How Climate Change Comes to Matter

Callison, Candis

Published by Duke University Press

Callison, Candis.
How Climate Change Comes to Matter: The Communal Life of Facts.

For additional information about this book
https://muse.jhu.edu/book/69964

For content related to this chapter
https://muse.jhu.edu/related_content?type=book&id=2566848
CHAPTER TWO

Reporting on Climate Change

In June 2007, the University of Oregon (UO) put on “The Changing Climate Issue: Reporting Ahead of the Curve,” a daylong workshop for reporters. It was titled “Climate Change Boot Camp” when I first heard about it, and it was sponsored by UO and the Society for Environmental Journalists. The idea behind it was that climate change was a story moving from the science pages into all other beats. “More than ever,” the conference description stated, “reporters in every part of the newsroom must understand some aspect of climate change and explain it to their publics.”

Between seventy-five and eighty reporters attended. Most were local reporters in the Pacific Northwest, although a few came from further afield like Chicago. UO’s Bob Doppelt, who is also a local columnist and author on sustainability issues, opened the conference. He said that the idea for the conference had come the previous year when he was interviewed
about a report. The resulting story had given equal time to a skeptic. Dop-
pelt called back and asked why. The reporter said they had “googled” and
found someone from MIT. The unnamed MIT source called about ten min-
utes before the story was broadcast, so the reporter decided to quickly
conduct an interview and put it in the story.

Climate change as a story, according to scholars, scientists, and jour-
nalists, has suffered mightily in the past from these problems of unnec-
essarily balancing points of view and reporters being dropped into cli-
mate change with little or no background on the science and/or debates
(Boykoff and Boykoff 2004; DiMento and Doughman 2007; Nisbet and
Mooney 2007; Oreskes 2004a; Russell 2008; Ward 2008). The workshop
was meant to avert these problems by (1) offering the basics of climate
change, which Doppelt described as explaining how scientists and policy-
makers think and arrive at conclusions, (2) how information tiers down
from global conclusions to the Pacific Northwest, and (3) how to accu-
rately cover a fast changing, complex topic.

The program began with renowned climate scientist Stephen Schneider
from Stanford University.1 Schneider began by trying to “distill out the
urgency and uncertainty” and said that “what we’re really talking about is
risk management.” He joked that one of the participants was a kid when
Schneider first testified before the Congressional Ways and Means Com-
mittee in 1976. He said that “back then,” it was “all theory.” The difference
between 1976 and 2007, he said, is that “the last 31 years nature has coop-
erated with theory . . . the most unequivocal part is that it’s warming.” He
advised journalists to watch out for “myth busters and truth tellers.” In-
stead he summed up scientific results and methods this way: “All good sci-
ence does not give you answers, it gives you probability distributions,” and
scientists “worry endlessly about the tails,” meaning the extremes or least
likely scenarios. He argued that the real debate was not about the science
but about fairness and efficiency. He used the melting of the Arctic sea ice
as a case in point. It’s “terrific” for the shipping industry, which will be able
to save on fuel costs by taking more direct and shorter routes across the
Arctic, but not so good for the Inuit, who depend on sea ice for their cul-
ture. Because the range of global average temperature increase, estimated
between one and six degrees, is “not even remotely settled,” the questions
are really about “how to deploy resources and make decisions with complex
science.” Schneider was open about the uncertainty that surrounds climate
predictions and equally forceful about the need to address those predic-
tions through precautionary decision-making and policies.
During the question-and-answer period following Schneider’s presentation, a question came from a radio reporter based in Seattle who said he was not a scientist but an English major who had flunked geology and was having difficulty trying to sort out climate change. He said, “Our job is to give people what they need to find out what’s true,” and finding out what’s true about climate change is no easy task. Schneider responded by advising the reporter that “not all PhDs are created equal” and that skeptics should be given “low status.” He said reporters should “do their homework” and learn “whose websites are credible and whose are ideological.” It was, he acknowledged, a tough story to cover in a day.

This interaction—scientist explaining area of expertise, journalists seeking how to best cover expert area—is not uncommon for many who work in science journalism. Journalists are expected to learn about the area of research, to converse regularly and develop professional relationships with scientists, to have a sense of how to gauge the impact or newness of the scientific discovery/fact/process, and adjudicate whether and how it merits journalistic coverage. But this interaction and what, arguably, makes it specific to climate change is that (a) nonscience journalists are covering the issue and must familiarize themselves with the issue, its science, experts, and politics, (b) scientific methods, processes, conclusions, and expertise are being vigorously questioned such that some experts are called “ideological,” and others deemed “credible,” and (c) reporters are compelled to articulate their professional norms as well as rationales for their practices and apply them to climate change specifically. In other words, the credibility of both journalist and scientist are on the line, as are the metrics that measure and account for what and who merits public trust.

Credibility, to a great degree, rests on the norms and practices already built into journalism and science—norms that dictate both what the public good is and how these professions should serve it. Michael Schudson (2001) distinguishes journalism practice from journalistic norms by defining norms as “moral prescriptions for social behavior” and “obligations” or “prescriptive rules” that are “self-consciously articulated.” The highly principled moral obligations that journalists dictate for themselves are enshrined in codes of ethics. (The Society of Professional Journalists organizes its code around four key principles: truth-seeking, independence, minimizing harm, and accountability.) As well, most members of the public have expectations and ideals related to what job they think the media should do, and as Jane Singer (2005) has pointed out, many a blog critique reflects such expectations.
Much has been written, too, about scientific norms—first and most famously by Robert Merton in 1942, and particularly since World War II about what the sciences and basic research offer society both as a way of justifying the amount of funding scientific research gets and as a way of explaining and accounting for societal “progress” in the United States (see Bush 1945). Yet even while journalism and scientific norms have been codified and celebrated, they also have morphed over time. Consider the kind of argument that Schneider presents. Climate change–related findings and predictions are not settled or marked by “answers,” but they inhabit a spectrum of probabilities—the likelihood of which, he argues, will decrease fairness for some and increase efficiency for others. With such an articulation, Schneider effectively moves climate change into moral and ethical terrain and away from questions about certainty. He trusts the process of science to continue to work at uncovering the riddle that is climate change, but he leaves open whether its predictions can be entrusted to the social, political, and industrial forces that seek to shape the outcomes for their own ends. Science as a self-governing, objective fact-producing set of institutions is maintained, but journalism’s role remains in question as it seeks to negotiate social forces and proceed with its watchdog work of holding government and corporations accountable while also educating (and inspiring) the public about climate change and its latent ethical questions.

It’s no wonder then that Schneider is met with a question about truth and how to convey what’s true. If fairness is what’s at stake, then truth must shine the light on the problem, its features, and its predicted impact. The question about how to report truth carries with it an implicit statement about norms: “our job is to report the truth”—journalistic norms are thus articulated as a way of explaining the challenge that reporting on climate change presents for journalists who have a responsibility to their profession and, by extension, to democratic publics. Journalists see their primary job as “seeking truth and reporting it”—under which the current Society of Professional Journalists Code of Ethics (adopted in 1996) includes “giving voice to the voiceless.” So lack of fairness stemming from an increase in greenhouse gas emissions requires the kind of independent investigation that journalism can and must provide.

