

"People Want to Protect Themselves a Little Bit": The Why of Denial

There is concern that public ignorance and illiteracy about global environmental issues is leading to misinformed views, apathy, ill-considered calls for government action, and little change in personal behavior. This view of the relations between public knowledge, values and actions accords with what has been described as an information deficit model: Ignorance about climate change is preventing appropriate public action.

-Harriet Bulkeley, Common Knowledge?

I am far from the first person to be puzzled by public silence in the face of climate change. On the contrary, environmental sociologists (e.g., Ungar 1992; Kempton, Boster, and Hartley 1996; Dunlap 1998; Rosa 2001; Brechin 2003, 2008), social psychologists (Halford and Sheehan 1991; Stoll-Kleeman, O'Riordan, and Jaeger 2001; Kollmuss and Agyeman 2002; Lorenzoni, Nicholson-Cole, and Whitmarsh 2007; Frantz and Mayer 2009), and public-opinion researchers (Saad 2002; Brewer 2005; Nisbet and Myers 2007) have alike for some time identified such public "apathy" as a significant concern. Possible explanations abound. I begin this chapter by examining existing explanations for why people have failed to respond to climate change from environmental sociology, psychology, and the field-of-risk perception points of view. I use the voices of community members to talk back to these dominant explanations for public silence. Although lack of information and lack of concern have been described as reasons why people do not respond to global warming, reasons for silence also come from people who are both informed and concerned about it. Here I explicitly shift from an information deficit model to a focus on the importance of emotion, social context, political economy, and social interaction in shaping how people relate to global warming.

"If People Only Knew"

For nearly twenty years, the majority of research on climate change from these disciplines presumed information was the limiting factor in public nonresponse. The thinking was that "if people only knew the facts," they would act differently. These studies emphasized either the complexity of climate science or political economic corruption as reasons people do not adequately understand what is at stake. Not surprisingly, given the extensive survey data on the public's lack of knowledge regarding climate change, the dominant theme of research from fields as widespread as science and risk communication, environmental sociology, and psychology has been the public's lack of information and knowledge as a barrier to social action. Systematic reviews of surveys and polling data by Thomas Brewer (2005) and Matthew Nisbet and Teresa Myers (2007) describe widespread misunderstanding regarding climate science extending back into the 1980s. Ann Bostrom and her coauthors write that "to a significant degree the effectiveness with which society responds to this possibility [of climate change] depends on how well it is understood by individual citizens. As voters, citizens must decide which policies and politicians to support. As consumers, they must decide whether and how to consider environmental effects when making choices such as whether our resources are most efficiently deployed by using paper or polystyrene foam cups" (1994, 959). John Sterman and Linda Sweeney (2007) similarly point to the complexity of atmospheric models as a limitation for both public understanding of climate change (even among highly educated people) and policy development. Noting "widespread misunderstanding" of how climate models work, the authors then link this conceptual failure to the lack of climate policy.

This assumption that "if people only knew," they would act differently—that is, drive less, use less electricity, or "rise up" and put pressure on the government—is widespread in popular discourse and environmental literature and underlies work from psychology, social psychology, and sociology. Psychologists and social psychologists have described flawed cognitive and mental models that limit people's ability to grasp what is going on, and sociologists have documented the manipulation of climate science (especially in the United States) and the media's role in misinforming the public by magnifying the perception of uncertainty. Sociologists have also conducted opinion polls highlighting the lack of public understanding of climate science and espousing the need for greater awareness.

The "conceptual challenges" surrounding global warming have been understood primarily in terms of the limitations of individual psychology (i.e., mental models, confirmation bias) or of media framing (see e.g., Ungar 1992; Bell 1994; Boykoff and Boykoff 2004; Armitage 2005; Dunwoody 2007; Boykoff 2008a, 2008b). Psychologists have described the power of "faulty" decision-making powers such as "confirmation bias" (Halford and Sheehan 1991). Bostrom and her coauthors describe how effective public response is limited because "lay mental models of global climate change suffer from several basic misconceptions" (1994, 968). Psychologists Grame Halford and Peter Sheehan write that "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). From another angle, social psychologists consider "affect" to be the positive or negative evaluation of an object, idea, or image. Similar to emotions but not as "full blown," affect has been shown to powerfully influence both information processing and decision making. Work in the area of risk perception and affect in the United States and Great Britain by Irene Lorenzoni and her colleagues found that "the terms 'global warming' and 'climate change,' and their associated images, evoked negative affective responses from most respondents. Personally relevant impacts, causes, and solutions to climate change were rarely mentioned, indicating that climate change is psychologically distant for most individuals in both nations" (Lorenzoni, Leiserowitz, De Franca, et al. 2006, 266). Other work describes how confusion results from the fact that people relate to global warming through other existing generalized frames, what researchers call "mental models," and thus see it as an "ecological problem" in general, "air pollution" or "ozone depletion" (Stern, Dietz, and Guagnano 1995; Dunlap 1998).

Researchers have lamented the confusion between global warming and the ozone hole (e.g., Bell 1994; Bostrom, Morgan, Fischoff, et al. 1994; Read, Bostrom, Morgan, et al. 1994), investigated the role of media framing (Ungar 1992; Bell 1994; Brossard, Shanahan, and McComas 2004; Carvalho 2005), and described how understanding global warming requires a complex grasp of scientific knowledge in many fields. Harriet Bulkeley describes how in the dominant view people are

presented as individual agents acting "rationally" in response to information made available to them. According to the information deficit model of public response to environmental issues, the public needs to be given more knowledge about environmental issues in order to take action. . . . In this approach the contextual dimensions of environmental concern are ignored so that public perceptions are seen as stable, coherent, and consistent and to exist within individuals rather than being located within the inter-subjective contexts of institutions and discourse. (2000, 315–316)

A second body of scholarship points to relationships between political economy and public perception. Here scholars have identified the fossil fuel industry's influence on government policy (the United States provides prominent examples), the tactics of campaigns by climate change skeptics (McCright and Dunlap 2000, 2003; Jacques 2006; Jacques, Dunlap, and Freeman 2008; Jacques 2009), how corporate control of media limits and molds available information about global warming (Dispensa and Brulle 2003), and even the "normal" distortion of climate science through the "balance as bias phenomenon" in journalism (Boykoff 2008a, 2008b). Such political economic barriers presumably have farreaching and interactive effects with the other factors discussed. Yet note that explanations for public nonresponse that highlight corporate media and campaigns by climate change skeptics also implicitly direct our attention to a lack of information as the biggest barrier to engagement, though for different reasons.

It is possible that the people of Bygdaby and their counterparts in the United States and around the world have paid little attention to the issue of climate change because they are too poorly informed to realize the potential danger or to be able to make connections between their daily activities and global warming. In my interviews and observations, there is certainly some evidence of general confusion about the basic facts. For example, in my time at Bygdaby residents in several instances confused global warming with the ozone hole. In one discussion about climate change, Sigurd, a member of the Labor Party, referred to climate change as coming from "holes in the atmosphere" (although he earlier correctly described climate change as coming from carbon dioxide emissions). There were other instances in which residents did not demonstrate a clear understanding of the process. One afternoon I joined a regular walking group of older folks on their tour of town. The unusual weather came up as a topic. I asked Maghild, a woman in her late sixties, if they went walking year round. Maghild replied, "Yes, so long as it isn't too slippery. You know this year is very unusual. I have never experienced it before. It can be 20 below and a meter of snow this time of year. Last year wasn't so warm. This is a very unusual year. And I was talking to a man who is much older than I am, and he doesn't remember anything like it either. They say it is because of climate change, the emissions of ..."—here she let her sentence trail off, not sure what was being emitted that caused climate change. A half-hour later the topic came up again, and again she wasn't sure exactly what was being emitted to cause climate change: "What a good day for a walk," someone in the group commented. Maghild replied, "Yes, but very unusual weather, they talk of climate change, that the release of . . ."

