

Living in Denial

Climate Change, Emotions, and Everyday Life



Kari Marie Norgaard

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To the future generations in my family:

To my son, Cody, and to sister Addie, brother Matt, and niece Isabel.

To all future generations.

May your world flourish.

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Prologue: An Unusual Winter

During the fall and winter of 2000–2001, unusually warm weather occurred in a rural community in western Norway. November brought severe flooding across the entire region. By early December, it was established that the weather was measurably warmer than usual. The local newspaper reported that October, November, and December were respectively 4.0, 5.0, and 1.5 degrees warmer than the 30-year average. As of January 2001, the winter of 2000 for Norway was recorded as the second warmest in the past 130 years. This fact was highly publicized. Regional and national newspapers carried headlines such as “Warmer, Wetter, and Wilder,” “Green Winters—Here to Stay?” and “Year 2000 Is One of the Warmest in History.” In the town of Bygdaby¹ (a pseudonym pronounced Big-DAH-bee), where I did my fieldwork, the first snowfall did not come until late January—some two months later than usual.

As a result of these conditions, the local ski area did not open until late December, and only then with the aid of 100 percent artificial snow—a completely unprecedented event with dramatic effects on recreation and measurable economic impacts on the community. The local lake failed to freeze sufficiently to allow for ice fishing. Casual comments about the weather, a long-accepted form of small talk, commonly included references to unusual weather, shaking of heads, and the phrase “climate change.” Lene, a businesswoman in her late forties, described the difference in the weather from her childhood:

In my childhood there was lots of snow all the time, it was cold, all the way down to -40 Celsius, so that diesel cars just stopped working, you know? And we had ice on the lake, the kind we had now for a few days. It was like that the entire winter, it was always like that, and we had such a good time. Down at the lake we had music, and there was both a long skating track and in the middle . . . a shorter track. Those were such different times. But since I've grown up,

it's been different. We have received little snow. Of course it's wonderful in a way. . . . You know, you don't have to shovel snow, you don't have to drive on ice, and all that. But the extreme [warm] weather, it didn't come until the 1980s, the end of the 1980s, it seems.²

Although the dramatic change in weather may have been most apparent to people older than thirty, teenagers could also perceive that the weather patterns were quite different. Vigdis, a 17-year-old student involved in antiracism work, described the change: "It is, well, milder. There has been less change between the seasons. There is less snow and more, like, halfway winter, and the summers have been colder. I think that it comes from climate change. Because it didn't used to be this way."

In addition to the marked absence of snow, the lake on the edge of town failed to freeze. In late 2000, a woman who was walking on the lake fell through the ice and drowned when it cracked. Ketil, an administrator at a small cultural institute, described the dramatic change in the lake ice over the previous decade:

Like the lake here—until fifteen years ago people came to Bygdaby from eastern Norway, from Hallingdal, and [from] other places by train. They stayed overnight at the hotel in order to use the ice. It was completely black with people out on the ice every single winter. They went out there and fished. It was very good fishing. But you know it hasn't been like that for the last ten years; now it is completely gone. Nobody comes here anymore. It hasn't been safe ice for nearly ten years now. After a day or two, it will rain.

Perhaps the clearest impact of the weather on the community that winter can be measured in money. Because of lack of snow, the opportunity to ski was greatly reduced, and the resort owner had to invest a considerable amount of money and effort to produce a single run made completely of artificial snow.

Communities around the world are experiencing similar stories of unusual weather that seriously impact local economies and survival. Across New Hampshire, a trend toward warmer winters has resulted in fewer and fewer ski areas. The warmer weather has particularly impacted smaller operations, contributing to an industry shift toward larger ski areas (Hamilton, Rohall, Brown, et al. 2003). In Vermont, the month-long season for maple syrup production has decreased by about three days over the past 40 years, leading to measureable decreases in syrup production and syrup producers' worries that climate change has begun to affect the \$200 million industry. Communities in polar regions are particularly at risk (Alaska Regional Assessment Group 1999; Arctic Climate Impact Assessment 2005). In October 2004, *Time* magazine ran

a story about Shishmaref, a 4,000-year-old Inupiaq Eskimo village on an Alaskan barrier island where the permafrost is thawing and where rising seas threatened to submerge the island. Huge waves had washed away the school playground and \$100,000 worth of boats and fishing equipment. Two years later in 2006 the entire community was evacuated (Roosevelt 2004). A recent U.S. General Accountability Office study found that 4 Alaskan villages are in “imminent danger” and that another 20 are seriously threatened by rising sea levels. In fact, the report documents that 184 of 213 Alaskan native villages are presently at risk from serious flooding (US GAO, 2004, 1). Elsewhere in the state, Inuit have difficulty using snowmobiles because the ice is dangerously thin. In the fall of 2004, Inuit people sought a ruling from the Inter-American Commission on Human Rights against the United States for causing global warming and its devastating impacts.