It’s this kind of thinking around and about climate change that has produced an enormous amount of debate about both the role of expertise and the role of media in adjudicating that expertise and responsibly informing the public. For journalists, climate change presents a conun-
drum both in terms of how its attendant facts are represented, stabilized, and mobilized (what “the truth” is) and what and how implications and potential impacts should be considered (what “the truth” means). It’s in parsing this out that the double bind at the core of this book is most evident—that of needing to both maintain fidelity to scientific expertise and move beyond facts to ask questions about communality, fairness, and what it means to live with knowledge that the future will likely produce more inequality and not less. For social groups, like Inuit leaders in chapter 1 and the evangelicals in the chapter 3, epistemological challenges, vernaculars, and ethical or moral obligations related to a future with climate change are starkly apparent. Yet climate change for journalists necessitates a theory of the social as well and a sense of what it is that journalism should be bringing to the conversation in spite of, and because of, its stated professional ethical obligations to uphold democracy by informing the public of “the truth” even “when it’s difficult to do so” (SPJ Code of Ethics).

What the workshop conversation and Schneider’s advice produce is also a call to report in a specific way such that the substantiation of facts leads to ethical questions and not more questions about the facts. And it is on this terrain that negotiating a stance with regard to what I am terming “near-advocacy” is most evident and, I would argue, unavoidable. Advocating for “the truth” related to climate change has been defined as reporting in a way that reifies and relies on scientific consensus and organizes new evidence and findings such that ethical implications emerge. Telling stories such that the ethical becomes the central focus or a central outcome goes beyond “just the facts” and requires an evolution of journalists’ relationships with and articulations of traditional norms like balance, objectivity, and accuracy.

Schneider is not alone, nor is it only scientists who have called for different metrics for journalists in the face of both an urgent need to address climate change predictions and organized skepticism that has actively sought to undermine scientific findings backed by widespread consensus. Many scholars have sought to analyze media coverage of climate change in terms of how norms shape what’s considered newsworthy and “who speaks for climate.” Boykoff’s analysis brings to the fore the challenge that journalists face in dealing with climate-related findings, and those who work to sow skepticism such that climate change is called into question as a fact and/or a fact requiring action. This chapter builds on Boykoff and other scholars’ work on media by providing what journalism
scholar James Carey might deem the other part of the equation when he says, “The appropriate question is not only what kind of world journalism makes, but also what kind of journalists are made in the process” (331). This chapter specifically uses ethnographic data to get inside the issue of how credibility is constructed, perceived, and articulated by journalists and particularly how “ethical” journalistic coverage of climate change is debated. It seeks to understand how journalists are being “trained” at workshops and other events that elaborate climate change as a specific science-laden form of life.

This chapter will also address criticism of and by journalists about climate change coverage that can be loosely grouped into a few categories: (1) accusations of bias, alarmist coverage, and exaggeration, (2) claims of inadequate application or explanations of climate science using false balance and ignoring “scientific consensus,” and (3) lack of proportionate attention to the issue such that publics might demand and take action. The first, if founded, is a clear violation of journalistic norms around independence, objectivity, and truth-seeking. The second might be seen as ineffective journalistic practices or practices inadequate for the story itself. For example, figuring out how to make the latest IPCC findings “relevant” for a local news outlet is no small feat, though regionalized impact scenarios are growing in numbers. The third, however, presents a distinct challenge to these same norms and practices, and negotiating this challenge is where the gauntlet of near-advocacy becomes clear for professional journalists intent on adhering to norms and to their own sense of what function journalism should responsibly play in society when predictions of the enormity of climate change are on the horizon.

Criticism of journalists and the role of media also gets at a deeper challenge first issued in 1997 by Bill Kovach and Tom Rosenstiel. In their seminal study of public expectations and journalistic norms and practices, they argue that journalists need to be “honest about the nature of what’s known and how that knowledge has been generated.” Epistemological matters have generally not been a central concern when aiming for a highly professionalized version of “just the facts, please.” Yet Kovach and Rosenstiel afford the public both an interest in processes and intersections between knowledge producers and transparency with regard to the choices journalists make in their reporting and analyses—allowing for an opportunity to hold journalists accountable for which knowledge and which questions they deem salient.5

The problem of how to report on climate change is thus a scientific,
moral, epistemic, and existential one—a problem that deals with anticipation, predictions, and conceptions of a future with a range of possible outcomes, produced by a variety of scientific and economic methodologies. So conceived, accusations that journalism is unnecessarily “ringing the alarm bells” for society might be seen as questions about epistemology—about how and which scientific facts are true (to quote the reporter from the workshop) and which knowledges and methodologies matter most in arriving at that truth. Unfortunately then for those who work with deadlines like the reporter who inspired a “climate change boot camp,” such forms of life cannot be fully explained merely by trotting out someone considered an expert to speak authoritatively about what is or is not true and/or relevant to the public’s interest. You have to, as Schneider put it, “do your homework.”

The Reporters’ Guide: How to Report on Climate Change

Climate change has produced an enormous amount of “homework” for journalists, policymakers, and the public. In particular, for journalists, the workshop I begin this chapter with is one example, but attempts at cultivating an exceptional set of practices around climate change began much earlier. Following the release of the 2001 IPCC report, which conclusively stated that humans were causing climate change, the Environmental Law Institute released a third edition of *Reporting on Climate Change: Understanding the Science* in 2003. Authored by journalist Bud Ward, now the editor for the *Yale Forum on Climate Change and Media*, it begins this way:

Like the first two editions that precede it, this is a guide written primarily for journalists. And for other communicators, educators, and just plain “thinkers” who want to take a journalistic approach to the science of global climate change. That is, the kind of approach that adheres to no narrow preconceptions about “who is right?” and “who is wrong?” on the often conflicting science surrounding the “global warming” debate. The kind of approach that recognizes—and respects—the reality that merely striving for “balance” among diametrically competing perspectives may help guarantee just that . . . “balance” . . . but not necessarily the higher standard of accuracy.⁶

Ward signals immediately that there is a “journalistic approach” but that the norm of balance, accuracy, and truth-seeking associated with it shouldn’t yield the same kinds of practices as any other story might. Accu-
racy will be achieved not by setting up the “debate” as a right versus wrong but by understanding the nuance and challenge that a global problem with multiple scientific approaches and key findings presents.

Ward’s edited guide leans heavily on the need for scientific knowledge and literacy for journalists and offers ten chapters that summarize the current state of various scientific fields. Ward describes the problem confronting journalists as “an enormous intellectual challenge. It involves all of the ‘earth sciences’—physical sciences, life sciences, and some would say even social sciences. It goes way beyond meteorology (the science of weather) and beyond the atmosphere itself.”

Reporting on climate change thus requires not only a depth of knowledge on varied fields of research but also an ability to knit differing epistemic approaches together. Rarely, or some would argue never, has an environmental issue enrolled so many disciplines and kinds of research—nor has such an issue been so overtly politicized. Certainly, reporters have not been tasked before with a global science–based issue such that it can and often has subsumed all other environmental issues in a future laced with a wide spectrum of risks. Expertise then presents an experiment for journalists both in terms of navigating their own norms of balance, independence, and accuracy and in terms of translating and representing the science related to the problem. When “the facts” are as complex as those put forward by varied climate models, IPCC and ACIA reports, and other forms of climate change knowledge, independent adjudication and verification of that expertise become a differently configured task, as Ward’s opening salvo about “balance” demonstrates.

Ward’s articulation foreshadows the oft-cited 2004 Boykoff and Boykoff article, “Balance as Bias,” which looked at major newspapers’ coverage of climate change and concluded that in an effort to observe professional norms of balancing divergent opinions, reporters had overrepresented skepticism about climate change. In the same year, science historian Naomi Oreskes published her work on scientific consensus in Science and later turned it into an op-ed for the Washington Post. Oreskes found that, in her review of over nine hundred peer-reviewed articles that dealt with climate change, none questioned the basic premise that climate change was occurring. Her evidenced claims to scientific consensus, as well as Boykoff and Boykoff’s claim to media bias (because coverage didn’t reflect that consensus) produced a kind of unassailable critique of how media had misrepresented the climate story. Oreskes’s later work with Eric
Conway in *Merchants of Doubt* (2010) further points out that skeptics have benefited from a strategy titled “teach the controversy,” borrowed from evolution/creation debates where less widely accepted and credible views are elevated to equal status under the rubric of teaching all points of view. In this way, doubt gets “produced” via the elevation of experts and the downplaying of widespread consensus. These strategies are particularly difficult to navigate for reporters who are assigned a climate change story without a grounding in its debates and with an overreliance on Internet search engines to find experts—as Bob Doppelt pointed out at the beginning of this chapter in his workshop introduction.