The public may lack information, but is this fact limiting greater public interest, concern, and political participation? Despite cases in which people in Bygdaby lacked information, this absence of information didn't seem to be the limiting factor in their reaction to climate change. Indeed, in both the conversations I just described, the individuals were concerned about global warming, despite their confusion or missing information. As Daniel Read and his coauthors (1994) point out, only two simple facts are critical to understanding climate change. First, if significant global warming is occurring, it is primarily the result of an increase in the concentration of carbon dioxide in the earth's atmosphere. Second, the single most important source of carbon dioxide addition to the earth's atmosphere is the combustion of fossil fuels, most notably coal and oil. Norwegians are among the most highly educated people in the world, and, "availability heuristics" and "mental models" aside, the basic fact that burning fossil fuels releases carbon dioxide and contributes to global warming is hardly a technical piece of information. If people don't know, then why not?

A key problem with information deficit models is that they do not account for the behavior of the significant number of people who do know about global warming, believe it is happening, and express concern about it (Hellevik and Høie. 1999), as appears to be the case for the majority of Bygdaby residents as well as for a sizeable percentage of the U.S. population. Recent Gallup data on the United States indicates that now some 80 percent of Americans report that they do understand global warming (Newport 2008). Yet as we saw in the discussion of the background noise phenomenon in chapter 2, this increased understanding has mysteriously failed to translate into either greater concern or concrete action.

Another approach applies psychological theories on cognitive dissonance, efficacy, and helping behavior to climate change (see, e.g., Stoll-Kleeman, O'Riordan, and Jaeger 2001; Kollmuss and Agyeman 2002; Lorenzoni, Nicholson-Cole, and Whitmarsh 2007). Leon Festinger's (1957) concept of cognitive dissonance describes "dissonance" as a

condition that emerges when an actor has two thoughts (cognitions) that are inconsistent. This dissonance is an unpleasant condition that people seek to resolve, often through changing one of their cognitions. Studies drawing on these frameworks point to multiple factors that would seem to "complicate" how people process information on climate change. This complication explains Paul Kellstedt, Sammy Zahran, and Arnold Vedlitz's (2008) finding that increased levels of information about global warming have a negative effect on concern and sense of personal responsibility. They noted in particular how respondents who are better informed about climate change express less rather than more responsibility for the problem. And they also found that "in sharp contrast with the knowledge-deficit hypothesis, respondents with higher levels of information about global warming show less concern" (2008, 120). These findings are in accordance with cognitive dissonance because people with low self-efficacy will be likely to deny responsibility and concern because unless they feel able to do something about the problem, an awareness of concern or sense of responsibility would be a conflicting cognition. Jon Krosnic and his colleagues (2006) similarly observe that people stop paying attention to global climate change when they realize that there is no easy solution for it. Instead, many people judge as serious only those problems for which they think action can be taken. In another highly relevant application, Cynthia Frantz and Stephan Mayer (2009) apply a classic model of helping behavior to the public response to climate change. Based on the criteria of this model, the authors note that climate change is difficult to notice and is marked by a diffusion of responsibility and that there are psychological costs of acting, each of which inhibits the likelihood of individual response.

Widespread public belief that climate change is happening clearly contradicts the assumption that lack of information is the key variable behind public apathy. Although there presumably exist at least some climate skeptics in Bygdaby, this widespread belief is congruent with the findings of national-level Norwegian studies of public response to climate change, which indicate that a majority of Norwegian citizens are concerned about climate change (Hellevik and Høie 1999). In Norway, there are far fewer people who do not believe that climate change is happening than in places such as the United States, where coal and oil industry–related organizations have waged large counter-campaigns (McCright and Dunlap 2000, 2003) and where President Bush himself openly questioned the validity of scientific data. Yet even in the United States, most likely the country with the highest percentage of climate

change skeptics in the world, skeptics only make up a minority of the population.

In fact, as indicated earlier, in that winter in Bygdaby in 2000–2001 the sense that the weather was very different from earlier times was considered "common knowledge" in the community, and comments on the unusual weather were consistently linked with the possibility of climate change. People spoke often of the weather being "less stable" than in the past. Eirik, a community member in his early fifties who worked for the county, voiced a sentiment that was frequently heard:

Eirik And it has been quite clear since the end of the 1980s, early '90s. There is a totally different climate here now than when I was a child. *Kari* Really?

Eirik Oh, yes. Much colder winters and more stable [in the past]. Even though there have always been small changes, it is clear that there are now significant differences. And at the same time I see a connection with all the things that we hear from Africa and other continents about climate changes, famine, dry spells, I feel that we learned this in school, that these climate gases, they are at a certain level, and we can measure that they are so much higher than they have been.

Although I did meet one person who said he was not concerned about global warming and a few who raised the possibility of doubt, I did not meet anyone in Bygdaby who dismissed it as an insignificant issue. Hilde, a member of the Farm Women's Association in her sixties, described her reactions to global warning: "We think it's a bit odd, you know. The way I remember winters, or winters before, you know there was always lots of snow, and it was cold the entire winter, you know." Lars, another local political leader, who stated that he believed climate change was happening, expressed some reservations about holding human beings responsible for it. Nonetheless, he said that caution was the wisest approach:

It's like politics. You have to choose who you trust. And I surely believe that there is climate change because we are constantly having new records, so that can't be explained away. But whether it is pollution that is responsible or whether it is happening on its own, that's too difficult to know. I don't know. There are scientists who say that it is coming no matter what. But of course we shouldn't take that chance. We shouldn't pollute more than necessary here in this world.

Finally, the notion that well-educated, wealthy people in the Northern Hemisphere do not respond to climate change because they are poorly informed not only appears to be inadequate to explain the nonaction in Bygdaby and much of the United States, but also fails to capture how in the present global context "knowing" or "not knowing" is itself a political act. All nations emit carbon dioxide and other climate gases into the common atmosphere, though the wealthiest 20 percent of the world's population is responsible for more than 80 percent of cumulative global greenhouse gas emissions. Nevertheless, global warming will precipitate the most extensive and violent impacts against the poor and people of color of the globe. Poor nations in Asia, Africa, and Latin America already experience more than 90 percent of the world's disasters and disaster-related deaths. Thus, not only is global climate change the most serious environmental problem of our time, but it is also a highly significant human rights or "environmental justice" issue (Agarwal and Narain 1991; Baer, Harte, Haya, et al. 2000; Roberts 2001; Athanasiou and Baer 2002; Donohoe 2003; Pettit 2004; Roberts and Parks 2007). Industrialized nations of the Northern Hemisphere emit greenhouse gases disproportionately to the global airshed, but a lack of resources and infrastructure place poor nations most at risk (Watson, Zinowera, and Moss 1998). It is highly significant that Norwegian wealth comes directly from the production of oil and that its economy flourishes with the current level of carbon dioxide emissions. I noted earlier that Norway is the largest oil producer in Europe and (as of 2009) the world's fifthlargest oil exporter (United States Energy Information Administration 2009). More than one-third of Norwegian national revenue is generated from the petroleum industry. Expansion of oil production in the 1990s enhanced the already high standard of living in Norway. These developments occurred during the same time that the Norwegian government backed away from Kyoto targets and that the percentage of the public that was "very much worried" about global warming dropped from 40 to 10 percent.

Given that Norwegian economic prosperity and way of life are intimately tied to the production of oil, ignoring or downplaying the issue of climate change serves to maintain Norwegian global economic interests and to perpetuate global environmental injustice. It is easy to see power operating when key political and economic decision makers negotiate contracts with Shell, British Petroleum, and Exxon and when representatives of nation-states negotiate emissions-trading strategies. Yet the people I spoke with in Bygdaby played a critical role in legitimizing the status quo by not talking about global warming even in the face of late winter snow and a lake that never froze. The absence of these conversations worked to hold "normal" reality in place.

