most pressing in the context of anthropogenic climate change. This book is the first to take a comprehensive look at communication and social change specifically targeted to climate change.

*Creating a Climate for Change* is a unique collection of ideas examining the challenges associated with communicating climate change in order to facilitate societal response. It offers well-founded, practical suggestions on how to communicate climate change and how to approach related social change more effectively. The contributors of this book come from a range of backgrounds, from government and academia to non-governmental and civic sectors of society. Each chapter goes beyond posing problems or discussing the difficulties, and offers constructive suggestions for improving communication and social change efforts. The book concludes that re-envisioning communication strategies and exploring new approaches are necessary if we are to effectively facilitate action on climate change. The book is accessibly written, and any specialized terminology is explained.

*Creating a Climate for Change* will be of great interest to academic researchers and professionals in climate change, environmental policy, science communication, psychology, sociology, and geography.

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# CREATING A CLIMATE FOR CHANGE

Communicating Climate Change and Facilitating Social Change

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## Preface

If you focus on results, you will never change. If you focus on change, you will get results. Jack Dixon

In 1999, the National Center for Atmospheric Research received a grant from The MacArthur Foundation to help improve the communication between scientists and non-governmental groups about climate change. We started our project in 2003 using a portion of those funds, and expanded the scope to focus more broadly on how climate change communication might more effectively facilitate social change in society more generally.

We saw real opportunity in broadly surveying existing academic knowledge and facilitating conversation across disciplines and with practitioners. Our own experience and a review of the literature suggested that the practice of climate change communication had resulted in disappointing and even counterproductive results. Thus, our central guiding objective was to understand how communicators might advance societal response to climate change by better conveying its urgency and creating a more inclusive and productive conversation.

We convened a multidisciplinary workshop with both academic and practitioner experts in communication and social change. Over 40 individuals from academia, government, non-profit advocacy groups, the business community, and other areas of the private sector met in June 2004 for a three-day workshop at NCAR. Quite deliberately, we invited not only professionals concerned with climate change but also others from unrelated fields and professional backgrounds to contribute fresh thinking on the communication – social change challenge. To facilitate communication among us, we had only two rules: let's speak in plain English and let's barnraise! Inspired by Michael Kahn's 1974 essay ("The Seminar") on different

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#### Preface

conversation styles, we hoped that everyone would add their insights to a fuller understanding of the challenges and possible solutions. We argued that if any one discipline or field of work had all the answers to the question of effective communication, this focus of inquiry would not be needed.

And barn-raise we did. We enjoyed each other's company and learned a lot, if simply because we listened and talked to people we don't usually meet in our regular networks and gatherings. In a deeply engaged, respectful atmosphere, new insights emerged. These insights, developed further since and augmented by viewpoints not represented at the workshop (but identified as critical there), are collected in this volume.

This book does not amount to a radical departure from existing understanding and practice, but presents a snapshot and milestone on a path of change for how we talk about and respond to climate change. It reflects state-of-the-art thinking in numerous relevant disciplines, presents rich examples of current practice, and also poses new questions to the research community. At the same time, it suggests that we don't just need to get better at what we already do; we also need to do new things. We need to open up the communication process to a wider community, in which participants own the process and content of communication. Mutual empowerment and support for change then become central. Such communication will shift us away from mere persuasion and notions of information transfer to dialogue, debate, negotiation, and visioning. These more interactive forms of communication have a far greater chance of supporting individual behavior change, change in organizations and different sectors of society, but they can also help shift social norms, policies, culture, and social relations that underpin deeper societal transformations needed to address global warming.

Despite our attempts to seek balance and integration, the following chapters do not constitute a grand theory of communication for social change. It was not our intent to arrive at such an all-encompassing theory that could integrate all the pieces seamlessly. We never asked our contributors to agree with a particular perspective or position. But we did question bold claims; we did ask that other viewpoints be considered, and if possible reconciled. We did push everyone to think harder. The advances we can claim could not have surfaced without this interaction between bodies of thought.

More important to us was praxis: What has worked? What has not? What have we learned from these experiences and how do they inform those emerging from other chapters? Our collaborators continued in the spirit of barn-raising and offered suggestions on how to improve communication in

#### Preface

support of societal response to climate change. As a result, the book's contributors have advanced our understanding – based in some cases on new research, in others on syntheses of the existing literature, in yet others on real-world experiences. All are original contributions. Their insights and suggestions moved us toward a more democratic communication process involving a broad spectrum of societal actors involved in climate change.