For the reporters at the UO workshop, Schneider described the IPCC as the ultimate navigational tool for following “the signal” and “filtering out the noise” related to climate findings. He said that it is because of the vast amount of evidence collected that the IPCC began its work as a “meta-research council,” and its primary task is to weight the literature in order of what evidence is most reliable. The IPCC produced four assessment reports in 1990, 1995, 2001, and 2007; a fifth set of reports has begun to roll out as this book goes to press. The IPCC website has a complex flow chart that shows the process by which it arrives at these reports. The sheer number of authors involved and the long and complex negotiations speak to the difficulty of achieving agreement on what science matters, what that evidence is saying, and what reasonable predictions achieve consensus in order to guide policy.

IPCC puts front and center the matter of expertise and who can speak for and about the signs of climate change. In a funny but poignant moment, Schneider advised reporters at the workshop: “This is not a job for you and your neighbor.” In other words, adjudicating scientific research is a job requiring a high level of expertise. Yet, despite the presence and the strength of the IPCC’s declarations, particularly from 2001 onward, journalists have continually been asked to do exactly that. It’s in this sense that journalists act as a social group vying for the trust of the public along the lines that evangelicals in the next chapter ascribe to “messengers”—those who can be trusted to evaluate the messages of science, scientists, and the discursive conclusions of those vested in certain kinds of policy solutions. But, unlike the coherence that a social group might offer in terms of its translations of the science, epistemological considerations, and use of vernacular, journalists don’t have the same sets of resources. Journalists speak for and ascribe to a sense of commonality in epistemology—
in this case, scientific facts and methodologies, and a set of professional norms that are based on an informational theory of democracy—that facts can and should drive action in society.

Andrew Revkin, a veteran journalist turned blogger at the *New York Times*, long associated with his coverage of climate change (he wrote his first book about it in 1992), characterized the problem this way in a 2006 draft of an article he sent me via e-mail:

Global warming is perhaps the prime example of an environmental issue that the media have largely failed to handle in an effective way. . . . *By “effective,” I do not just mean accurate.* I mean that we have largely failed to communicate what science can tell us about climate in a manner that allows the public to absorb the information and integrate it into how decisions are made, both at the personal and societal level. The tendency of the media seems to be either to overplay the sense of imminent calamity or ignore the issue altogether because it is not black and white. That has left society, like a ship at anchor, swinging cyclically with the tide. And like an anchored ship, we are not going anywhere.

Revkin elevates “effectiveness” to the level of journalistic norm, alongside accuracy. He describes effectiveness as being able to “absorb the information and integrate it” such that decisions can be made personally and politically. Balance then is not about quelling or creating anxiety or doubt about climate change, but rather about the responsibility of reporting such that publics and polities are compelled to become consistently engaged and make decisions accordingly.

An evaluation of “effectiveness” is an enduring aspect of critiques and debates about how to report adequately on climate change, and part of it has to do with the ways in which the scientific findings have evolved. Boyce Rensberger, a science reporter with the *New York Times* and then the *Washington Post*, said that when he began reporting on global warming in the early 1990s, the science was a lot more controversial. The Montreal Protocol had just come out in 1987 banning chlorofluorocarbons (CFCs), chemicals proven to contribute to the ozone hole. Rensberger had reported on the ozone hole and asked atmospheric scientists working on the ozone whether they thought about the case for global warming. Despite landmark testimonies in 1986 and 1987, Rensberger said the ozone scientists he spoke with “were fairly skeptical” about the work their colleagues “down the hall” were doing—the scientists said there were a lot of things they didn’t know.
At that time there was a lot of uncertainty and it was completely appropriate for stories to have input that expressed the range of scientific opinion. And so I wrote a story—it was another one of these big package things—that looked at the science behind it. It did not take any alarmist tone or anything like that. What’s the evidence, where’s the uncertainty, what’s the strongest case you can make for it, what’s the strongest case you can make against it?

Rensberger said he “got hammered” by “environmental activist groups” for this story—so much so that they called a congressional caucus meeting on global warming that was mostly attended by congressional staff in order to specifically discuss the article. The fear was that the issue wasn’t “as cut and dried as they were led to believe,” and they wanted to know what the truth was. It was a public meeting, so he went and sat in the back of the room without anyone noticing.

Well-known NASA climate scientist James Hansen was among the speakers at the meeting, and according to Rensberger, Hansen got up and said, “Well, the facts in the article are okay. It’s just the tone.” Rensberger said he was puzzled by this, and he talked with a lot of other people including Bud Ward and Stephen Schneider. They pointed out that he was focusing on the uncertainties, which Rensberger said “is what a good science reporter does . . . we’re trying to give people some basis for judging whether you should believe it [a finding] wholeheartedly, or you should take it with a grain of salt, or whether you should say, ‘Well, that’s interesting. Let’s wait and see how it turns out.’” Rensberger cited Ward, Schneider, and others as pointing out to him that “most environment stories had been written from a sort of whistleblower, alarm calling, watchdog point of view, which is the classic traditional stance of journalists in the United States.” Rensberger was quick to point out that this is the reason “why journalism is protected under the constitution. It’s supposed to serve the public and be the eyes and ears of the public to report if something is going wrong in the government or anything else that affects us.” But, he said, in his stories, “rather than taking that alarmist tone, I just tried to do it straight down the middle.” He said that before this experience with global warming, he was even accused of calling the ozone hole a hoax because he said it was a solved problem and “not to worry.”

I took a look back at Rensberger’s articles for the Washington Post and found a 5,311-word story published on the eve of the 1992 Earth Summit in Rio de Janeiro. Rensberger cites the IPCC’s 1990 report—the first assessment report as evidence that scientists have not confidently con-
cluded that the rate of warming will be dangerous or that it is caused by humans. He quotes the report as saying, “It is not possible at this time to attribute all, or even a large part, of the observed global-mean warming to the enhanced greenhouse effect [the extra warming attributable to those human-produced gases] on the basis of the observational data currently available.” And he points out, “Seldom, in fact, has an issue risen to the top of the international political agenda while the facts of the matter remained so uncertain.” He quotes Hansen’s 1988 testimony, noting that “the most visible scientists have tended to be those who express alarm and call for immediate, massive action in the name of prudence.” S. Fred Singer, a now well known skeptic, was quoted as a severe critic of Hansen who agreed with the IPCC report, calling it “an excellent compilation . . . filled with appropriate cautions and qualifications.” With this as a precursor, Rensberger launches into the vast body of the article, establishing it as a guide and “‘toolkit’ for nonspecialists who believe the future of the planet should be taken seriously.” Rensberger walks through many of the details including historical climate shifts, an estimation of emissions, the greenhouse effect, and computer modeling in depth, with a prominence (it ran on page A1) and detail I’ve rarely seen in a newspaper since I began closely looking at the issue in 2003.