Former Norwegian minister of the environment Børge Brende has expressed that "Norway is one of the countries in the world that has benefitted most from fossil fuels. This gives us a special responsibility in the politics of climate change, especially with respect to poor countries" (Hovden and Lindseth 2002, 143). Despite its reputation for environmental leadership, Norway has tripled its production of oil and gas in the past ten years. Under the Kyoto Protocol, Norway promised to limit greenhouse gas emissions to a maximum of one percent above 1990 levels. Instead, at the time of my stay in 2001, total Norwegian carbon dioxide emissions were 42.4 million metric tons—an increase of 7.2 million tons or 20 percent from the 1990 level of 35.2 million tons (Statistisk sentralbyrå 2002). Norwegian researchers Eivind Hovden and Gard Lindseth note that "Norway, an already wealthy and highly developed country, built a very significant fortune in the 1990s from the very activity that has made stabilization of CO₂ emissions next to impossible" (2002, 163). By 2008, the emissions figure had climbed to 53.8 million tons. This critique is echoed by Norwegian climate policy analyst William Lafferty and colleagues. In their review of progress on sustainability, the authors note that despite Norway's early international leadership on the issue under Gro Harlem Brundtland, as of 2006 "the Norwegian Sustainable Development profile is long on promise and short on delivery" (2007, 177). Lafferty and colleagues point directly to the role of oil wealth in the shifts in national policy: "In our view, a major reason for this 'reluctance' is the increasingly dominant role of the petroleum sector in the Norwegian economy. The impact of the petroleum economy on the will to pursue sustainable production and consumption in Norway has been massive. The prospect of steadily increasing state revenues from petroleum and gas activities has directly 'fueled' the politics of both 'business as usual' and increasing welfare benefits" (2007, 186). As of 2008, the oil and gas industry accounted for 26.6 percent of the Norwegian carbon dioxide emissions.¹

The notion that people are not acting against global warming because they do not know about it reinforces a sense of their innocence in the face of these activities, thereby maintaining the invisibility of the power relations that are upheld by so-called apathy regarding global warming. Within this context, to "not know" too much about climate change maintains the sense that if one *did* know, one would act more responsibly. This can be seen as a classic example of what Susan Opotow and Leah Weiss call "denial of self-involvement": "Denial of self-involvement

minimizes the extent to which an environmental dispute is relevant to one's self or one's group. . . . By casting themselves as 'clean' and insignificant contributors to pollution, they assert their non-relevance to environmental controversy" (2000, 485). Stanley Cohen similarly observes that

The psychology of "turning a blind eye" or "looking the other way" is a tricky matter. These phrases imply that we have access to reality, but choose to ignore it because it is convenient to do so. This might be a simple fraud: the information is available and registered, but leads to a conclusion which is knowingly evaded. "Knowing," though can be far more ambiguous. We are vaguely aware of choosing not to look at the facts, but not quite conscious of just what it is we are evading. We know, but at the same time we don't know. (2001, 5)

Citizens of wealthy nations who fail to respond to the issue of climate change benefit from their denial in economic terms. They also benefit by avoiding the emotional and psychological entanglement and identity conflicts that may arise from knowing that one is doing "the wrong thing," as I discuss more fully later.

Most work on concern, knowledge, and perception has taken the form of large-scale surveys. Data from interviews and ethnographic observation can yield information on meanings and relationships between thinking and feeling in everyday life. Indeed, these studies emphasize the complexity of people's response to climate change—how people seem to know and not know about it at the same time—and point to the emotional ambivalence that characterizes denial. As Bulkeley notes, "Confusion, doubt and a degree of illiteracy concerning climate science did not prevent focus group participants from locating this global issue in their backyard," and "there is a need to move from a narrow conception of public knowledge towards recognition of the complex, fluid and contradictory nature of public understanding of global environmental issues" (2000, 329).

It is important to note that although I offer significant criticisms of the information deficit model, the idea that people do not need any information regarding climate science to develop concern or engage in action is not one of them. What is important to recognize, however, is that information alone is not enough to produce action. "Information," like caring (see the next section), cannot be thought of in generic and isolated blocks of "facts" with universal meaning and significance across all communities. Instead, information is socially structured, is given social meanings, and must be understood in social context. As I explore in chapter 4, information on climate change may be accepted, resisted,

navigated, and interpreted differently depending on the sense of efficacy, self-esteem, and social support of the individuals receiving it.

"If People Only Cared"

Just as we can ponder whether people in Bygdaby really knew the facts in 2000–2001, it is also possible that people in this small town paid little attention to climate change because they simply didn't care about it. This explanation for inaction describes people as too selfish, too individualistic, or too greedy to think about the well-being of others, whether the others are future generations, citizens of other parts of the world, or nonhuman organisms and ecosystems. As awareness of climate change increases worldwide and information deficit explanations have become less prominent, more social scientists have more recently turned to explanations for inaction that hinge on inadequate caring.

Given so little visible social action regarding climate change in Bygdaby, not to mention elsewhere, such as the United States, one might easily come to such a conclusion. Yet all but two of the people I spoke with in my year living in Bygdaby voiced significant concern about climate change. During a portion of our conversation in which we discussed the production of climate gases and climate change, Eirik expressed a sense of concern about future impacts: "I see that we do lots of things that most certainly cannot continue. It will work for a while, but sooner or later it isn't going to work. So I am worried in any case for that which will happen."

In my conversation with Øystein, I asked whether, when he thought of environmental issues, there was one that stood out for him in particular. He indicated that the stand-out issue was climate change, and he was clearly concerned about it: "Most I would say emissions. Emissions in the atmosphere. Perhaps that is where it is dangerous, where we are doing poorly today. You know, emissions are going right to hell. It is dramatic."

In order to avoid the possibility that people were expressing concern about climate change simply for reasons of social acceptability, I often asked interviewees whether they thought *other people* were concerned about global warming. Arne, a man in his early sixties, reflected simultaneously on both his own fears and my question of what he thought other people were thinking: "I don't completely know what I shall think of it. But regardless, I believe that many believe that it's wrong that we are changing nature so much. I have the sense that most people believe

that nature knows best. I believe that. So, basically, I think that people are worried about climate change. They don't know rightly what to say." These are hardly the thoughts of a person who callously disregards the future or the lives of others. A lack of caring per se did not seem to be a problem in Bygdaby.

Furthermore, public-opinion data on concern are hardly linear. As evidence for climate change pours in and scientific consensus increases, interest in the issue throughout many Western nations paradoxically declined during the 1990s and into the early 2000s (e.g., Immerwahr 1999; Hellevik 2002; Saad 2002). For example, Gallup polls for the United States show that the percentage of people who "personally worry a great deal about global warming" dropped from 35 percent in 1989 to 28 percent in 2001, and the percentage who worry "not at all" rose from 12 to 17 percent during the same time period (Saad 2002). Biannual national-level survey research in Norway even more dramatically finds a significant and steady downward trend in public interest and concern about global warming, with the percentage of respondents who replied that they were "very much worried" declining steadily from 40 percent in 1989 to less than 10 percent in 2001 (Hellevik 2002; Barstad and Hellevik 2004).

If we consider the voices of community members alongside patterns of survey data, the notion that people do not respond because they do not care about climate change appears at best to be an incomplete explanation. Such results are deeply troubling to our enlightenment sensibilities in which we presume that knowledge will lead to rational action. Indeed, the basic premise of an enlightened, democratic, and modern society is that information (especially scientific information) will lead to concern and response on the part of the public and public institutions. Yet the case of climate change poses a challenge to this paradigm (Norgaard 2006a, 2006b, 2009, 2011; Jacques 2006; Jacques, Dunlap, and Freeman 2008; Jacques 2009). Instead, relationships among caring, knowledge, and action point us to another set of questions about whether and under what circumstances information leads to concern or action (Krosnic, Holbrook, Lowe, et al. 2006; Kellstedt, Zahran, and Vedlitz 2008).