Our own hope in making progress on global warming was sustained in no small measure by this project, by the fact that people from different walks of life, who do not usually talk to each other, gather around an idea and start talking - and not *at* but *with* each other. It is to those who came to the workshop and those who contributed to this volume that we owe our greatest thanks. They demonstrate what is possible: a new, if challenging, but most rewarding and fruitful conversation.

Many more than those represented in this volume have helped make this dialogue possible. The project would never even have happened without Adele Simmons, then at The MacArthur Foundation, who granted the initial gift to NCAR that allowed us to meet in the June 2004 workshop. We cannot thank Bob Harriss enough for entrusting it to us and trusting our ideas. He supported us all along through his optimism and constructive critique. We received additional funding from NCAR's Environmental and Societal Impacts Group (now the Institute for the Study of Society and Environment), NCAR's Walter Orr Roberts Institute through Cindy Schmidt, and a grant from the National Science Foundation through our steady supporter, Cliff Jacobs.

Along the way, this project was supported by a fabulous Steering Committee. We thank Vicki Arroyo, Caron Chess, Sharon Dunwoody, David Gershon, Mickey Glantz, Sonia Hamel, Dale Jamieson, Doug McKenzie-Mohr, Bob O'Connor, Cindy Schmidt, Paul Slovic, Shelly Ungar, and Elaine Vaughan for all their guidance, ideas, reality checks, and encouragement. Several individuals in addition to the ones included in this volume contributed to our workshop and project, and we would like to acknowledge their valuable insights – Tim Barnes, Dennis Bray, Sarah Conn, Mickey Glantz, Deborah Lynn Guber, Sonia Hamel, Cliff Jacobs, Willett Kempton, Robert Lempert, Franz Litz, Susan Munves, Bob O'Connor, Roger Pielke, Jr., Opalanga Pugh, Carol Rogers, Blake Smith, Clive Spash, and Will Toor.

We could not have pulled off the workshop or completed this book without the exceptional administrative and other support – from travel planning and recording of conference conversations, to website design, maintenance and help with graphics, to editing and proofreading, to the invisible, but

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indispensable, emotional support that helps people keep going until something is finally done. Thank you to Nataly Ascarrunz, Yarrow Axford, Marilyn Averill, Rebecca Haacker-Santos, Vicki Holzhauer, Jan Hopper, Mark McCaffrey, Rebecca Morss, Jean Renz, Hillary Rosner, Sharon Shearer, D. Jan Stewart, Jason Vogel, and in particular to John Tribbia and Susan Watrous for keeping us sane during the book's completion phase.

In the spirit of the MacArthur grant, it was our goal to make this project not just an academic exercise, but to include those who in their daily work experiment with communication and social change strategies. Precisely because practitioners are busy doing just that, we did not expect that writing a book chapter would be high on their list. Several surprised us, saying they want to write their own, and we want to especially acknowledge them – we know this wasn't part of their day job. Others gratefully accepted the chance to work with either an academic colleague or with one of our three wonderful writers and editors, Natasha Fraley, Sarah Rabkin, and Susan Watrous. They enabled the voices and stories of practitioners to be included in this volume – a part of the conversation so often left out.

A big thank you also to Matt Lloyd at Cambridge University Press for recognizing the value of this eclectic compendium. He, Helen Morris, Emma Pearce, Dan Dunlavey and Imran Mirza at Keyword Group were enthusiastic supporters from the start. Their experienced and patient hand smoothed out the rough edges we didn't see and shepherded the book to completion.

Finally, we would like to thank each other. The first edited book for each of us, and our first project together, we dove into it with the enthusiasm of those who don't know what's ahead. Two years and a lot of learning later, we know that neither of us could have done a better job alone. Our different training, professional experiences, perspectives, and personalities complemented each other in essential ways. It is our hope that the result will stimulate rich new thinking on communication for social change, and maybe even encourage some to go out and be part of the change. As Eleanor Roosevelt famously said: "You must do the things you think you cannot do."