In a history of climate change that includes some analysis and summaries of the media coverage particularly of this period, historian Spencer Weart (2009) notes that most journalists reported on “the issue as if it were a quarrel between two diametrically opposed groups of scientists.” Weart argues that this is in part because of efforts made by conservative think tanks, but he also notes that it was “hard to recognize that there was in fact a consensus, shared by most experts—global warming was quite probable although not certain.” The latter is definitely where Rensberger said his motivation lay—in the actual lack of consensus on the issue. Weart concludes that “the media got that much right” when they “emphasized the lack of certainty.” Indeed, Weart points out, like Schneider did at the workshop, that it was the need for a “better representation of what scientists did and did not understand” that spurred the IPCC to form and continue its work of negotiating and producing consensus statements and views. Yet as the IPCC became more certain about anthropogenic causality and dangerous warming potential with their second report in 1995 and third in 2001, Weart says, media and the public generally paid little attention to the changes. At the same time, industry-funded think tanks and skeptics continued to grow in influence and profile (Hoggan
and Littlemore 2009; Oreskes and Conway 2010). It’s out of this that the Boykoffs’ and Oreskes’s research emerged in 2004 and critiques by journalists and authors like Ross Gelbspan and Bill McKibben grew in prominence. Gelbspan went as far as to allege that his journalist colleagues had been duped by or sold out to fossil fuel interests (2004).

This highly charged and critical political atmosphere helps explain the need for a guide like the one Ward wrote and the multiple editions of it (a fourth edition was released in 2012). As Rensberger’s story illustrates, reporters needed (and still need) to be able to navigate the scientific research, the institutions publicizing findings, as well as the industry, advocacy, and political interests in order to adequately cover the issue and its ongoing developments—and any fallout that might occur as a result of their reporting. In 2003 Ward began to go one step further than the guide when he worked with Anthony Socci, a scientist with the U.S. Global Change Research Program. Together they embarked on a remarkable series of six two-day invitational workshops for scientists and journalists in order to educate reporters about the state of knowledge on regional and local impacts.8 Ward told me that with the workshops, they “made a conscious decision to basically fly below the radar stream. . . . We didn’t want to seek publicity.” Ward posted the links to summaries from the workshops, which are in many ways riveting. They include some of the leading science journalists and scientists (a group that includes Revkin, Rensberger, and Schneider) debating with one another, airing their grievances about Science or Media writ large, and educating each other about their respective professions.

In Ward’s book based on the workshops, Communicating on Climate Change: An Essential Resource for Journalists, Scientists, and Educators, he says this was the express purpose—for scientists and journalists to educate each other. But he goes further, saying from the start that “frustration was the impetus behind the workshops” (2008, 1). Scientists were roundly frustrated that the media didn’t get it and that public engagement suffered as a result. Journalists were similarly discouraged that they still had to convince their editors and the public and battle the rapid pace of change that was transforming their newsrooms, downsizing staff, and putting more demands on their time.9

In terms of the work of reporting, balance was an issue that took center stage early on at the workshops. Scientists argued, Ward said, that peer-reviewed articles should not be equally weighted against opinion, policy debates, or political views. At the November 2003 workshop, Ward
makes a point of citing Rensberger’s affirmation of the growing scientific consensus. Ward writes:

While there may once have been a legitimate 50/50 split of viewpoints on some climate science questions, Rensberger argued, the preponderance of scientific evidence had since accumulated to a point where responsible reporters should give the scientific consensus on anthropogenic climate change much greater weight than dissenting claims challenging the mainstream scientific conclusions. The journalistic tenet of accuracy now demands that the established science be given total or near total prevalence in coverage of certain aspects of climate change science.

By the time the workshops finished in 2007, this was the dominant view of most journalists I spoke with due in part to a host of likely factors including these workshops, the Boykoffs’ article, Al Gore’s film, and the fourth IPCC report.

In my interview with Ward, he noted that he thought the workshops “help[ed] create community that certainly journalists knew scientists up close and personal at a level that they didn’t before. They have a much better understanding of each other’s issues, including like who writes a headline.” In his book, Ward said that scientists were generally surprised to learn that journalists did not write their own headlines—that editors did, and that journalists were quite often frustrated with this process and its outcome. He said it was a bonding moment as scientists also bemoaned the way their universities’ public relations staff oversold and sometimes mischaracterized their research with press releases. This community and the trust-building process are not an insignificant by-product, and in many ways they spawned other efforts like the UO workshop I began this chapter with.

**Telling the Story:**

*Journalistic Practice Meets Hurricanes and the Arctic*

Climate change, as this recent history of guides and workshops illustrates, presents a genuine and evolving challenge as a news story—what scholars might differentiate as journalism practices. On one hand are the ethical and near-advocacy related challenges: how to present a long-term uncertain issue like climate change that requires action and engagement without sacrificing journalistic norms of objectivity and non-advocacy. Skep-
tics provide a kind of specter or counterpoint to many of the actions taken by those, especially journalists, who seek to present climate change as a fact requiring action. Part of the complaint of some prominent skeptics has to do with how facts are evidenced. Skeptics tend to favor empirical meteorological modes of compiling and projecting data, while climate science more often relies on more complex models and simulations that enroll empirical and theoretical data to arrive at a range of predictions (Edwards 1999; Lahsen 2008; Mooney 2007; van der Sluijs et al. 1998). Finding one’s way around climate science then is part of the ethical and substantive task that is part of a climate story.

But the other set of challenges have to do with the mechanics related to forms and styles of journalism (Broersma 2010). Many journalists, including those at the workshops, note that climate change is a story that “oozes” and doesn’t “break.” In other words, it doesn’t quite fit the mold of what is characterized as news primarily because it isn’t happening on a timescale or in ways that demand immediate attention. And finding a picture that illustrates conclusive proof of the fact that climate change has begun is nearly impossible, although the maps showing the decline of the Greenland ice sheet come close. Climate change also defies the framework most have developed for thinking about weather as an empirical, felt experience. It relies on statistics, theory, a wide range of evidence and research, and global modeling to make a case for massive disruptive changes that will introduce a range of variabilities that may or may not begin happening immediately. With the exception of most glacial melt and sea level rise, it may be difficult to recognize them, in most cases, as conclusively connected to the notion of climate change.

Yet the norms of storytelling for news require that journalists find a way to make an esoteric, futuristic concept like climate change relevant, concrete, visible, and legible for the average reader/viewer/listener. Such journalistic dictates stem in part from the democratic ideal of an informed citizenry being given the opportunity through media coverage, as Revkin put it earlier, “to integrate” information into their lives. With media changes and its forms in flux, ever pressed for space and time for analysis, complex issues like climate change present some distinct challenges and opportunities when events that qualify as (breaking) news present themselves.

Hurricane Katrina provides a case in point. Katrina was a larger, more catastrophic hurricane than had previously been witnessed in the Gulf of Mexico, cutting a wide swath of tragedy throughout the Gulf and de-
stroying much of the city of New Orleans. Shortly before it hit, MIT atmospheric scientist and leading hurricane expert Kerry Emanuel had published an article in *Nature* saying that it was likely, based on his modeling, that climate change would increase the intensity (not frequency) of hurricanes. In the days following Katrina, he said his phone rang continuously with journalists looking to make the connection between climate change and hurricanes. *Time* magazine’s first cover in the aftermath read, “Are we making hurricanes worse? The impact of global warming. The cost of coastal development.” *Time* wasn’t alone; many news outlets ran with the story, some even making a distinction between intensity and frequency. Ross Gelbspan published an op-ed in the *Boston Globe* entitled “Katrina’s real name.” Al Gore’s film built heavily on the devastating images wrought by Katrina’s destruction. It would seem that Katrina was the first catastrophe that could be considered evidence of climate change, a portent of future risk, and a reason to act now. This was certainly evident in my research with Ceres, as I detail in chapter 5, and in the use of weather-related destruction costs by insurance industry reports in 2005—the year Katrina hit.