Hierarchy of Needs

A related explanation for public nonattention to climate change emphasizes a kind of "hierarchy of needs" (Maslow 1970) in which people

focus on immediate needs first and long-term needs later. In this line of reasoning, people cannot think about climate change because they are too consumed with solving the problems of the present. Although there is no doubt that the hierarchy-of-needs approach holds weight—indeed, each of us is clearly confronted with more issues than our attention can handle—this approach alone is also insufficient to explain public apathy on the larger social level. Individuals in a particular social context may express the feeling that they don't have time or may have a limited ability to respond or both. Yet from a sociological standpoint, this information tells us about that particular society's social norms and limits of concern. "Needs," however real they may feel, are, in affluent places such as Bygdaby where nobody lives "on the edge," a reflection of social facts and local social and cultural norms. In his work on cognitive sociology and the social organization of concern and caring, Eviatar Zerubavel writes, "After all, only through being socialized does one come to know whether the concern about feeding one's dog should come before or only after the concern about feeding the homeless, or whether one ought to be more concerned about the well-being of fellow American businessmen in Southeast Asia or the Southeast Asian refugees living in one's own neighborhood" (1997, 47).

People in Bygdaby may feel that they can't use less fossil fuel because they "need" to be able to drive their kids to soccer practice or to take an annual trip to Greece, but these kinds of needs are very much a product of social context. In the words of Eirik, who had lived with his wife in Africa as a missionary for several years,

We shouldn't consume so many resources, drive so much, or travel so much by air. We know that it is bad because it increases carbon dioxide levels and creates a worse situation. But at the same time, of course, we want to go on vacation; we want to go to the South; we want to, well, live a normal life for today. So many times I have a guilty conscience because I know that I should do something or do it less. But at the same time there is the social pressure. And I want for my children and for my wife to be able to experience the same positive things that are normal in their community of friends and in this society.

Here Eirik struggles with his own sense of right and wrong behavior and the social pressure to need a life that is more "normal" for his society. These pressures are significant.

Another facet of the hierarchy-of-needs explanation is that the issue of climate change is too abstract, one that affects people only in the future and thus is farther down on the hierarchy of needs. Yet warm temperatures and the absence of snow were hardly abstract issues of the

distant future that winter of 2000–2001 in Norway. Numerous noticeable effects of unusual weather were commonly interpreted as possible impacts of climate change. As previously mentioned, skiing is an activity with a great degree of cultural importance in Norway, and when snow came late that particular winter, causing a two-month delay in the opening of the ski area, there were significant, tangible economic and cultural effects for the community.

More important, like "needs," perceptions of what is near and far, relevant and abstract are themselves socially structured (Zerubavel 1997). Norms of attention, in Bygdaby as elsewhere, organize perceptions of reality (see chapters 1 and 4). Indeed, C. W. Mills's (1959) work on the sociological imagination, a concept that is at the very heart of sociology, is fundamentally about whether individuals "see" connections between their lives and politically relevant events in the world around them.

In her work on apathy in the United States, sociologist Nina Eliasoph notes that for many of her respondents, battleships in their front yards and toxic wastes in their neighborhood were not considered sufficiently "close to home" to warrant action, yet whales in the North Pole were (1998, 2). If climate change is felt to be an "abstract" issue in the community, this fact reflects a disjuncture between the local sense of time and place described in chapter 1 and the sense of time and place that would be needed to conceptualize climate change for it to seem "real." Norwegian sociologist Ann Nilsen interviewed young people in Bergen about environmental problems and their sense of the future. Nilsen similarly concludes that

the most serious consequences from damaging the environment, are long term. In societies such as the contemporary Western world where thinking and attention span are aimed at the extended present, or the immediate future, environmental problems of the magnitude that climate change represents, for instance, will be difficult to find solutions to, also because of a general time horizon involving less attention to the long-term future. (1999, 176)

A community's sense of the past, present, and future are not just "there," like a political imagination; they are collectively constructed. In fact, there is virtually no evidence to support the perspective that climate change just does not pan out in a hierarchy of needs. For example, the European nation that is threatened most by sea-level rise, the Netherlands, ranks at the very bottom of level of concern regarding climate change in ACNielsen's 2007 global study of nations (ACNielsen 2007).

And Sammy Zahran and coauthors find that in the United States "respondents living within 1 mile of the nearest coastline at negative relative elevation to the coast are less (not more) likely to support governmentled climate initiatives" (2006, 783). Again in relation to the hierarchyof-needs argument, consider the negative relationships between wealth and concern exhibited in individual, state, and national data (e.g., O'Connor, Bord, Yarnal, et al. 2002; Zahran et al. 2006; Sandvik 2008). Consider the findings of Hanno Sandvik (2008), who examined a cross-national sample of data on public concern for climate change from 46 countries. Sandvik hypothesizes that public awareness and concern regarding climate change is not a function of scientific information alone, but of psychological and sociological factors as well. He observes a negative association between concern, on the one hand, and national wealth and carbon dioxide emissions, on the other, and notes a "marginally significant" tendency that nations' per capita carbon dioxide emissions are negatively correlated to public concern. Sandvik writes, "These findings suggest that the willingness of a nation to contribute to reductions in greenhouse gas emissions decreases with its share of these emissions." He concludes that such a relationship is "in accordance with psychological findings, but poses a problem for political decision-makers" (2008, 333). Although Sandvik is the first to test explicitly a relationship between wealth and concern cross-nationally, his findings are in accordance with earlier work across spatial scales from the individual to the nation-state. For example, Zahran and colleagues (2006) found that citizens residing in U.S. states with higher emissions of climate gases are somewhat less likely to support climate change policies. Robert O'Connor and his coauthors (2002) found that higher income negatively affected participants' willingness to take some voluntary actions such as driving less. An inverse relationship between wealth and concern is also reported in Riley Dunlap's 1998 cross-national research, but with a smaller sample of nations. Although Dunlap does not give this relationship much discussion, he notes that "despite the lower levels of understanding among citizens of the poorer nations in our study (Portugal, Brazil and Mexico), residents of these nations typically express more concern over global warming than do those in the more affluent nations (Canada, U.S., Russia)" (1998, 488). Furthermore, there are no examples of the reverse relationship, in which higher income is positively correlated with concern for global warming or with support of climate-protection policy.

All Is Well

It is also possible that people in Bygdaby, like others around the world, pay little attention to climate change because they believe that the government will take care of things, that international agreements on emissions reductions will be reached, and that all will go well. This perspective might be a variation of either "faith in government" or "technological optimism." In past decades, the Norwegian government was visibly involved in the issue of climate change. Perhaps residents feel that things are in good hands. Norwegian sociologist Ottar Hellevik explores the possibility of faith in the government as a causal factor behind the national pattern of declining concern about climate change since 1980. He does not, however, interpret optimism as the force behind the trend in declining concern:

Results from the Monitor surveys tend to contradict such a trend of optimism, however. The percentage disagreeing with the proposition—"When negative environmental conditions are revealed, business takes the problem seriously and cleans up as soon as possible"—rose from 45 percent in 1995 to 56, 59 and 55 percent in 1997, 1999 and 2001 respectively. The public thus seems to have become *more* rather than *less* skeptical with regard to the environmental status of business leaders. Further, when queried in 2001 as to anticipated development trends for selected areas of society, only 14 percent of the population believed that the situation with regard to environment and pollution would improve, while 31 percent expected deterioration (43 percent reply, "no major changes" and 10 percent "don't know"). (2002, 13–14)

Although I suspect it is possible that some community members in Bygdaby felt a sense that "all was well" at the beginning of this century, I found no one who endorsed this perspective. Instead, the expressions of concern given in earlier quotations indicate that a significant number of individuals felt that all was not well. My field notes offer another example on the local level from a conversation I heard one evening:

It was a mid-November evening, and Sam and I joined our neighbors at a local dance organized by a group that Anne says has been around about 30 years. A band played folk dance music, and the atmosphere in the room was friendly and happy. Most people were pretty good dancers. Sam and I danced a reinlander, a waltz, and a few other dances. There was a pause in the music, and we went back to our table. Arne said to Torstein but clearly and facing me so that I could understand: "You know the second time that I got married, in the 1970s I didn't really want to. I didn't feel that I should have any more children, didn't know what kind of a world my grandchildren would have, so didn't feel that it

was right to have children." Then he said, "All these meetings in The Hague [referring to the recently failed climate talks], and what has come of it? Nothing." (field notes, November 18, 2000)

People may have *hoped* that all was well, but for these residents the jury was still out.