Changing climate has visible impacts farther south as well. The World Health Organization now estimates that worldwide climate change contributes to 160,000 deaths each year due to the increased prevalence of vector-borne diseases, food insecurity, and heat waves (Campbell-Lendrum, Pruss-Ustun, and Corvalan 2003). By 2030, climate change is expected to lead to a 14 percent increase in the number of people exposed to malaria in Africa, and the rate of people at risk from dengue worldwide is expected to double by 2070 (Hales, de Wet, Maindonald, et al. 2002; World Bank 2010). High-income countries are vulnerable as well. The 2003 summer heat wave led to the deaths of more than 70,000 people across Europe (Robine, Cheung, Le Roy, et al. 2008; World Bank 2010). As urban heat islands produce temperatures significantly higher than surrounding areas, city planners are beginning to map patterns. By the middle of this century, New York, Philadelphia, Detroit, Chicago, and Minneapolis are projected to be among the cities in the United States with the most heat-related deaths due to global warming (Carlson 2007).

In the winter of 2000–2001 in Bygdaby, it was not just the weather that was unusual. As a sociologist, I was perplexed by the people’s behavior as well. Global climate change is arguably the single most significant environmental issue of our time. Impacts on human society are predicted to be widespread and potentially catastrophic as water shortages, decreased agricultural productivity, extreme weather events, and the spread of diseases take their toll. Potential outcomes for Norway include increased seasonal flooding, decreased winter snows, and the loss of the Gulf Stream that currently maintains moderate winter temperatures, thereby providing both fish and a livable climate in the northern

region. In Norway, there has been relatively high public support for the environmental movement as well as public awareness of and belief in the phenomenon of global warming. Yet despite clear social and economic impacts on the community, no social action was taken at the beginning of this century. Whether the warm weather and lack of snow in Bygdaby were actually a result of global warming or not cannot be determined for certain because weather and climate are not equivalent. Among competing explanations for the unusual weather, however, it *was* widely linked to global warming in both the media and in the minds of local residents. National newspaper coverage of weather events contained information on climate change, and small talk about unusual weather frequently referred to the possibility of climate change. In a focus group in late November with young women who attend the local high school, I asked whether the issue of climate change seemed “real” to them or not:

Siri I have heard about the conference [climate meeting at The Hague]. I became a bit afraid when they didn’t reach agreement. . . .

Trudi Our minister of environment! In 2008, we will decrease our emissions by 5 percent. (General laughter.)

That will help!

Kari So all of you have followed this a bit. And is it something that you feel is real, really happening, or . . . ?

(Immediately and several speaking at once.)

Mette Now it is incredible, 5 degrees Celsius is, you know, really strange.

(Mmm, ja.)

Siri (interrupting) There should be snow.

Trudi It comes in much closer for us. You notice it. You know, it’s getting worse and worse.

Mette We notice it here in the everyday with climate here, in your surroundings.

Trudi Last year there was snow at this time of year. And actually that is the way it should have been for quite some time now.

This conversation occurred on November 28, 2000. The community did not get snow until mid-January.

What perplexed me was that despite the fact that people were clearly aware of global warming as a phenomenon, everyday life in Bygdaby went on as though it did not exist. Mothers listened to news of unusual flooding as they drove their children to school. Families watched evening

news coverage of the failing climate talks in The Hague, then just tuned into American sit-coms. Global warming did not appear to be a common topic of either political or private conversation unless I brought up the topic. Aside from small talk about the unusual weather, few people ever seemed to spend much time thinking about global warming.

People could have reacted differently to that strange winter. In Bygdaby, the shortened ski season affected everyone in the community. In the words of one taxi driver, “It makes a difference if we move from five months of winter tourism to only three. It affects all of us, you know, not just those up on the mountain. It affects the hotels, the shops in town, us taxi drivers, we notice it too.” Why didn’t this awareness translate into social action? Throughout modern history, people have used a variety of strategies to draw attention to problems in their communities, such as staging marches and boycotts and writing letters to newspaper editors and political leaders. What might Bygdabyingar have done differently? Community members could have written letters to the local paper, brought up the issue in one of the many public forums that took place that winter, made attempts to plan for the local effects of climate change, put pressure on local and national leaders to develop long-term climate plans or short-term economic relief, decreased their automobile use, or, at the very least, engaged their neighbors, children, and political leaders in discussions about what climate change might mean for their community in the next ten to twenty years.