Neither Emanuel nor any of his scientific colleagues would say Katrina’s ferocity was a direct product of climate change. The Gulf waters were warmer, which likely increased Katrina’s intensity. But that wasn’t necessarily caused by climate change. Indeed, what Emanuel points to as a problem for all hurricane-prone areas is inappropriate coastal development. And what later was revealed to be a primary issue in the destruction of New Orleans was the state of the levees (McQuaid and Schleifstein 2006). Yet it’s still possible to point to Katrina as an example of what the globe could be in for in the future.

A number of scientists have turned to blogging, particularly those involved in climate research. Noted climate scientists Stefan Rahmstorf, Michael Mann, Rasmus Benestad, Gavin Schmidt, and William Connolley coauthored the following explanation on their blog, *RealClimate* (subtitled *climate science from climate scientists*):

Due to this semi-random nature of weather, it is wrong to blame any one event such as Katrina specifically on global warming—and of course it is just as indefensible to blame Katrina on a long-term natural cycle in the climate. Yet this is not the right way to frame the question. As we have also pointed out in previous posts, we can indeed draw some important conclusions about the links between hurricane activity and global warming in a statistical sense. The situation is anal-
ogous to rolling loaded dice: one could, if one was so inclined, construct a set of dice where sixes occur twice as often as normal. But if you were to roll a six using these dice, you could not blame it specifically on the fact that the dice had been loaded. Half of the sixes would have occurred anyway, even with normal dice. Loading the dice simply doubled the odds. In the same manner, while we cannot draw firm conclusions about one single hurricane, we can draw some conclusions about hurricanes more generally. In particular, the available scientific evidence indicates that it is likely that global warming will make—and possibly already is making—those hurricanes that form more destructive than they otherwise would have been.

Rahmstorf et al. separate Katrina from climate change in terms of causal effect, but they don’t let it go as an object lesson. Rather, they employ a different frame or set of questions that enroll Katrina as an example rather than an effect. It’s a subtle change, but one that still allows for the ethical discussions about what climate change portends in the wake of Katrina. Much like Schneider’s earlier characterization, Rahmstorf et al. seek to explain climate in terms of probability distributions and the ongoing processes of scientific research as just that: ongoing. Then they close not with answers but with ethical questions that research brings to the fore for them as scientists—questions that point to eventual winners and losers, where those in hurricane zones will likely suffer as a result of more destructive results. They close with this sentence: “What we need to discuss is not what caused Katrina, but the likelihood that global warming will make hurricanes even worse in future.” In other words, Katrina presents itself as a harbinger of an anticipated future.

In the year following Katrina, another research team weighed in—but not just on the legitimate scientific disagreement that Rahmstorf et al. only hint at in their post. Judith Curry, Greg Holland, and Peter Webster published a paper in 2006 in the American Meteorological Society that sought to both characterize scientific findings related to hurricanes and climate change and their experience with media who sought them out as experts. Like Emanuel, Curry et al. had also published a paper in advance of Katrina (Webster et al. in Science) that had their phones ringing constantly with journalists looking to clarify the link between hurricanes and climate change. Recognizing that major media interest would be related to Katrina, Curry et al. drafted a press release that took this into account, and they excerpted this key portion in the AMS article:
The key inference from our study of relevance here is that storms like Katrina should not be regarded as a “once-in-a-lifetime” event in the coming decades, but may become more frequent. This suggests that risk assessment is needed for all coastal cities in the southern and southeastern U.S. . . . The southeastern U.S. needs to begin planning to manage the increased risk of category-5 hurricanes.

Much like Rahmstorf et al.’s blog post, Curry et al. wanted to have a conversation about what to do about storms, and they expected that peer-reviewed research like their article would be the “gold standard” of evaluation. Instead, their interview clips and excerpts were placed alongside climate skeptics of many kinds, and much of the reporting focused on whether or not climate change was real and could be the cause of Katrina. More devastating, however, was the division that media coverage caused within the scientific community. They refer, without details, to misrepresentation of disagreements and unsubstantiated feuds between scientists that have disrupted normally “collegial” relationships. Curry, a participant in the workshops led by Ward and Socci, cites both Boykoff and Boykoff’s “Balance as Bias” article as well as the workshop reports as a way to understand how media work and what media are doing wrong. But she and her coworkers also cite fundamental fault lines in the norms, expectations, and epistemic goals of scientists and journalists.

While responsible journalists and respected scientists share some similarities in their “pursuit of truth,” they have different and sometimes incompatible goals, missions, and responsibilities. Journalists are not simply looking for information; they are looking to develop stories that are timely and relevant, are wide in scope, have a particular thematic angle, reflect conflict, and demonstrate human drama.

Curry et al. reserve some distinctions for those explicitly committed to science journalism as opposed to political journalism, but in general their sense of unfair, inaccurate coverage is palpable. Much like Boykoff’s later work in *Who Speaks for the Climate*, they view journalists as truth-seekers, but with a storytelling mission rather than one of information transfer. As Rahmstorf et al.’s blog post also illustrates, connecting hurricanes to climate change does present a serious conundrum for journalists in terms of providing the public with clear predictions that warrant action, framing relevant questions, characterizing and including relevant scientific findings, nuanced summarizing of probabilities, and connecting global climate research models to single weather events. And certainly Curry
et al. as well as Emanuel bore some of the brunt of this challenge in the wake of Katrina.

In contrast to hurricanes, the Arctic provides the most immediate, reliable evidence of current climatic changes and their effects. Drastic images of the melting polar ice cap make for dramatic evidence of climate change. The image of Greenland’s receding ice cover year after year shows a clear and present trend toward warming; it was a much circulated image from the 2001 IPCC report. Charismatic megafauna, like polar bears, also play a lead role in stories about the Arctic. Time magazine’s iconic cover in 2006 was titled “Be Worried. Be Very Worried.” Classically written as a hook or peg that makes climate change present for the reader, the subheadline underneath reads: “Climate change isn’t some vague future problem—it’s already damaging the planet at an alarming pace. Here’s how it affects you, your kids, and their kids as well.” Beside it is a lone polar bear stranded on an ice floe in the middle of melting waters. Polar bears were placed on the endangered species list as a “threatened species” in 2008 as a result of climate change predictions. Al Gore’s film has a dramatic animation of a polar bear drowning because it has run out of energy trying to find another ice floe to rest on. A less popularized aspect of this issue is that Inuit people, particularly in Canada, were upset by the listing, as polar bears are not yet actually endangered in terms of current statistical measures, and they are the basis for robust hunting and guiding businesses throughout the Canadian part of the Arctic (Palin 2008; Watt-Cloutier 2007).

Revkin has reported extensively on the Arctic, traveling there with scientists to cover climate change research. He wrote a book about the North Pole for kids in 2006. And as I detail in the previous chapter, he also broke the news of the Inuit claim in an article he wrote in 2005. In a 2006 interview he gave to Brooke Gladstone for NPR’s On the Media, Revkin had this to say about the Arctic and corresponding sea level rise:

When you look ahead at the Arctic later this century, there’s not a scientist around studying this stuff who doesn’t see the prospect of basically a blue pole at the top of the world for the first time in human history, meaning summertime open water ocean, just like the Atlantic or the Pacific, all the ice gone. But when you look at the near term, there’s been a lot of melting, a lot of strange things going on with the sea ice that they can’t ascribe this particular year to our influence on the climate system. They know it’s contributing to change, but there’s enough variability in the Arctic that you can’t make a slam dunk case.
So that’s a nightmare for the media. You know, my editors—the one thing that makes them glaze over immediately is the word “incremental.” That’s like, at the *Times*, and I’m sure any other newsroom, that’s a death sentence for a story.