Political Alienation

Finally, a corresponding but opposite explanation for the "all is well" hypothesis is that perhaps people are so disempowered that they are not responding to *anything*. It is possible that the lack of response to climate change is not specific to the issues raised in this case, but part of a general phenomenon of public apathy about and lack of interest in the environment. In the United States, for example, voting rates and faith in democracy are lower than in Norway, so the hypothesis of political alienation may hold more weight there. Indeed, there is some evidence for political alienation in Norway as well. Arne, something of an environmental philosopher, describes his sense that people are disillusioned with the concept of progress: "I am afraid that there is less optimism today than in the past. There has been more optimism. There was more optimism before. We can look at it in terms of philosophy. We talk about modernity and the modern time or whatever it's called. People are disillusioned, they no longer believe in the great notion of progress. So Norway isn't the fantastic country like that anymore." Peter, a man active in the opposition to the European Union, said he felt Norwegians were not optimistic:

Peter Well, no, I don't have a lot to say about whether Norwegians are optimistic or pessimistic, but I think it's probably that people are more and more pessimistic; yeah, I think probably so.

Kari Why would that be?

Peter They see that it doesn't matter, that the development of society is driving over them.

Kari Hmm, I see. Have you experienced this?

Peter Yes, I have experienced it. I experience it, I experience it, and I experienced it in the last years when people said no [to the European Union]. In the last municipal election—the local election—I experienced it a lot. "No, there's no point. It doesn't matter."

Yet, as I discussed in chapter 2, there were in fact high levels of political activity in Bygdaby in 2000–2001, on issues ranging from local topics

such as the development of the downtown, new roads, and a proposed shopping mall to national and international issues such as opposition to the European Union. Other social indicators of political trust such as voting behavior do not indicate that political alienation is so prevalent that it alone can explain the public silence on climate change. As mentioned in chapter 1, rates of voter participation on local and national levels were relatively high in Norway. Was there something about the issue of climate change that made engagement more difficult? If so, can an in-depth examination of how people respond to climate change tell us something more about the meaning and process of political alienation? Or can it perhaps especially bring insight into the dynamics of politics in the new terrain of risk societies?

Contrary to widespread assumptions that people fail to respond to global warming because they are too poorly informed, are too greedy or too individualistic, and suffer from incorrect mental models or faulty decision-making processes, the people I spoke with expressed feelings of deep concern and caring and a significant degree of ambivalence about the state of the world. Instead, as I listened, the residents of Bygdaby told me many things about why it was difficult to think about global warming. I mentioned earlier the words of one person who held his hands in front of his eyes as he spoke: "People want to protect themselves a bit." Knowing about global warming raised fears for the future, feelings of helplessness, and feelings of guilt, some of which were in turn threatening to individual identity. Yet emotions, despite their apparent salience in how people process information on climate change, are missing from the current scholarly discussion about nonresponse. If in Bygdaby emotions worked to prevent engagement, how exactly did this happen? By what mechanism did this process take place? Here I use community members' voices to lay out a series of unpleasant emotions linked to thinking about climate change (see table 3.1).

Table 3.1
Troubling Emotions Associated with Thinking about Climate Change

Fear of loss of ontological security
Helplessness
Guilt
Threat to individual and collective sense of identity

Risk, Modern Life, and Fears Regarding Ontological Security

Automobile and plane crashes, toxic chemical spills and explosions, nuclear accidents, food contamination, genetic manipulation, the spread of AIDS, global climate change, ozone depletion, species extinction and the persistence of nuclear weapons arsenals: the list goes on. Risks abound and people are increasingly aware that no one is entirely safe from the hazards of modern living. Risk reminds us of our dependency, interdependency and vulnerability. Catastrophic risk is an even stronger reminder.

—Carlo Jaeger, Ortwin Renn, Eugene Rosa, and Thomas Webler, Risk, Uncertainty, and Rational Action

One day in mid-December 2000, my husband and I, avid skiers ourselves and disappointed with the lack of snow in Bygdaby, decided to take the train a few hours away to a neighboring community and go skiing. The temperature was about -5°C, and the sun was shining brightly on the bare fields surrounding our house as we loaded our skis into the taxi and drove down the road to the train. "Do you like to ski?" I asked our driver. "Oh yes, but I don't do much of that anymore," he replied. He was in his late fifties, but this age doesn't imply much for a Norwegian because I have been outskied by many people older than seventy! "When I was a kid, we would have skis on from the first thing in the morning to the end of the day. I grew up in Mykdalen [a community about 20 kilometers from Bygdaby], and there was so much more snow back then. We had snow from October to May. You know the parade on May 17, that was always in the snow." I ask if the weather really has changed all that much. "Oh yes," he says, "The summers were warmer, and the winters were colder with more snow. In the summer, we would spend a lot of time swimming in the river. We have seen so many changes. The climate is changing quite a lot." "That's a bit scary," I say. "Yes," he agrees. "When you think of how much has changed in my fifty years, I was born right after the war, how much has changed in my fifty years of existence, it is very scary."

Large-scale environmental issues in general and global warming in particular threaten biological conditions, economic prospects, and social structure. The impacts of global warming on human society are predicted to be widespread and potentially catastrophic. At the deepest level, large-scale environmental problems such as climate change threaten individual and community senses of the continuity of life—in other words, they threaten what Anthony Giddens calls "ontological security." "Ontological security" refers to the confidence that most human beings have

in the continuity of their self-identity and the constancy of the surrounding social and material environments of action" (1991, 92). Merely thinking about climate change raises a series of questions related to ontological security: What will Norwegian winters be like without snow? What will happen to farms in the community in the next generation? Will they, in the words of one Bygdaby resident, "begin growing oranges in Norway?" Robert Lifton writes of an increasing, "amorphous but greatly troubling sense that something has gone wrong with our relationship to nature, something that may undermine its capacity to sustain life" (1982, 21). If the climate continues to warm, how are people going to make a living and maintain their lifestyles in 50 years? In 100 years? Thinking about climate change was difficult for people in Bygdaby at the turn of the twenty-first century because it brought up fears connected to ontological security. In Arne's words, "I think it's a bit worrisome to lose one's roots or to lose connection with, yes, with the generations and with a place."

People have a need for meaning in their lives. The present environmental crisis threatens not only people's sense of how the world is (a "good place," as many want to believe), but also the meaning of their sense of the continuity of life, as Lifton discusses at length. Joanna Macy and Molly Young Brown describe how we look away, "lest we drain our lives of meaning" (1998, 28). As Øystein told me, "I think maybe that most people think so little about climate change because they are afraid we are on the wrong track. That it could go badly. But we don't know . . . that this is as far as it goes for Norway."

Øystein also expressed the concern that climate change is deeply threatening to one's sense of the continuity of life, commenting on the possibility that in as few as a hundred years it may not be possible to live on the planet:

We have now come so far that . . . you know, in one hundred years it's possible that the environment will be damaged to the point that it isn't possible to live on earth anymore, you know? You see, of course, that we have these holes in the atmosphere that climate change is coming from, you know? Now people are beginning to see that something is happening with nature because we haven't taken environmental questions seriously enough.

For Lise, mother of two and member of the Socialist Left Party, climate change was "one of the reasons I try to be active"—although she hadn't actually taken action related to climate change. "Yes, of course it is one of the reasons that I try to be active—try to influence, you know. I am very pessimistic when I think about these things."