> Susanne C. Moser Lisa Dilling

## Foreword

There is a remarkable and recurring shape in both art and science. Hogarth, the seventeenth-century artist, would have seen it as an "S"-shaped "line of beauty," and Verhulst, the mathematician, in 1838, as yet another example of rapid but self-limiting growth in the form of the logistic equation. And for me it is a powerful model of how social, behavioral, and technological change takes place. So whether we are charting the proportion of the public expressing concern for global warming over time or the number of people, institutions, and countries taking action to limit climate change, we hope the eventual path will be "S"-shaped. Such a curve would show a slow increase of climate change risk perceptions, mitigation or adaptation policies, and individual behaviors followed by a period of rapid growth, until finally the rate of growth slowed once a very large proportion (but not all) of people, institutions, or countries have changed.

The chapters in this volume suggest that if we were to plot public awareness of global warming or climate change we are probably high on the curve, although much of public knowledge of causes and solutions may be inaccurate by scientific standards. Yet public concern and political will have not yet turned the corner leading to an adequate response to this threat. And indeed if we use as a criterion specific actions, rather than vague ones such as "saving energy" or "helping the environment" – then it is still very early days. Overall, these exciting, stimulating, and sometimes conflicting chapters address how we can bend the flat line upwards to put us on the path to accelerated action.

Fortunately, there are many examples of such periods of rapid change following years of painful plodding. Recent history suggests that long-term trends in individual behavior can undergo dramatic change. For example, growing scientific evidence and public pressures led to the adoption of stricter laws, penalties, and enforcement measures related to smoking, seat

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#### Foreword

belts, drunk driving, and littering. In turn, the implementation of these structural changes led to rapid increases in seat-belt use and actual reductions in smoking, drunk driving, and littering. In the United States, social change in the areas of civil rights, feminism, and the environment has been extraordinarily rapid following decades or even centuries of slow, incremental change.

My colleagues Anthony Leiserowitz, Tom Parris, and I have recently argued that at least four conditions are required for these accelerations in collective action. These include: changes in public values and attitudes, vivid focusing events, an existing structure of institutions and organizations capable of encouraging and fostering action, and practical available solutions to the problems requiring change. For example, the struggle for civil rights in the United States was galvanized by dramatic televised images of overt racism, which offended widely held values of justice, fairness, and equality. A variety of organizations, especially African-American churches and their leaders, skillfully forced long-ignored issues of race relations onto the national agenda. Legal solutions were readily available and quickly implemented, including the repeal of Jim Crow laws, the Civil Rights Act (1964), and the Voting Rights Act (1965). Another example is the relatively quick international adoption and implementation of the Montreal Protocol on ozone protection. Strong global values and attitudes favoring the protection of human and environmental health already existed and ozone depletion was directly linked to skin cancer. Response to the scientific discovery of the role played by chlorofluorocarbons (CFCs) in ozone depletion developed slowly until the identification of the ozone "hole" provided a vivid image and metaphor. A broad set of health, environmental, and industry non-governmental organizations was ready to respond to the emerging sense of crisis. Finally, the companies that produced CFCs were able quickly to develop substitutes and to take advantage of a new regulatory environment that phased CFCs out of production.

Most of the chapters in this book address one or more of these four conditions, such as the use of communication to change or amplify public values and attitudes, the importance of vivid imagery and focusing events, the need to understand and use the structure of existing institutions to foster action, and to share examples of practical solutions already implemented or readily at hand. For each of these, there is a strong emphasis on what each of the authors learned about how to communicate better their concerns, institutions, or solutions.

Thus this volume provides an important synthesis of ideas and approaches to accelerate the global response to climate change. But it is only a starting

#### Foreword

point. Some conclusions emerge very clearly. Make the global local. Communicate hope, not just fear. Strengthen existing values and use existing organizations. Make action attractive and efficacious. Many chapters will challenge readers to rethink their current efforts to communicate and respond to climate change. Other chapters raise more questions than they answer, but they are important. Are events such as Hurricane Katrina useful focusing events or do they encourage a wrong mental model of climate change and its impacts? Are scientists part of the problem or the solution? And ultimately, can the modest practical actions of individuals, cities, and even states change a global dynamic that requires nothing less than an end to almost all fossil fuel use?

So even if this volume doesn't answer all your questions, do read on. Let me assure you that there never has been as diverse a group of participants, as fresh a set of new voices, brought together by two splendid editors, in a single volume, at a special time, to address the urgency of what might be the grand challenge of the twenty-first century.

Robert W. Kates

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