In other words, Revkin sees it quite differently than those who wrote the headlines for *Time* magazine and tagged it to a polar bear on the precipice of possibly drowning. Moreover, while incremental is what Revkin says is the primary concern, variability could well be a bigger death knell for climate coverage.

In a session I sat in at a conference titled “The Impact of Diminishing Ice on Maritime and Naval Operations” in Washington, D.C., as well as at the Arctic Science Summit Week, I heard U.S. Army Cold Regions Research and Engineering Laboratory (CRREL) scientist Jacqueline Richter-Menge speak about the state of Arctic sea ice cover. Richter-Menge and Jim Overland from NOAA’s Pacific Marine Environmental Laboratory are lead authors of the 2006 *State of the Arctic* report and subsequent “report cards.” Their presentation includes a dramatic time-lapse animation of sea ice recession. Whenever I have seen their sea ice melt presentations, the evidence seems overwhelming, even to my seasoned eye. Multi-year ice, the thickest ice cover, has been melting at a previously unfathomable rate. The Arctic waters freeze up in the winter again, but that ice is not as strong or thick as multi-year ice. Richter-Menge is careful to say that what she was presenting is what they are witnessing now. She says very clearly that they don’t know what the future holds, and that it is possible that the sea ice could freeze up again and stay frozen for ten or fifteen years and then melt off like this again. Speaking as she was in Washington, D.C., to people focused on infrastructure in the Arctic, both industrial and military, this is not exactly the kind of stable news one might hope for if, for instance, one were looking to support either a new shipping route through the Northwest Passage or new polar tourism like the cruises around Greenland.

So even in the Arctic where evidence is definitely associated with climatic changes, the variability throws journalists a curve ball. Change is definitely occurring, but what that looks and feels like for global and regional infrastructural needs, not to mention geopolitical games (of which there are many in the Arctic), remains indeterminate. If we think in terms of journalism practice only, one of the first things students are taught is “news judgment”—what makes a news story. Drama, personalization, and novelty, as Boykoff and Curry et al. both point out, are part of
it, but a story won’t fly unless there’s a news rationale and clear evidence to support assertions and claims. What constitutes evidence is where epistemological questions begin and where, as Jasanoff argues, distinct cultural factors also act to determine what matters and who counts as an expert. Yet news rationale is generally explained in terms of impact and timeliness—how much it affects wide swaths of the public or “the public interest” and when. Reporters are trained (and socialized) to identify and articulate these elements in order to get approval from editors to pursue a story, and headlines (usually devised by editors and not necessarily the assigning editor, who would have approved the story) also use this rubric in order to sum up impact and timeliness in a pithy short phrase that makes readers or viewers pay attention, click, and/or read and watch the story. But if we think in terms of norms: how much or rather should journalism in its myriad of platform-based variations be used to educate the public? Whether the form and institutional structure allow for education, robust participation that questions, verifies, and debates journalistic assertions and reports and/or alternative experts and knowledge are all evolving, open questions.

**Form and Structure: Educating, Informing, and Participation**

Science, in general, is most often reported at the national level, and even then, national reporting is caught in the midst of industrywide flux. Immediately following the period of my fieldwork, in 2009, the death of newspapers was feared to such a great degree that Senate committee hearings were held to discuss their demise. No such hearing was precipitated when science sections were cut out of newspapers. The *Boston Globe*, for example, decided to cancel its science section well before the hearings (Russell 2009a). Its reporters remained on staff. Despite the rising proliferation and complexity of science issues, the *New York Times*, the *Washington Post*, and wire services are among the few that maintain reporting staff with a science beat.

So part of the challenge confronting science journalism in general and climate change coverage in particular is structural, and part of it is practice-related as the previous section illustrates. Even with all of the guides and workshops and attempts at changing the way climate is reported on, many journalists are focused on audience-specific events and concerns, or their publications don’t provide space for reporting on science. But a more basic question remains alongside and undergirds the
structural and practice-related ones, and that is the question of what role media should play (and how). For many climate advocates, and for scientists like Curry, Webster, and Holland, journalists can and should be educating the public about the complexity of climate change, the adjudication of expertise, and the processes and methods by which scientists arrive at findings. But when journalists do choose to take such an “educational” stance, it can be perceived as advocacy by their audiences or, worse, propaganda.

The last panel of the UO workshop for journalists was set up to dissect the fallout from a small chain of newspapers that had done a climate series and won awards for their coverage of environmental issues. Their readers, mostly an audience of farmers, said little until the chain publicized their awards, and then the phones began to ring. The editor on the panel described a man who spent an hour on the phone with every member of management staff and the reporters involved, airing his dislike for the series. A skeptic, yes, but it was also an argument about relevance, about how such a big issue fit within the vernacular of farming and everyday life in rural Oregon. It is an argument similar to the one made in Kotzebue that I examined in chapter 1: namely, that even when climate change symptoms are obvious and felt, assigning them to this thing called “climate change” requires translation from one or many vernaculars to others. For reporters, this process lays down a challenging gauntlet requiring various kinds of negotiations inside and outside the newsroom.

Unfortunately for the local Oregon paper, the farmer who vociferously complained wasn’t alone. Some subscriptions were not renewed or were canceled outright, and the editor wondered out loud how long this trend would continue, whether it was short term, and whether all the non-renewals and cancelations were related to the series. There weren’t any suspicions that it was an orchestrated campaign—rather, that skepticism had both trickled up and trickled down. In other words, farmers had formed opinions through unspecified means (social, media, social media, or otherwise) unrelated to the local paper so that when the paper presented its take on climate change, it was met with anger and disagreement.

Often local reporters encounter similar resistance long before it gets to the public—from their editors. At the 2007 Society for Environmental Journalists (SEJ) meeting at Stanford University, one of the most striking panels I attended had nothing to do with climate. It was a panel of reporters from places like Tallahassee, Bar Harbor, and Colorado Springs who were speaking about reporting on the environment in a conservative me-
dia market. One reporter told of reporting on the governor of Maine attending a special screening of An Inconvenient Truth, a newsworthy event in terms of policy and lawmaker influence. Afterward, however, an e-mail went out to all staff from the editor saying that he didn’t want any more reporting on climate change “until Bar Harbor is under water.”

The sentiments expressed by Oregonian farmers and a Maine editor reveal that for local media, the stakes are much higher than they are for a national media outlet. When naysayers and skeptics weigh in, it’s not participation that gets recorded at the local paper. It’s cancellation. In other words, at this level, it’s not just a matter of navigating expertise and varied scientific research and predictions, although that is an issue as the UO workshop and recent investigations into the strategy of skeptics can attest (Hoggan and Littlemore 2009). Rather, climate change’s form of life and how it is understood (or not) as meaningful and relevant play a far greater role for their audiences. Science is easily ignored or shut out by those uninterested in the stakes being pursued by either scientists or policymakers, and that is reflected in the structure of how science gets reported in the American news industry.

When I went to speak with James McCarthy, a well-known scientist at Harvard who chaired the IPCC Working Group Two for the 2001 assessment report and is president of the AAAS, he encouraged me to talk with Cornelia Dean, a science writer for the New York Times who teaches science students at Harvard about media. McCarthy and Dean had offices across the hall from each other at Harvard at the time of my interviews. McCarthy said that Dean and he had many conversations/debates about the duty of journalists with regard to educating and informing the public. McCarthy, like many scientists I talked to, saw journalists as educators, but he said Dean drew a fine distinction between educating and informing the public. When I asked Dean about this, she said: “I think the responsibility of the journalist is to give the news, and what I’ve said is if people end up learning something in the process, I do not object to that, but my job is to give the news.” She said people have to be able to discern right up front, in the first three paragraphs, why a story is important.