Ulrich Beck describes the present phase of modernization as a "risk society," one that is characterized by a "growing embeddedness of risk in the public consciousness" (Beck, quoted in Jaeger et al. 2001, 13). Beck argues that modern society, through the use of scientific technologies, has created large-scale social and environmental risks that cannot be understood without scientific expertise. For him, the risk society is one in which ontological security is threatened in two different ways: first, modern life means pervasive exposure to risks that threaten our sense of the continuity and stability of our lives; and, second, in modern societies the social networks of human life have been eroded. For community members in Bygdaby in 2000–2001, both these threats to ontological security were visible concerns.

Feelings of Helplessness

Lise's comments about pessimism were connected to the often voiced sense of helplessness or powerlessness in relation to climate change. As she continued speaking, she described the many problems in the country, which she said could make her feel a bit "pffff" (meaning "yeah, whatever"):

Lise It's like that with the environment, with the women's movement, with the green [movement], and with war and peace and everything. There are lots of problems in the country. There's a lot that is negative; I feel a bit like, yeah, pffff! But when I have something that I am trying to do, something with, when you are trying to influence something, then it's like you can be optimistic anyway. But I think about this with the young people. Things can just explode around us all the way, and so it's good that I don't allow myself to think so far ahead.

Lise mentioned that one strategy for coping with these feelings is to get involved and that another is not to think too far into the future. As noted in chapter 2, another Bygdabyingar told me that it was "just a joke to get involved with that," meaning climate change. And others expressed a similar feeling:

Ingrid 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."

Kari They don't feel that they can do anything anyway?

Trudi I think that there are a lot of people who feel "No matter what I do, I can't do anything about that anyway."

Helplessness, then, was a second emotion that the topic of climate change evoked among Bygdabyingar in 2000-2001. Trying to think about this problem could be overwhelming. The problem seems so large: solving climate change will involve the cooperation and common work of people in so many different countries, governments are unable to reach agreement, and perhaps entire economic structures will have to change. Even if all of this change were to be achieved, all the carbon dioxide released up to the present will still continue to cause climate change. Thus, it is not surprising that rather than feeling that there is much that can be done, one resident, Maghild, a woman in her late sixties, pronounced that "we must take it as it comes." And Lene told me, "And of course it's climate change that is doing it. There isn't anything to be done about it." Beyond the dimension of powerlessness that comes from the situation itself but connected to that dimension is the possibility that those political and economic structures that have been set in place are inadequate to handle the problem. Thus, for some residents there was another layer to the feeling of powerlessness that comes from considering the possibility that neither one's government nor the world community at large can be relied on to solve this problem. Arne said that he was afraid that there was less optimism than before, and Peter felt that more people have the sense that "no, there's no point. It doesn't matter." This concern is connected to the growing general sense of helplessness throughout modern society worldwide. Carlo Jaeger and his colleagues note that "the adoption of 'risk' as the imprimatur of our age marks a significant refocusing of social thought. The foundation of Western thought since the Enlightenment—from Comte, Spencer, Marx, Parsons, Habermas and others—has been the expectation of progress, of continued improvement in the social world. The emergence of a 'Risk Society,' abruptly challenges that assumption" (2001, 15).

Beck writes that the "risk society means an epoch in which the dark sides of progress increasingly come to dominate the social debate" (Beck 1992, 2). As previously discussed, trust in the government has been relatively high in Norway, thus further highlighting the tension and significance of those instances where this trust is challenged.

Lise described the way in which her feelings of helplessness with respect to climate change were merging with her feelings regarding environmental risks in general. Although she confused climate change with the depletion of the ozone layer, she was clearly concerned. She vividly described a choice between the chemicals in sunscreen, which she feared

may be carcinogenic, and what would happen if her son didn't get sufficient protection:

It is so icky, that I believe that the sun has become stronger. Yeah, so you go around with that inside you, we carry that all the time. But it was so strange, we went skiing two weeks ago and we needed to go into a store to buy sunscreen. So I went in and there were all these different factor levels. It gets so crazy, the whole thing. Because you know how the sun is, that it burns and makes the skin damaged, and can make you sick. I always put sunscreen on the kids, I think that we are probably predisposed to get burned. So I bought factor 21, which protects him, but factor 21, there are lots of chemicals in the cream, so thenyou don't know—so you know how the whole things goes, right? So there was a man standing there watching me, what I was doing and trying to choose. "No, no, no," he said to me—I didn't know him at all—"you must take factor 8," he said, "because that one doesn't have so many chemicals in it, [and] it will protect you well enough." He was watching me because I was talking out loud in the store, you know, trying to decide which one to take. But it illustrates a bit of the apathy that we live with these days. And that mad cow disease, for example. Now I try to use less meat and more vegetables. And the next day you learn that no, vegetables, they have so many cancer-causing pesticides of this type and that type. So you are constantly reminded of everything that is dangerous and unhealthy and carcinogenic. So, you know, you are reminded of that all the time. That's when I think I have to just cut out and live as well as we can. Yeah. And find the middle path, the way through, all the time. I am preoccupied, absorbed, with it. It is exhausting!

After describing her attempts to choose the lesser of two evils, sunscreen or sunburn, Lise went on to mention other environmental issues that troubled her, from mad cow disease to pesticides on fruits and vegetables. These issues clearly blended together for her, heightening her sense of powerlessness. She described trying to just "cut out"—which I take to mean "stop participating in the system"—and concluded that she must try to "live as well as she can." But the process was tiring for her.

Phrases that Bygdabyingar used in connection to the topic of climate change—"we must take it as it comes," "we must try to live as well as we can," "it's just a joke to get involved," and "we can't do anything about it"—indicate a degree of profound powerlessness associated with this subject.

Feelings of Guilt

Thinking about climate change was also difficult in Bygdaby because it raised feelings of *guilt*. Members of the community told me they were

aware of how their actions contributed to the problem, and they felt guilty about it. Recall the earlier interview passage where Eirik described the difficulty of both living by his conscience and living a normal social life in his community: "It is very . . . I think it is a bit problematic. I feel that I could do more, but it would be at the expense of, it would perhaps create a more difficult relationship between me and my children or my partner and in general. It really isn't easy."

Guilt was also connected to the sense of global warming as an issue of global inequity: Norwegians' wealth and high standard of living are intimately tied to the production of oil. Given their high newspaper readership and level of knowledge about the rest of the world, Bygdaby community members were well aware of these circumstances. This understanding contrasted sharply with the deeply ingrained Norwegian values of equality and egalitarianism (Jonassen 1983; Kiel 1993a), thus raising feelings of guilt.

It is also relevant that Eirik expressed his sense of guilt in the context of social relationships. He described how his connection to others in his community made taking action difficult. I explore this notion further when I examine the pressures of social norms in a homogenous society in chapter 4. Although privileged people around the world experience this contradiction between their wealth and the poverty of others, there is a particular force in the way in which these issues come together for people in Bygdaby and in Norway in general. High levels of access to information, high levels of acceptance of the information, a strong tradition of value for social welfare and the environment, and current wealth and economic interests come together with force. As the high school girls mentioned in chapter 1 stated, highlighting their discomfort with global inequality: "It's practically not right to sit here and just get, get, get; that's what we do, at least here in Norway; it's totally awful really."

Eirik similarly described the use of cars in his family and how the amount of driving they did negatively impacted his conscience:

Yes, if you take for example this with cars, we drive a lot of cars—in my family, that is. We go on vacation and we go shopping, and my partner drives to work every day. And I often drive up here [his office] myself. It gives us flexibility and so forth. And then we experience . . . we don't like it. We feel that we must do it to make things work in a good way, on a practical level, but we have a guilty conscience, a bit of a guilty conscience. We talk here about collective transport, but you know it really doesn't work. There are so few available that you must use a lot of time. Then you would have to give up a lot of things that you would like to do. So we are really hoping for some kind of other solution. For a car

that is better, [that] doesn't create the same problems when we use it as what is happening now. Because I believe that we here, the way we live in Norway, we can't just stop using cars. So we have to hope that we will get a car that we can drive with a good conscience, (pause) a relatively good conscience.