Indeed, in other parts of the world that year reactions to climate change *were* different. The severe flooding in England in November 2000 was linked to climate change by at least some of the impacted residents. People from affected communities in England traveled to the climate talks at The Hague to protest government policies. Since that time, several cities in the United States have taken action against the federal government over global warming. And although one cannot tie weather events per se to climate change, the fact that increased hurricane intensity is one clear outcome of climate change has led residents in Mississippi, who are now homeless as a result of Hurricane Katrina, to file a lawsuit against oil companies for their role in climate change. The residents of Bygdaby could have taken similar actions, rallying around the problem of the lack of snow and its economic and cultural impacts. But they did not.

How did people in Bygdaby manage to ignore outwardly such significant risks? Did they manage to ignore it inwardly as well? Why did such a seemingly serious problem inspire so little response?

The rather puzzling behavior of people that winter in Bygdaby is related to larger questions about social and environmental action in Norway, in the United States, and around the world: How are the citizens of wealthy industrialized nations responding to global warming? Why are so few people taking any sort of action? Why do some social and environmental problems result in people's rising up when others do not? And given that many people do know the grim facts, how do they manage to produce an everyday reality in which this urgent social and ecological problem is invisible? Citizens of all the wealthier nations of the world today face these critical questions. Climate change is not unique to Norway, nor are its present and future impacts. Nor, unfortunately, is the failure of response unique to this small community in Norway. Despite the extreme seriousness of this global environmental problem, the pattern of meager public response—in terms of social movement activity, behavioral changes, and public pressure on governments—exists worldwide.

I arrived in Norway in the summer of 2000 on a scholarship from the American-Scandinavian Foundation, with a concern about global warming and an intention to conduct research on how the environmentally progressive Norwegians made sense of it. My husband, Sam, accompanied me with plans to work at the local ski resort. I was fluent in Norwegian. We both looked forward to an interesting year. Norway was not only a place where I had spent significant time growing up, but also a nation I admired for its strong environmental and humanitarian values. Plus, the Norwegians have significant wealth, which can be an asset, at least in making technological changes. Since the time I first lived in Norway as a teenager, I had been fascinated by the extent of progressive environmental policy and awareness there. Now I returned with my comparative sociological lens to ask questions that at the time could not be addressed in my own country, the United States. Indeed, at the time the United States was the only country in the world where, thanks to extensive countercampaigns by the oil industry and the George W. Bush administration, one-quarter of the population still questioned whether global warming was actually occurring (Krosnick 2009).

In the past several years, especially since the widespread viewing of Al Gore's *An Inconvenient Truth* and the events of Hurricane Katrina, the United States has "caught up" with Norway, which is to say that Americans have reached the point that Norwegians were at in 2001: widespread knowledge and concern regarding climate change, but still too little action. More important, having reached the same levels of

information and concern that Norwegians exhibited in 2001, many Americans have also begun to experience the same mental landscape inhabited by so many well-educated, environmentally conscious people I met in Bygdaby—a landscape where the possibility of climate change is both deeply disturbing and almost completely submerged, simultaneously unimaginable and common knowledge. In this sense, Norway and the community of Bygdaby serve as a bellwether for the United States and the rest of the world.

People in the United States, facing the same quandary, can no longer claim not to know about global warming. Although some 68 percent of the population list global warming as a serious environmental problem in recent polls, few people spend time writing or thinking about it, much less taking action. A joint study by the American Geophysical Union and Public Agenda in 1998 emphasized the public's feelings of powerlessness and frustration, rather than lack of information, connected to the issue of climate change:

They said they care deeply about global warming, but their concern did not translate into any forward motion. As they thought about the problem, they seemed to run into brick walls, characterized by lack of clear knowledge, seemingly irreversible causes, and a problem with no real solution. As a result they were frustrated and eager for a solution but unsure of which way to go. The symptoms of this frustration are clear. The first is that people literally don't like to think or talk about the subject. Our respondents always seemed to want to move the topic from global warming itself to more familiar topics, such as moral deterioration, where at least they felt on firmer ground. (Immerwahr 1999)

Despite increases in awareness and concern in the United States since the time this observation was made, the comment still holds an eerie familiarity to what I observed in Norway.

This book is about how people experience disturbing information regarding global climate change. It tells a story about what goes on behind the scenes to create the public face of apathy. It is a story that uses the voices of members of one small town to speak to questions from sociology and science communication regarding the relationship between information and social action. It is a story that I hope will help us to understand the complexity of the lived experience of people around the world as we struggle collectively to make sense of this significant problem.