It’s very easy in science journalism to lapse into writing what is going to sound like an encyclopedia entry. And it is my belief, untested, that people are not necessarily going to be engaged by encyclopedia entries the way they will be engaged by news. Now very often you’ll write a
story about something and there will be a little sidebar that says, you know, the chemistry of the atmosphere, or the life cycle of the whatever, or a graphic that explains it. And so you’re educating people, but what we’re actually doing, I would say, is giving them the background they need to understand the news that we are telling them about.

As Dean articulates it, then, the duty of journalism is caught up in the norms and expectations of journalistic storytelling and the conventions of what is perceived as news. She said that science reporters are particularly challenged by this because they “have to assume much more ignorance” than on other news beats. She used the example of DNA to illustrate the concept of a “headline word.” This is something that ceases to need an explanation. Twenty years ago, she said, DNA needed to be explained much like RNA would now, but somewhere along the way, it became a part of what was assumed knowledge—it became a headline word. She said a colleague at the New York Times uses a sports metaphor to explain what science reporters are up against: “It would be as if you were writing about sports and every time you wrote a baseball story you had to tell your readers what first base is.” So education is part of a reporter’s task, but only insofar as it furthers the goal of explaining what is news about a particular area of research.

This notion of education is connected to a supposed dearth of science literacy among the public. I have heard repeated calls to do better with American schooling in order to get Americans properly engaged with science at a young age. Some journalists I spoke with say they aim for a grade 7, 9, or 12 level of science education. Others, like Dean, say they are writing for a reasonably curious adult reader. Journalist and author Chris Mooney and social scientist Matthew Nisbet have made the point that scientists often think that educating the public (or journalists) means making them think or see what scientists do. Then the public might come to the same conclusions, and controversies would evaporate (2007). But what this chapter illustrates is that, even on a challenging subject like climate change, this is decidedly not the role journalists covering science see for themselves, as either parrots or cheerleaders.

In contrast to Dorothy Nelkin’s findings in the early 1990s, journalists who cover science regularly for leading publications are no longer likely to cover science with unbridled enthusiasm. Boyce Rensberger, who began as a science reporter in the 1960s, said there’s been an enormous change in the professionalization of science reporting and with science itself.
In the 1960s, science reporters were largely people who saw themselves as translating what scientists do for the general public. They took in the science in one ear or maybe in both ears and then processed it and typed it out in some simpler form. I had an editor once who talked about *running it through the simple machine*. So from that it would come out in a form that—this was in Detroit where there is a big Polish population—so it was Mrs. Poppazuski was the one who had to understand what we were writing about: a Polish immigrant who was more concerned with day-to-day survival than bigger issues. And so science reporters and medical reporters took press releases and announcements from scientists, looked at the journal sometimes, and just wrote—took it all at face value. Today, that’s very different. The journals are covered much more closely. Science reporters are much more knowledgeable about science. They are much more skeptical about it. They know that scientists make all kinds of claims, some of which are responsible but highly uncertain by definition. Cutting-edge science is looking into things that we don’t know much about; therefore, it’s highly uncertain.

Certainly American views of science coming out of the postwar period were focused on the progress that technology offered, and there was an eagerness for news of “discoveries” or, as Rensberger put it, “amazing breakthroughs.” Breakthroughs are still sought after and amply reported on. Indeed, the hype is what is often required to fund research that might alleviate critical medical problems (Burri and Dumit 2007; Sunder-Rajan 2006). But that trope has been affected by issues like the threat of “nuclear winter,” which turned out to be more of an “autumn,” and medical advice that turned out to be incorrect or damaging for the purpose it was intended, as in the case of thalidomide.

Climate skepticism builds on the erosion of the authority of science, which as I detail in the next chapter on Creation Care is definitely greater among some social groups than others owing to historical relations with scientists and core concepts and principles like evolution. But for those without overarching religious beliefs, trust in science is not automatic either. Part of the problem is that science as a process—often two steps forward, and one step back—is not the usual purview. And as Revkin points out, “For every PhD, there is an equal and opposite PhD,” and adjudicating expertise has become that much more complicated as claims and counter-claims need to be sorted more carefully if accuracy is the goal and not mere balance.
But it’s also about what Dean so articulately points out in Kuhnian fashion: “All science is provisional. It’s capable of being overturned.” She explained science as a process: “Science looks in nature to answer questions about nature and test those answers with observation and experimentation.” Science as provisional means that there will be moments where science errs, and figuring out those moments is a challenge both for scientists and for those who report on them. That science is a process dependent on errors and failures and not a search for solutions is still subterranean even in the formulation of it as provisional.

In recognizing this, and in building relationships with scientists, journalists who engage with climate change are faced with the challenge of navigating balance, independence, and objectivity in their pursuance of truth. Climate change reporting has often been accused of advocacy, particularly by those who have a vested interest in making sure it remains off the radar of the American public. Such assaults fly in the face of professional norms and the journalistic tenet of independence and the trust journalists work to build with their audiences. But they also work to open up these norms for historical and current scrutiny.

**Sorting Norms: Objectivity, Advocacy, Truth-Seeking**

For those who report on the environment beat, there is a spectrum of beliefs on how to navigate their own role in relation to advocacy.15 Ross Gelspan has moved over, according to some, to being an advocate, and so has Elizabeth Kolbert, whose *New Yorker* series was turned into the book *Field Notes from a Catastrophe*. Chris Mooney, author of *Storm World* and *The Republican War on Science*, told me that he sees part of his work as being education and another part as advocacy in addition to journalism. But it was Dean who articulated the position of those avowedly against any connection with advocacy. When she wrote *Against the Tide: The Battle for America’s Beaches* in 2001, she said she was very careful about being perceived as an advocate on the highly contentious issues she covers in this book.

I wanted to write a book that would present information that I thought people ought to know about when they consider what they should do on the coast. I have a personal opinion but there are very few things that people have no opinions about, right? I wanted to make it impossible for people with another opinion to dismiss my book as the work of an advocate. You have to inoculate yourself against the possibility that
someone is going to say there’s no reason to pay attention to that—we know where she stands. I think the journalist in some ways has the same problem as the scientist. If you become known as an advocate, people will tend to dismiss what you’re saying as having been precooked.

Dean, in a follow-up conversation by e-mail, said that this did not mean she gave “equal weight to all sides.” Her book came to be seen as an account of the “negative consequences” that have resulted from “many of our coastal development practices.”

Advocacy is intimately connected then to criticism about balance and to the long-held norm of objectivity. In Dean’s formulation, being seen as an advocate reduces a journalist’s ability to adjudicate expertise and the impact their work might have on the widest possible audience. Yet facts like those associated with climate change are compelling as are the ethical dimensions and risks associated with these facts. Good practices associated with balance mean representing a consensus view of science, but as this chapter illustrates, other questions continue to proliferate around what tone to use, how to tell the story, how to hold science experts to account, and whether or not to force ethical questions into the foreground when scientists say the facts demand such questions. In sorting through these problems, a spectrum of near-advocacy has developed as Dean, Mooney, Gelbspan, and Kolbert aptly represent. But in the critique around why the media has not managed to inspire the public to care about climate change, there is an underlying misunderstanding, or perhaps an emergent debate about what it is that journalism can and cannot do according to its own professional standards, norms, and practices. This is what forces many journalists to engage in an articulation of norms in order to demarcate what it is that journalists can and cannot do in response to climate change and to define what kind of challenge climate change’s in-flux form of life presents to journalists.

