

Gordon Sullivan, former chief of staff of the U.S. Army, regards the uncertainties of climate change as no obstacle to action at all: "We never have 100 percent certainty. You have to act with incomplete information. You have to act on your intuition sometimes."

It is now routine to include climate change as a potential threat to U.S. national security. The Center for a New American Security, whose board bursts at the seams with generals, admirals, and, typically, the acting secretary of defense, published a report in 2013 confirming that climate change is a serious national security issue. As General Chuck Wald, former deputy commander of U.S. European Command, puts it, "There's a problem there and the military is going to be a part of the solution."

Not surprisingly, this makes some observers very nervous. The liberal journalist and activist Naomi Klein has long argued that crises are exploited as a means to centralize power and subvert democracy. Her fear is "that climate change is the biggest crisis of all and it will be exploited to militarize our societies, to create fortress continents."

If this is the case, then that process has already been started by the military strategists using the language of uncertainty to justify a military response. Uncertainty is, like proximity and cost, an area within which different interest groups shape the language surrounding climate change to meet their own objectives.

People *do* doubt climate change because they perceive it to be uncertain. And this, in turn, affects their willingness to respond to it. However, as can be seen in comparison with the far greater uncertainties of other high-profile issues, language around uncertainty, like that around timing and costs, is manipulated to support the interests of those who oppose action or, in the case of the military, those aching to be in the middle of it.

Paddling in the Pool of Worry

How We Choose What to Ignore

EVERY DECEMBER THE LITERARY AGENT John Brockman goes through his address book and asks top scientists and writers to ponder a single question for the readers of the *New Yorker* magazine. In 2012 he asked them, "What should we be worried about?"

Professor Brian Knutson, a psychologist at Stanford University, replied that he was most worried about worry—or, as he suggested—he had a "metaworry about worry." I warn you that this is the first of many "meta"s you will encounter in this book.

Knutson said that our tendency to worry (and our personal disposition to do so) has been set by evolution at an optimal level because "those who worried too little died (or were eaten), while those who worried too much failed to live (or reproduce)." Unfortunately, he argued, our worry systems are entirely inadequate for coping with climate change. He did not want us to worry more—this would generate "hyperworry," which could freeze us up entirely. Rather, he said, we need to "turn our ancient worry engines in new directions."

I find that talking about *worry* can provide a more useful analysis than talking about *risk*. Risk can be evaluated and measured and engage the rational brain. But when we ask people what they worry about, we get a far stronger indication of their emotional perceptions and, as Knutson suggested, the threats they have chosen to ignore.

Patricia Linville and Gregory Fischer at Duke University argue that

people's capacity for worrying about problems is limited and rationed. They have neatly named this the *finite pool of worry*. There is, they say, constant competition for space in the pool, and the modern media is always trying to get our attention by creating new emotionally charged issues to worry about. The result, Linville and Fischer argue, can be an emotional numbing—a protective indifference to issues that are not of immediate personal concern—which narrows the criteria for space in the pool, or even shrinks its total size.

So what, then, has happened to worry about climate change? This issue is a major threat, has been growing in prominence for twenty years, and has been accompanied by a string of high-profile extreme weather events. Has this enabled it to secure a corner in the pool of worry, or, as Knutson worries, do our evolutionary worry detectors refuse to grant it admission?

For the past ten years, Tony Leiserowitz, the director of the Yale Project on Climate Communication, and Edward Maibach, the director of George Mason University's Center for Climate Change Communication, have been watching the public concern about the issue rise and fall. They have been trying to identify a clear signal in all the static because, like temperatures and ice levels, public attitudes are subject to random variation, which can be confusing or hide a longer-term trend.

Certainly the short-term trend is indisputable. Across the polls, across the Western world, public concern about climate change rose steadily through the early 2000s, peaked around 2007, and thereafter went into decline, especially among people with conservative politics.

Sitting in his oak-paneled study high up in the Yale Department of Forestry and Environment, I ask Leiserowitz what he thinks is going on. He says that there were two factors coming together around 2007. The first was the deepest recession since the 1930s, and 2007, was the year in which the housing bubble popped and U.S. unemployment rates rose over 10 percent. Climate change cannot feel as salient to people as the threat of losing their job or the very visible foreclosure signs on the street.

The second issue was the virtual collapse of media coverage. In the two years following the 2009 world climate conference in Copenhagen, overall media coverage fell by two-thirds, and evening news coverage dropped by 90 percent. This was compounded by the decline in the size of the mainstream media, leading to a lower quality—and quantity—of environmental reporting.

However relevant these factors are, the truth is that concern about climate change has never been especially high at any time. For the past twenty-five years, the Gallup organization has asked people how much they “personally worry” about a variety of environmental issues. There has never been much interest in climate change; worry levels have always wobbled between “only a little” and “a fair amount,” below both river and air pollution.