Introduction: The Failure to Act, Denial versus Indifference, Apathy, and Ignorance

Environmental and social scientific communities alike have identified the failure of public response to global warming as a significant quandary. Most existing explanations emphasize lack of information (people don't know enough information; climate science is too complex to follow; or corporate media and climate skeptic campaigns have misled them) or lack of concern (people are just greedy and self-interested or focused on more immediate problems). Such work emphasizes either explicitly or implicitly the notion that information is the limiting factor in public nonresponse to this issue, an approach that is often called the "information deficit model" (see, e.g., Bulkeley 2000). There is the sense that "if people only knew," they would act differently: that is, drive less, "rise up," and put pressure on the government. For example, psychologists Grame Halford and Peter Sheehan write, "With better mental models and more appropriate analogies for global change issues, it is likely that more people, including more opinion leaders, will make the decision to implement some positive coping action of a precautionary nature" (1991, 606). Researchers have lamented the confusion between global warming and the ozone hole (e.g., Bell 1994; Bostrom, Morgan, Fischhoff, et al. 1994; Read, Bostrom, Morgan, et al. 1994), investigated the role of media framing (Bell 1994; Ungar 1992; Grundmann 2006, 2007), and described how understanding global warming requires a complex grasp of scientific knowledge in many fields. Also in this vein, John Sterman and Linda Sweeney examine public misperceptions of climate models as a cause for inaction. The authors conclude that "low public support for mitigation policies may arise from misconceptions of climate dynamics rather than [from] high discount rates or uncertainty about the impact of climate change" (2007, 606). Furthermore, they link this misunderstanding to the failure of response by U.S. policymakers. Yet as Daniel Read and his colleagues (1994) pointed out more than a decade ago,

only two simple facts are essential to understanding climate change. If significant global warming occurs, it will be the result primarily of an increase in the concentration of carbon dioxide in the earth's atmosphere. And the single most important source of carbon dioxide is the combustion of fossil fuels, most notably coal and oil. How can it be that people don't know these basic facts?

Finally, the information deficit approach cannot explain a paradoxical phenomenon: as evidence for climate change pours in, and as predictions become more and more alarming and scientific consensus increases, interest in the issue in Norway and elsewhere is declining. Biannual national surveys find a significant and steady downward trend in Norwegian interest and concern in the issue, with the percentage of respondents who replied that they were "very much worried" about climate change declining steadily from 40 percent in 1989 to less than 10 percent in 2001 (Hellevik 2002, 13; Barstad and Hellevik 2004).¹ Hellevik's explanation for declining concern is interesting: "A decline from such a high level of anxiety is to be expected. There are limits to how long it is possible for individuals to live with the extremely pessimistic environmental perspectives reflected in the 1989 results. Anxiety reduction mechanisms make people look for brighter aspects of development" (2002, 13). Although the situation is more complicated in the United States, we can see evidence of the same pattern here. For example, Paul Kellstedt, Sammy Zahran, and Arnold Vedlitz have found that increased levels of information about global warming have a negative effect on concern and sense of personal responsibility. In particular, respondents who are better informed about climate change feel less rather than more responsible for it: "in sharp contrast with the knowledge-deficit hypothesis, respondents with higher levels of information about global warming show less concern" (2008, 120). Similarly, Jon Krosnic and his colleagues (2006) observed that people stopped paying attention to global climate change when they realized that there is no easy solution for it. They note that many people instead judge as serious only those problems for which they think action can be taken.

In the United States, there is also the phenomenon of outright climate skepticism, in which 26 percent of the population does not believe there is scientific consensus that climate change is occurring (Krosnic 2009). Is this phenomenon at all linked with the larger majorities of the U.S. public who find global warming alarming, but who fail to take action? If so, how?

Existing studies of how people process information on climate change have focused largely on either the individual level, examining “mental models” and cognitive schemas (e.g., Bostrom, Morgan, Fischhoff, et al. 1994), or the national level, carrying out large-scale cross-national surveys (e.g., Dunlap 1998; Saad 2002, 2007 Nisbet and Meyers 2007; Newport 2008; Leiserowitz, Maibach, and Roser-Renouf 2008, 2010). No sociological work to date has taken an open-ended, ethnographic approach to the question of how people experience climate change. Results from the few studies that use interview data do not support the information deficit model. Instead, their results describe a complexity of response, situations of knowing and not knowing, and emotional ambivalence. Perhaps more significant, although information deficit explanations are indispensable, they do not account for the behavior of the large number of people who *do* know about global warming, believe it is happening, and express concern. Outright climate skepticism is flashy and attention grabbing, but survey data make clear that a much larger percentage of the Norwegian (not to mention U.S. and world) population is not skeptical (Hellevik and Høie 1999). If we look closely, these people’s inaction becomes an interesting, complex, and, I suggest, important barrier to social change.