Norwegian sociologist Ann Nilsen's interviews with Norwegian young people on climate change and their sense of the future contain similar expressions of both powerlessness and guilt. In an interview with a 23-year-old young woman in the study, the respondent offers her reflections in reaction to environmental problems and the third world (she had just mentioned climate change in the preceding passage):

It's terrible to think of, that we live so well while others live in such miserable circumstances. Of course it's very good to have a comfortable life . . . I enjoy it . . . but I feel so bad about the others, the rest. I have a guilty conscience, that's why I try not to think about it, keep it at a distance. . . . I still think these are important matters, but it's as if I can't make myself be concerned all the time, not any more. . . . Terribly important these matters, but I don't feel involved in a way, don't want to get involved. There are so many things to care about, so much information, we know so much about the connections between things in the world, in a way you are obliged to understand and to care. I suppose that's why my family has become more and more important to me, my everyday life, that which is near. (Nilsen 1999, 184)

This woman describes a fair amount of awareness of world problems and significant concern. She thinks "it's terrible to think that we live so well while others live in such miserable circumstances"; she knows "so much information . . . so much about the connections," yet she retreats from these thoughts, "keeps them at a distance," and "doesn't want to get involved." In fact, this woman says explicitly that it is because of her guilty conscience that *she tries not to think about these problems*. Note the connections between feeling and thinking. Fear of guilt and the attempt to maintain a "good conscience" ultimately cannot be controlled by not thinking about climate change. One remains aware beneath the surface that something is not quite right.

Fear of "Being a Bad Person": Individual and National Identity

A related concern with awareness of climate change is the threat it implies for individual and national identities. Although coming from a different tradition, social psychological work on identity complements work on emotion and cognition. The Norwegian public self-image has included a strong self-identification of being environmentally aware and humanitarian (Eriksen 1993, 1996). Norwegians have been proud of

their international leadership on a number of environmental issues, including climate change. Stereotypical characterization of Norwegians describes a simple, nature-loving people who are concerned with equality and human rights (Eriksen 1993, 1996; see also chapter 5). Yet Norway increased production of oil and gas threefold in the ten years preceding my study of Bygdaby. Expansion of oil production in the 1990s contributed significantly to the already high standard of living, making Norway one of the countries in the world that has most benefitted from fossil fuels. In 2001, Norway was the world's sixth-largest oil producer and the world's second-largest oil exporter after Saudi Arabia (Norwegian Ministry of Petroleum and Energy 2002). Information about climate change—including Norway's inability to reach Kyoto reduction quotas, increased petroleum development, and participation in the Umbrella Group—makes for an acute contradiction between traditional Norwegian values and self-image, on the one hand, and the present-day economic situation in which high electricity use, increasing consumption, and wealth from North Sea oil make Norway one of larger per capita contributors to the problem of global warming, on the other. Bygdabyingar were widely aware of this issue. Øystein commented, "But what we have managed to do inside our own nation, it is clear that we have a ways to go still before we can keep the goal we have set, that which came from the international agreements. For example, with carbon dioxide we haven't managed very much; we have managed a little, but not so very much. It is, you know—we haven't managed, done very well, to solve that problem in Norway, I don't think."

Global warming was difficult to think about because it was threatening to individual and collective senses of identity and raised questions about whether people were "good," both individually and collectively. For Norwegians, information on global warming contradicts their sense of being environmentally responsible. And as a problem generated by wealthy nations for which people in poor nations disproportionately suffer, knowledge of global warming also challenges Norwegians' and Bygdabyingar's sense of themselves as egalitarian and socially just. In his work on denial, Cohen describes the scenario in which "you see what is happening, but you refuse to believe it, you can't 'take it in.' If these apparent facts and their manifest interpretations were true, this would seriously threaten your sense of personal and cultural identity" (2001, 24).

Information about Norwegian contributions to global warming disrupt the collectively created Norwegian sensibility and moral order

described in chapter 1. During a conversation about global inequity, one of the many issues linked to climate change, Mona, a mother in her thirties, commented: "It is unpleasant to think that we in Norway hold others at a distance so that we can have things nice and good in Norway."

Torbjørn, a man in his early thirties raised in Bygdaby but who now lives in another town, commented: "We have a sense of ourselves as very good at giving money, but we are not as good as we think we are. People watch the TV program [TV Aksjon, a national fund-raising effort for a different global humanitarian cause each year] all day in the fall and see how much money people are giving, and they feel that we are generous. But when you compare it to how much is spent on a weekend on alcohol or for all these fireworks at New Year's. . . . When you are going to make a self-image, you choose positive aspects. Nobody chooses negative ones."

Svein, a friend of ours in his thirties who was a schoolteacher from a nearby community, told me about some of these contradictions as he sat at our kitchen table one evening:

Svein Norwegian schoolchildren have learned that they are not racist. That this happens elsewhere. But the Sami [an indigenous group in Norway] were treated terribly; up until the 1970s, they were taken from their homes, given schoolbooks in Norwegian. Of course, they couldn't read them. They were not helped. So there are many Sami people my age who are illiterate.

Kari It was the Norwegians who sailed the slave ships.

Svein Yes. We are proud of our sailing and shipping history, but we don't talk about that.

Emotion, Cognition, and Political Economy

Even in the face of such a highly emotionally charged problem as climate change, the emotion factor has long been missing from academic explanations for the public's nonresponse to the problem. Why and how might emotions matter? Emotions affect cognition in a variety of ways. As noted earlier, Lifton describes how fears of powerlessness or of being weak can prevent people from thinking about serious issues: "The degree of numbing of everyday life necessary for individual comfort is at odds with the degree of tension, or even anxiety that must accompany the . . . awareness necessary for collective survival" (1993, 108). Emotional needs and desires, Lifton tells us, influence what is and what is not acceptable to think.

Here we can also draw upon social psychology to expand our understanding of the possible significance of emotions for social inaction. Research from social cognition, sociology of emotions, and sociology of culture illustrate that people do not absorb in a direct, linear manner all information to which they are exposed. Rather, both individual and social processes operate in the organization of information that people hold in their minds. Paul Slovic (2000) describes how affect, or an association of "goodness" or "badness," is linked to judgments and decision making, including those involving environmental risks. Morris Rosenberg (1991) has examined emotional motivations for different interpretations of reality and the way moods and emotional states affect how people store information. Rosenberg describes how people selfregulate emotions because of a preference for emotions that enable them to get what they want out of life (instrumental) and because some emotional states are more enjoyable than others (hedonic), some are socially appropriate, but others are not (normative).

We heard from Bygdabyingar about their guilt and fears of being bad people. These emotions are closely linked with identity, an area that has been the focus of much research on cognition. Social psychologists Victor Gecas and Peter Burke describe the importance of our self-concept to the process of thinking: "the self is not simply a passive sponge that soaks up information from the environment; rather it is an active agent engaged in various self-serving processes," and "perception, cognition and retention of self-relevant information are highly selective depending on whether the information is favorable or unfavorable to one's self-conception" (1995, 50–52).

But through what process can social psychological needs actually influence perception? Feeling powerless, guilty, or concerned about the future might have been unpleasant experiences for Bygdaby community members in 2000–2001, but what exactly could they do about these feelings? Social psychological work on cognitive dissonance describes the needs people have to feel good about themselves and to feel that they can affect the world around them, both of which influence perception. But how exactly does this happen? As Rosenberg tells us, because emotions are difficult to control directly, "the main way of controlling one's emotions is to exert control over one's thoughts" (1991, 130). It would seem that people engage in a number of distortions and deceptions in order to maintain valued self-conceptions. Notice the links between emotion and cognition in Gecas and Burke's explanation that "people's self-conceptions are valued and protected and that a low self-evaluation

(on criteria that matter) is an uncomfortable condition which people are motivated to avoid. This may occur through increased efforts and self-improvement or (more typically) through such self-serving activities as selective perception and cognition, various strategies of impression management, and restructuring the environment and/or redefining the situation to make it reflect a more favorable view of the self" (1995, 47). Of course, as Gecas and Burke note, conflicts between actual and desired views of self can also lead to action in the world. If Mona found it unpleasant to be aware of her role in global inequality, she could have "fixed" this problem by becoming socially active. Or she could have engaged in one of many options of how to restructure her perceptions. The fact that Mona found it unpleasant to think that she or other Norwegians might "distance themselves from others" might have made it less likely that she would want to pay attention to the situation that caused this unpleasant feeling.