This is what opinion polls find when they ask people, upfront, how much they worry about climate change. About half of Americans know that when a pollster asks the question “How worried are you about global warming?,” the appropriate response is to indicate some worry. However, when they are not prompted to give an answer, they scarcely mention it at all. Every year since 2001 the Pew Research Center has asked people to choose the policy issue that should be a high priority for the president. “Dealing with global warming” has never risen above the bottom slot and is probably only there at all because it was included in the list of options.

Naturally enough, as Leiserowitz predicted, the salient issues of the economy, jobs, terrorism, and health care are always on the top of the pile for the president. But far-less-salient and long-term issues such as the budget deficit, the influence of lobbyists, and even “dealing with the moral breakdown” are also regarded to be far be more pressing than climate change.

What is interesting is that none of these issues are ones over which people have personal control. It is sometimes argued that people do not accept climate change because they feel powerless to do anything about it. In the wider psychology of coping, a perceived sense of powerlessness leads to helplessness and depression. There is some research evidence that people stop paying attention to global climate change when they realize that there is no easy solution for it.

But it is clearly more complex than this. People have no personal power over terrorism or drug use or the national economy, but that does not prevent them from talking about it and demanding collective action. Ironically, through their own emissions, they may have *more* personal involvement in climate change than any of these issues, though, as we shall see in later chapters, this creates its own problems.

Nor is there any reason to suppose that if these other items were removed from the pool of worry that climate change would find room to move in, just as there is no evidence that people in countries with lower crime rates, deficits, unemployment, or river pollution than the United States have correspondingly higher levels of concern about climate change.

The pool of worry is a metaphor for cognitive processes by which we select what we wish to pay attention to, and what we choose to ignore. The past twenty years have seen a huge increase in research into the processes of attention and there is a growing consensus that such selection processes are fundamental to our thinking at every level.

According to the Canadian sociologist Erving Goffman, we manage our attention through "schemata of interpretation," which, thankfully, he also described using the far more memorable term: *frames*.

Goffman explained that frames are constructed of our values, our life experience, and the social cues of the people around us. We decide what information we wish to pay attention to—placing what is relevant, important, familiar, or rewarding to know inside the frame.

Frames are active too. They seek out, scan, and select new information. George Lakoff, a cognitive linguist at U.C. Berkeley, argues that frames have a physical presence in our brains, are embodied in our neural circuitry, and are strengthened through use. This is, he stresses, a dynamic process in which new frames build onto existing, established frames to form a coherent system.

Climate change is not a frame, but it has become framed. That is to say that people have applied their existing frames to the issue, allowing them to decide whether it is important to them and what position they should take on it. Everything we see and hear about climate change triggers frames: responsibility, resistance, freedom, science, rights, pollution, consumption, waste—all are frames with their own associations.

However, the nature of framing is that it does not just select what to pay attention to; it also selects what to ignore. Frames are like the viewfinder of a camera, and when we decide what to focus on, we are also deciding what to exclude from the image we collect. Research suggests that our ability to choose what to ignore may be just as important for our psychological functioning as our ability to choose what to attend to—and that it is this skill that enables us to cope with the information-supersaturated modern urban environment.

So far this book has focused on what is said about climate change, including the loud and intensely politicized debate and the arguments about cost, certainty, and impacts. But of equal interest is what is deliberately *not* said, and the extent to which climate change is not just marginalized but also entirely removed from the public consciousness—sitting permanently on the beach but never in the pool.

Don't Even Talk About It!

The Invisible Force Field of Climate Silence

I AM CONSTANTLY DROPPING THE term *climate change* into conversations with strangers. I may talk about my own work or relate it to the weird weather or some other issue that is hogging a prime spot in their pool of worry. I am very relaxed and casual about it—after all, no one wants to find herself sitting next to a zealot on a long-distance train journey.

Really, though, it doesn't seem to matter how I say it, because the result is almost always the same: The words collapse, sink, and die in midair, and the conversation suddenly changes course. It is like an invisible force field that you discover only when you barge right into it. Few people go that far, because, without ever having been told, they have somehow learned that this topic is out-of-bounds. That is why they know that if someone else inadvertently enters this zone, it is a good idea to find something new to talk about.

In America I find that the native friendliness dissipates the instant the words *climate change* enter a conversation. If I am talking to a couple, one person will continue to talk with me (it would be rude not to) while the other will instantly turn away and find some adjacent distraction.

When pressed two thirds of people admit that they rarely or never talk about it, even inside the close circle of their friends and family members. Women talk about it far less than men do, and as a group, younger women talk about it less than anyone, especially, as I will explain later, those with children. Another survey found that a quarter of people have never