Double Realities: Climate Change and Everyday Life

It was not long after my arrival in Bygdaby that I began to sense a paradox. Norwegians are among the most highly educated people in the world. Global warming was frequently mentioned during my time in Bygdaby, and community members seemed to be both informed and concerned about it. Yet at the same time it was an uncomfortable issue. People were aware that climate change could radically alter life within the next decades, yet they did not go about their days wondering what life would be like for their children, whether farming practices would change in Bygdaby, or whether their grandchildren would be able to ski on real snow. They spent their days thinking about more local, manageable topics. Ingrid, a local high school student, described how “you have the knowledge, but you live in a completely different world.” Vigdis told me that she was afraid of global warming, but that it didn’t enter her everyday life: “I often get afraid, like—it goes very much up and down, then, with how much I think about it. But if I sit myself down and think about it, it could actually happen; I thought about how if this here continues, we could come to have no difference between

winter and spring and summer, like—and lots of stuff about the ice that is melting and that there will be flooding, like, and that is depressing, the way I see it.”

In the words of one person who held his hands in front of his eyes as he spoke, “People want to protect themselves a bit.” These voices are echoed in the United States. One of my female environmental studies students described how “solving global warming seems like such a daunting task, and even I know that it can seem too overwhelming.” Another student observed, “Despite my knowledge of the wider climate issues, I am still living the same life.”

Community members in Bygdaby described this sense of knowing and not knowing, of having information but not thinking about it in their everyday lives. As one young woman told me, “In the everyday I don’t think so much about it, but I know that environmental protection is very important.” As a topic that was troubling, it was an issue that many people preferred to avoid. Or as Ingrid put it, “I think that there are lots of people who think, ‘I don’t have that problem myself; I can’t do anything about it anyway.’”

Community members describe climate change as an issue that they have to “sit themselves down and think about,” “don’t think about in the everyday,” “but that in between is discouraging and an emotional weight.” People in Bygdaby did know about global warming, but they did not integrate this knowledge into everyday life.

This state of affairs brings to mind the work of historical psychologist Robert J. Lifton. Lifton’s (1982) research on Hiroshima survivors describes people in states of shock, unable to respond rationally to the world around them. He calls this condition “psychic numbing.” Following his initial studies in Japan, much of Lifton’s work has been devoted to describing the effect of nuclear weapons on human psychology, particularly for Americans (see, for example, *Hiroshima in America: Fifty Years of Denial* [1995]). Out of this project, Lifton describes people today as living in an “age of numbing” (1993, 210) due to their awareness of the possibility of extinction (from the presence of both nuclear weapons and the capacity for environmental degradation). In this usage, numbing comes not from a traumatic event, but from a crisis of meaning. Lifton says that all of us who live in the nuclear age experience some degree of psychic numbing. We know that our lives can end at any moment, *yet we live as though we do not know this*. Lifton calls this condition the “absurdity of the double life.” We live with “the knowledge on the one hand that we, each of us, could be consumed in a

moment together with everyone and everything we have touched or loved, and on the other our tendency to go about business as usual—continue with our routines as though no such threat existed” (1982, 4–5). According to Lifton, the absurdity of the double life profoundly affects our thinking, feeling, identity, sense of empowerment, political imagination, and morality. He writes, “If at any moment nothing might matter, who is to say that nothing matters now?” (1993, 23).

I adapt Lifton’s phrase “absurdity of the double life” in coining the term *double reality* to describe the disjuncture I observed that winter in Bygdaby. In one reality was the collectively constructed sense of normal everyday life. In the other reality existed the troubling knowledge of increasing automobile use, polar ice caps melting, and the predictions of future weather scenarios. In the words of Kjersti, a teacher in her thirties at the local agricultural school: “We live in one way, and we think in another. We learn to think in parallel. It’s a skill, an art of living.” This disconnect between abstract information and everyday life is also reported by Norwegian sociologist Ketil Skogen, who finds that for young people in a rural Norwegian community, “environmental issues in general and global threats like the greenhouse effect in particular, are seen as abstract and irrelevant, and are generally not something young people think about” (1993, 232).

It can be easy to take such statements at face value, and most people do. But through his work on the sociology of cognition, Eviatar Zerubavel reminds us that society teaches us what to pay attention to and what to ignore. We learn “cognitive traditions” through a process of socialization. Deciding whether to pay attention to a given idea or event in a given moment or not is a learned process that Zerubavel calls “optical socialization”: “Separating the relevant from the irrelevant is for the most part a social act performed by members of particular ‘optical’ communities who have been specifically socialized to disattend certain things as part of the process of adopting the distinctive ‘outlook’ of their community. In other words, we learn what to ignore, and only then does its irrelevance strike us as natural or ‘logical’” (1997, 47).