Social psychological work applies to other emotions besides guilt. Recall that the topic of climate change raises feelings of helplessness. Yet Ellen Langer notes that "since feelings of inefficacy are undesirable and depressing, people may engage in distortions of reality and operate under the illusion of greater personal control and efficacy than they really have" (quoted in Gecas and Burke 1995, 48). Individuals may block out or distance themselves from certain information in order to maintain coherent meaning systems (Gecas and Burke 1995), desirable emotional states (Rosenberg 1991; Meijnders, Midden, and Wilke 2001a, 2001b), or a sense of self-efficacy (Gecas and Burke 1995; Bandura 1997).

Rosenberg's work on thinking as a technique of emotional self-control moves us toward a typology of options for controlling these unpleasant thoughts. The "denial" we have been looking at might seem so far to be merely in the domain of the individual. But at least some of the reasons for ignoring an issue are related to awareness of one's privileged position in the global economic order. Troubling emotions are troubling due to social context.

Emotion Management and Collective Strategies for Shifting Attention

Social structure (hence, sociology) is relevant for the study of denial because it draws our attention to the political dimension of emotions such as guilt. But it is not only the reasons for denial that are socially structured. Sociology also matters for the process of ignoring. Although the social psychological studies mentioned earlier provide part of the

picture of how emotion and cognition are linked through processes such as selective attention, we can also look to Arlie Hochschild's (1983) powerful theory of emotion management, which points to the importance of cultural norms and gives more details of the relationship between thinking and feeling. It is important to understand that sociologists think about emotions differently than either psychologists or the lay public. Whereas many nonsociologists regard emotion as part of what distinguishes an individual from society, sociologists of emotion describe emotion as deeply embedded in and reflective of both social structure and culture. Indeed, emotion can be understood as one of the main ways that social structures are reflected in our personal lives: "Many of the feelings people feel and the reasons they give for their feelings are social, structural, cultural, and relational in origin" (Denzin 1984, 53).

Sociologists of emotions describe emotion norms that prescribe the socially appropriate range, intensity, duration, and targets of feelings in different situations (Hochschild 1983). Emotion norms set the standard for what an individual "ought" to feel in a given context. Emotion norms apply to how people experience and respond to environmental problems. How scared should you feel when you see that the front page of the Bergens Tidende has a story on global warming? Also important are display rules that regulate the range and intensity of appropriate emotional expression in different contexts. How much of the fear one feels can be expressed? Emotion and display rules vary by contexts (such as public versus private spaces). And, of course, individual actors do not always feel or show the appropriate emotions. When what a person feels is different from what they are supposed to feel, they may engage in some level of *emotional management* (Hochschild 1983; Thoits 1996). Although the act of modifying, suppressing, or emphasizing an emotion is carried out by individuals, emotions are being managed to fit social expectations, which in turn often reproduce larger political and economic conditions. Arlie Hochschild's (1983) work on how flight attendants manage emotions in order to produce a pleasant experience for airline passengers (and thus increase income for the airline) is an excellent example of how the act of emotion management may link individuals, cultural norms, and political economy. In the case of global warming in Bygdaby, emotions that were uncomfortable to individuals were uncomfortable not just because they reflected a bad situation, but also because they violated norms of social interaction in the community. Thus, in addition to the social psychological explanations for nonresponse offered earlier, people also block out or distance themselves from certain information in order to follow norms of emotion. And in the case of the *Bygdabyingar* at least some of these emotion norms in turn normalized Norway's economic position as a significant producer of oil.

I place emotions and emotion management centrally in the process of denial. Emotions and emotion management matter for climate change because if the emotional states associated with thinking about a topic are uncomfortable or socially unacceptable, a person may not make the associated cognitive link. In Bygdaby, avoiding the unpleasant and socially unacceptable emotions associated with climate change was best achieved by simply not thinking about the topic. But even this statement is inadequate to explain what is going on. How does one not think about something that is important? It takes work to ignore the proverbial elephant in the room.

Because the primary way to control one's emotions is by controlling one's thoughts, the study of emotion management techniques draws on research at the intersection of theory on emotion and cognition (Hochschild 1983; Thoits 1996; Rosenberg 1991; Jasper 1997). Emotion management may take the form of either "surface" or "deep" acting (Hochschild 1983). When people pretend to feel an emotion they do not feel, they are doing what Hochschild calls "surface acting." With surface acting, the actor knows that she is trying to act according to cultural etiquette but that her own feelings are different. Emotion management becomes more complicated in the case of deep acting. In deep acting, one manipulates one's emotions to fit the social norms. Individuals talk themselves into the expected or "normal" response, usually by redefining a situation or shifting their focus. Thus, much of emotion management is cognitive. Furthermore, in the act of redefining a situation or shifting their focus, actors usually draw on existing cultural scripts. Through these existing scripts, we see the link to social structure.

In the case of deep acting, the boundary between individual and society becomes blurred, and as Hochschild describes, "the very act of managing an emotion is part of what the emotion becomes" (1983, 11). Through deep acting, individuals fit their emotions to the appropriate norms of their social position (i.e., gender, race, class, sexual orientation). Thinking can lead to different emotional states; thus, managing thinking is a central means to managing emotion (the emotion management

techniques described by Hochschild in deep acting use thought control as a means of emotion control). As a result, if the emotional states associated with the information in question are not comfortable or considered appropriate, a person may not make the connected cognitive link.

But to say that there are unpleasant emotions associated with global warming is not enough to explain the lack of social movement activity in Bygdaby at the turn of the twenty-first century—especially considering that such emotions can also serve as the impetus for social action. I am interested in looking more closely at denial as a social process. How exactly might the presence of these troubling emotions put a damper on engagement? Despite the recent advance in the interest in emotions within social movement scholarship, little work has been done on the role of emotions in nonmobilization (Goodwin, Jasper, and Polletta 2001). People in Bygdaby expressed emotions such as concern that would seem to motivate action. What, then, is the mechanism by which these same emotions might work to mute social action? Taking full advantage of this question requires not only that we keep in mind links between emotion and cognition, but that we employ an embedded sociological understanding of emotions. As we proceed to answer the questions of why and how people avoided emotions associated with climate change in Bygdaby, we move toward a picture of the social world that situates social action across the micro- and macrolevels, linking personal emotions and political economy.

On the one hand, the emotions people in Bygdaby felt provided much of the reason why they preferred not to think about climate change. But if we stop the story here, we would miss the bigger picture of how emotions are connected to social structure, of how denial is a socially organized process. In a sense, we would miss all the sociology. In the next chapter, I examine how emotion management is a central aspect of the process of denial, which in this community was carried out through the use of a cultural stock of social narratives to achieve "thought prevention," "perspectival selectivity," and "selective interpretation."

Throughout this chapter, it has been my aim to shift the discourse from one in which knowledge and caring about climate change are in short supply to a view whereby knowledge and caring are present but problematic and thus actively negotiated. Whereas this chapter has addressed *why* people failed to respond to climate change, chapter 4 examines *how* nonresponse is collectively produced through social interactions. We will see how the presence and management of unpleasant

and troubling emotions associated with global warming worked to prevent social movement participation in this rural Norwegian community. In so doing, my work shifts from a focus on the information deficit model, in which information is the limiting factor in public response, to a focus on the importance of social context and political economy and the centrality of social interaction and emotion to both the cultural production of climate denial and the reproduction of power more generally.