Zerubavel tells us that rather than taking thinking as matter of fact, we need to realize that notions of what to pay attention to and what to ignore are socially constructed. We learn what to see and think about from the people around us. Zerubavel’s work tells us that whether people notice information about climate change is related to socially shaped systems of perception and attention, whether they remember what they hear is a function of social systems of memory, whether it is considered

morally offensive or not is a function of whether it is inside or outside socially defined limits of concern; and the relevance of climate change to daily life is a function of socially shaped systems of cognitive organization (see Zerubavel 1997). “Cognitive traditions” or collective patterns of thinking differ from one “thought community” to another. How we think is part of culture and marks our participation in community. Cognitive traditions and thought communities thus shape how and whether groups of people think about climate change and whether they perceive the topic as relevant for everyday life. From the inside, boundaries of thought appear “natural,” and “commonsense” decisions about what to pay attention to or ignore appear strange only when we are outside a given cognitive tradition. Zerubavel (2002, 2006) calls this social shaping of our awareness, memories, and thought patterns the “social organization of denial.” Most research to date has examined denial on the level of individual psychology. Yet what individuals choose to pay attention to or to ignore must be understood within the context of both social norms shaping interpersonal interaction and the broader political economic context. Thus, Zerubavel argues, and I agree, that we need both psychology and sociology to study “the mental processes of attending and ignoring” (1997, 11). From the former perspective of individual psychology, people block information on their own as individuals, but from the latter perspective denial occurs through a process of social interaction.

Zerubavel also calls our attention to the normative aspect of how we direct our awareness. Indeed, in every community there are social rules for focusing attention, including rules of etiquette that involve tact-related ethical obligations to “look the other way” and ignore things we most likely would have noticed about others around us. “Not only does our social environment provide us with a general idea of what we can disattend, it very often also tells us what we should repress from our consciousness and ignore. In other words, there is an important (though relatively unexplored) normative dimension to relevance and irrelevance. Indeed, probably the main reason that our own focusing patterns seem so natural or ‘logical’ to us is that they are usually normatively binding” (Zerubavel 1997, 50).

But why would thought communities be normative? And if they are, then how are the boundaries enforced? Questions about whether people pay attention to climate change can suddenly start to look much like theoretical questions about the nature of power. In the midst of whether climate change is defined as near or far, relevant or irrelevant, we find

entree into the heart of concepts such as hegemony and ideology and into the role of culture in the reproduction of power.

Ann Swidler's Cultural Tool Kit and the Production of Culture

One of Antonio Gramsci's (1971) key contributions to social theory is his emphasis on how social control is enacted through the acceptance of ideas that prevent social change and on the important role of culture in legitimating those ideas. If we entertain for the moment the notion that power may be located in the realm of culture, then we must next ask both *how* and *why* particular systems of memory or cognition concerning climate change are enforced. How exactly does power operate through culture? Up until the mid-1980s, many social scientists understood culture to shape human activity in a fairly static manner, through providing values that direct actions.

Then in 1986 Ann Swidler's work described an alternative framework for a causal role of culture in social action. In a groundbreaking essay, Swidler describes how "culture influences action not by providing the ultimate values toward which action is oriented, but by shaping a repertoire or 'tool kit'" (1986, 273). In her view, culture shapes social action not by providing guiding values, but by providing cultural components or "chunks of culture" (283) that can be used as tools by individuals to construct "strategies of action" (273). Such a "tool kit" may contain "symbols, stories, rituals and world-views which people may use in varying configurations to solve different kinds of problems" (273). For example, "Publicly available meanings facilitate certain patterns of action, making them readily available, while discouraging others" (283). For Swidler, "This revised imagery—culture as a 'tool kit' for constructing 'strategies of action,' rather than a switchman directing an engine propelled by interests—turns our attention toward different causal issues than do traditional perspectives in the sociology of culture" (271). I build on Swidler's tool kit concept in chapters 4 and 5.

"We Don't Really Want to Know": Climate Change and Disturbing Emotions

A second question about power and culture concerns *why* individuals choose to enact cultural systems of optical socialization. In the fall of 2000 in Bygdaby, using ethnographic fieldwork, interviews, and media analysis, I began to notice that although global warming was an issue

that people knew and cared about, they didn't seem to *want* to know about it. Furthermore, not wanting to know about climate change appeared to be related to the host of powerful emotions the topic engendered. The people I interviewed described fears about the severity of climate change, of not knowing what to do, that their way of life was in question, and that the government would not adequately handle the problem. They described feelings of guilt for their own actions and the difficulty of discussing the issue of climate change with their children. These emotions were significant. What role might they play in the equation of the double reality?

In her landmark book *The Managed Heart: Commercialization of Human Feeling* (1983), sociologist Arlie Hochschild vividly exposes the relationship of seemingly private and personal emotions to social structure and political economy. She writes about the signal function of emotions and their ability to provide information about our interpretations of the world. Quite provocatively and in contrast to the emotion/reason dualism, she writes that emotion "can tell us about a way of seeing" and that "emotion is unique among the senses because it is related to cognition" (1983, 220). She goes on to explain: "A black person may see the deprivation of the ghetto more accurately, more 'rationally' through indignation and anger than through obedience or resigned 'realism.' He will focus clearly on the policeman's bloodied club, the landlord's Cadillac, the look of disapproval on the employment agencies' white face. Outside of anger these images become like boulders on a mountainside, miniscule parts of the landscape" (30n.). Hochschild writes that "a person totally without emotion has no warning system, no guidelines to the self-relevance of a sight, a memory or a fantasy. Like one who cannot touch fire, the emotionless person suffers a sense of arbitrariness, which from the point of view of his or her self-interest is irrational. In fact, emotion is a potential avenue to 'the reasonable view'" (30). Sociologists of emotion also emphasize the role emotions play in the sociological imagination: "Emotions provide the 'missing link' between 'personal troubles' and broader 'public issues' of social structure, itself the defining hallmark of the sociological imagination" (Williams and Bendelow 1997, xvii). Thus, Hochschild notes, "When we do not feel emotion, or disclaim emotion, we lose touch with how we link inner to outer reality" (1983, 223).

Scholars such as James Jasper have expanded our understanding of the important role emotion plays in public life and social movements. Outrage, for example, can lead to protest and thus to social change.

Emotions are tied to the moral values that are part of a social movement framing process, shape social movement goals, provide motivation for potential participants to enter movements, and form the basis of solidarity among movement participants (see Jasper 1998; Goodwin, Jasper, and Polletta 2001). The emotions people described in Bygdaby that fall and winter of 2000–2001 were not trivial. If emotion and cognition are linked, it would seem important not to skip over them. Yet few scholars have paid attention to emotions and climate change or to the role of emotion in preventing action. Were these emotions part of the matrix of ignoring? If so, then how?

In contrast to research that has emphasized individuals' faulty decision-making powers; the use of inappropriate schemas, heuristics, or mental models; or the inadequate transfer of information from scientists to society (as in risk and "science communication" models), I aim to shift our view to the emotional and psychological experiences of noticing or thinking about climate information, the normative aspects of thinking and feeling, and the active production of cultures of emotion and talk regarding climate change. In so doing, I am building a model of socially organized denial. In sharp contrast to psychological approaches to denial, the notion of socially organized denial emphasizes that ignoring *occurs in response to social circumstances and is carried out through a process of social interaction*. I am grateful here for the work of Eviatar Zerubavel (2002, 2006), who, as previously noted, coined the phrase "social organization of denial" and describes numerous important components of it. Building from the ground up with ethnographic and interview data as this project does, emotions and culture also emerged as prominent factors in the production of denial regarding global warming. Thus, adding to Zerubavel's framework other theory from sociology of culture and emotions, I describe socially organized denial as the process by which individuals collectively distance themselves from information because of norms of emotion, conversation, and attention and by which they use an existing cultural repertoire of strategies in the process.

Denial is also related to political and economic circumstances, what Marxist scholars call "political economy." Norway is one of the nations of the world that has benefitted most from oil production. It is important to understand not only that Norway is one of the world's richest countries, but that oil and gas have played a significant role in generating that wealth. As of 2009, Norway was the world's fifth-largest oil exporter and the second-largest exporter of natural gas (United States Energy Information Administration 2009). As a result of the total volume

produced, direct government ownership, and the taxation scheme, more than 34 percent of national revenues came from the petroleum industry in 2008. At the close of 2009, Norway's State Petroleum Fund was worth 2.6 trillion Kroner, or more than 457 billion U.S. dollars.

High levels of wealth, education, idealism, and environmental values, together with a petroleum-based economy, make the contradiction between knowledge and action particularly visible in Norway. The country has moved from a position of environmental leadership (setting a goal of national stabilization of carbon dioxide emissions) to one of political and economic conservatism. In the 15 years prior to my time in Bygdaby, it dropped the goal of capping national carbon dioxide emissions, expanded petroleum development, participated in the Umbrella Group,² led the way in developing strategy for trading rather than reducing emissions, and justified increased carbon dioxide through shifting the dialog to an international rather than national context. Oil and gas production increased threefold in the ten years prior to my time in the field. In 2008, the oil and gas industry accounted for 26.6 percent of the national carbon dioxide emissions (Klima og Forurensnings Direktoratet 2009). Norwegian scholars Eivind Hovden and Gard Lindseth write that "Norway, an already wealthy and highly developed country, built a very significant fortune in the 1990s from the very activity that has made stabilisation of CO₂ emissions next to impossible" (2002, 163). Emotions of guilt and powerlessness articulated by the individuals I met must certainly be understood in the context of these political economic conditions.

The term *denial* is sometimes used to describe the phenomenon of outright rejection of the notion that certain information is true—which, in this case, is the reaction of global warming skeptics mentioned earlier. But by now it should be clear that this use of the term is very different and more literal than my use in this book. In his recent work on denial, British sociologist Stanley Cohen (2001) describes three varieties of denial: literal, interpretive, and implicatory. His framework is useful in explaining this book's particular focus. Literal denial is "the assertion that something did not happen or is not true" (the global warming skeptics). In interpretive denial, the facts themselves are not denied but are instead given a different interpretation. Euphemisms, technical jargon, and word changing are used to dispute the *meaning* of events—for example, military officials speak of "collateral damage" rather than the killing of citizens. It is Cohen's third category, implicatory denial, that is at the center of this book. In the case of implicatory denial, what is

minimized is not information, but “the psychological, political or moral implications that conventionally follow” (2001, 8). What I observed in Bygdaby—indeed, what we all can observe in the public silence on climate change in United States and around the world—is not in most cases a rejection of information per se, but the failure to integrate this knowledge into everyday life or to transform it into social action. As Cohen puts it, “The facts of children starving to death in Somalia, mass rape of women in Bosnia, a massacre in East Timor, homeless people in our streets are recognized, but are not seen as psychologically disturbing or as carrying a moral imperative to act. . . . Unlike literal or interpretive denial, knowledge itself is not at issue, but doing the ‘right’ thing with the knowledge” (2001, 9).

My work here draws on theory from diverse academic traditions. Research in the field of environmental sociology and risk perception points to the social and political significance of climate change as well as to the paltry public response it has received. The work of historical psychologist Robert J. Lifton contributes the concepts of psychic numbing and the double life. The field of sociology of emotions describes links between thinking and feeling as well as the process of emotion management, and it asks questions about the role of emotions in social movement participation and nonparticipation (Hochschild 1983; Scheff 1988, 1997; Bendelow and Williams 1998; Goodwin, Jasper, and Polletta 2001). The sociology of culture examines the role of conversation in the development of a sociological imagination and thereby of political power (Eliasoph 1998); how culture can provide resources for constructing strategies of action (Swidler 1986); and how attention, memory, and focus are socially organized (Zerubavel 1997, 2002). Social psychology adds insight on identity and social cognition, describing the power of cognitive schemas and the desire to maintain a sense of self-efficacy and to view self in a positive light. The work of Gramsci and other Marxist theorists on ideology and hegemony highlights links between material relations and dominant discourse, how the ideas of elite political and economic actors come to be seen as common sense to the general public, and how control in modern societies is maintained through consent to “ruling ideas” rather than through direct imposition of force. Using Swidler’s concept of culture as a “tool kit” of available resources, I describe how members of Bygdaby had available what I call “tools of order” and the “tools of innocence” to create distance from responsibility, to assert rightness or goodness of actions, to maintain order and security, and to construct a sense of innocence in the face of the

disturbing emotions associated with climate change (see chapters 3, 4, and 5).

Weaving these pieces together, I follow an arc of power that moves from the microlevel of emotions to the mesolevel of culture to the macrolevel of political economy and back again. According to my data both from Norway and from the United States, thinking about global warming is difficult for community members because it raises troubling feelings, feelings that go against a series of cultural norms. And these norms are in turn embedded in the particular social context and economic circumstances in which people live. For example, only by analyzing cognition within the context of political economy can we explain Hanno Sandvik's (2008) provocative finding that a nation's willingness to contribute to reductions in greenhouse gas emissions is inversely related to both emissions and national wealth. Thus, in contrast to psychological and survey research that studies human perceptions of climate change on an individual level, I locate these emotional and psychological experiences in both *cultural* and *political-economic* contexts. As a result of this emphasis on cultural, economic, and social contexts, my approach shifts from an "information deficit" model, in which the public fails to respond because of a lack of information, to a "social organization of denial" model in which the public on a collective level actively resists available information.

This book is about how people experience the reality of global climate change in their everyday lives. Most of it is based on an ethnographic account from one community in Norway (see appendix A). But climate denial is not unique to this one community. As an American, I have observed similar dynamics in my own country. In order to show the broader salience of the voices from this one community, including their similarities and differences with voices in the United States, I draw in particular on a smaller set of U.S. interviews, national surveys on climate change, and observations and data collected by other U.S. scholars. Chapter 6 gives a view into how many of the themes developed from Bygdaby play out in the United States. This book is not an exhaustive attempt. I use the comments that people in one community in Norway made and my own observations of them during a recent very dry and warm winter in order to make visible the private emotions and cultural constructions that tell a larger story behind worldwide public paralysis in the face of predictions from climate scientists.

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