In Schudson’s excavation of the objectivity norm in American journalism (2001), drawing on theories from Émile Durkheim and Max Weber, he considers four conditions that encourage the articulation of norms: (1) during forms or events related to “ritual solidarity” for the group, (2) during “cultural contact and conflict,” (3) in large institutional settings such that informal socialization is not enough and prescribed rules must be formally generated and circulated, and (4) when superiors in large institutional cultures need to control subordinates in a complex organization. The first two relate to Durkheim’s notion of social cohesion, and the
latter two relate to Weber’s ideas about social control. Schudson identifies the presence of these conditions in the late nineteenth century as the objectivity norm began to take hold. He argues that objectivity was “already operating in the daily activities of American journalists” before it was enshrined in codes and articulated in the 1920s and 1930s and that its emergence is linked to two overlapping impulses within the profession. Journalists at that time “sought to affiliate with the prestige of science, efficiency, and Progressive reform” and “sought to disaffiliate from the public relations specialists and propagandists who were suddenly all around them” (1998, 162). It’s into these conditions, Schudson points out, that Joseph Pulitzer and Walter Lippmann begin to advocate for professionalism, scrupulous methods, and scientific ideals. Objectivity as a specifically American journalistic norm becomes a way of defending and guiding journalism even while many recognize its limitations and regard the emergent “interpretive journalism” as necessary in an “increasingly complex” society. Interpretive journalism still required the professional distance and methodology to assess and opine on news of the day, but it allowed for latitude beyond “just the facts.”

Objectivity was removed, with much fanfare, from the Society of Professional Journalists’ Code of Ethics in 1996. Yet as Stephen J. A. Ward (2004) argues in his history of objectivity, a commitment to “objective methods” persists, and objective is often what is meant when terms like “fair,” “accurate,” “independent,” and “unbiased” are deployed to describe what sets professional journalism apart from bloggers or others who espouse a kind of “affirmation journalism.” Affirmation journalism seems like an oxymoron, but it’s been adopted to describe those who explicitly interpret news and events through a lens that’s roundly seen as ideological. Journalists of all stripes, however, and despite their aforementioned history, are not likely to align themselves with science, nor are scientists likely to perceive much of their methods (or “prestige”) in journalism.

Panels at the many conferences, workshops, and events I attended present Durkheimian moments of “conflict and contact” and “ritual solidarity” where an articulation of norms arises in order to situate what it is that journalists should and shouldn’t be doing in relation to climate change. Similarly, journalism is under enormous pressure as an industry and a profession as a result of new media disruptions to professionalization, influence and authority, and business models. These disruptions have acted to transform the journalist-audience relationship such that audiences are now users who sample from a variety of sources, and spread-
ability, as Henry Jenkins argues, acts as the primary influence as opposed to the previous era of broadcast hegemony. Thus the Weberian elements are present, too, as “the newsroom” disperses, is altered, and/or becomes irrelevant and hence institutional control and pedagogical inculcation are both in decline. Much like the historical conditions Schudson describes, professionals since the early 1990s have been rallying to explain, dictate, and valorize professional journalistic norms in the face of profound changes in the news industry. Yet this same era has witnessed the rise of citizen journalism and the means to challenge journalists. Some have gone as far as to call this “the golden age of fact-checking,” noting that journalists now have their own “peer review” mechanism.

Trust has long been seen as the most important relational aspect for a journalist and his/her audience. It’s trust that’s seen as keeping audiences tuned into Brian Williams or subscribing to the New York Times and Washington Post. But Schudson argues that “decreasing levels of public trust in news [are] not so much a matter for alarm as an index of epistemological shift—that people in recent years no longer view journalism just as an institutional provider of informational content, but as an epistemological performance or process of knowledge production” (2013, 196).

Jenkins and others who work on fan culture and new media would argue that the public has always been savvy in their responses to broadcast and institutional forms of knowledge production—that they have always been “making do,” responding, remaking, and rereading their own bricolage. This process and an interacting public are only becoming more evident, visible, and possible as media changes beget a plethora of news and information sources, platforms, and devices that are increasingly used to produce and share as much as they are to read/view what’s available. Yet the shift exemplified through blogging and other platforms marks a definite regime change in terms of both transparency and accountability. In her comparison of norms among bloggers and professional journalists, Jane Singer sees the work of bloggers as partly being about letting journalists know when they haven’t lived up to journalistic norms. Other scholars like Florian Sauvageau contend that journalistic forms and styles must be rethought, as “journalism, previously a lecture, has now become a seminar or a conversation” (2012, 40).

Since I finished fieldwork and began teaching in a journalism school, issues related to transparency, verification, and expertise have only escalated, as have forums in which to discuss the ways that new media challenge journalistic forms, styles, and assertions. As I noted in the introduction,
one journalist referred to reporting on climate change as akin to “parking your car under a bunch of starlings.” In other words, even when observing a high standard of journalistic practice with regard to fact-checking and adjudication of claims and evidence, journalists who report on climate change are likely to receive attacks from all sides. At a recent conference dedicated to looking at online communication of climate change, Revkin titled his keynote “Is the Internet Good for the Climate?” and then wrote a blog post that also captured Twitter responses to his provocation. His conclusion is that transparency and multiple audiences are now the norm, and journalists have little choice but to “embrace it.” But clearly this isn’t an even response. Late in 2013, Popular Science took the extraordinary step of shutting down its comment section, explaining that the debaters and naysayers were too numerous and “nasty,” and citing research by Dominique Brossard and Dietram Scheufele that found online readers were influenced by uncivil comments to view issues as falsely polarized (LaBarre 2013).

Navigating expertise in the midst of ongoing, evolving research presents a particularly daunting task, then, as audiences are asked to trust the conclusions and ethical questions offered by scientists and the journalists who rely on them for their expertise. The array of political, advocacy, and policy-oriented groups as well as social movements present another set of challenges both in terms of their role in the ongoing saga of climate activism and policy development and the immediate feedback now available through online media outlets. New media has put ethics front and center for many who work in media, but climate change, more than many ongoing issues, demonstrates aptly that the role of journalist as educator, informer, or advocate is up for debate as “new antagonisms open up between those who produce risk definitions and those who consume them” (Beck 1992, 46). I want to turn now to a story that Revkin did before he left his position in 2009 as a reporter for the New York Times. It marks one of the earliest instances of what I am describing here and perhaps explains the title of his more recent talk and its conclusions.

**Not the “Shrill Voices Crying Doom”: Blogging, Alarmism, and the Middle**

No one reporter has been more closely and consistently linked to the coverage of climate change during the past two decades than Revkin. While at the New York Times, Andrew Revkin reported on a prodigious number
of stories related to climate change—by his own count, hundreds. Almost everyone I encountered during the course of my research considered his reporting a primary exemplar in terms of its quality, reach, influence, and longevity. If there were a category for a widely acclaimed “expert” on climate change reporting, Revkin would be at the top of the list. Not that he doesn’t have his detractors on both the left (progressive) and the right (skeptic) ends of the spectrum—respectively, people who either think he isn’t “blowing the whistle” hard and long enough to effect massive political and personal change, and those who think he has it all wrong and is part of a vast conspiracy to misinform and defraud the American public. But then climate change reporting tends to attract passionate responses and criticism. Such is the ethical nature of the issue and the difficulty of reporting on it.

With polling numbers on the upswing and a crush of media attention pointed toward climate change in mid-2007, I asked Revkin where he thought the state of climate reporting was at that point. His reply lacked much of the optimism I had heard from many at this point in time.

The media went from the tendency of ignoring it all together through that stage of equivocation where they just use the old media template of the balance template, yes person and a no person. So now, it’s just—it’s almost oversimplified because we know the basics, you know, more CO$_2$ equals warmer world that means we know everything with equal confidence. And anyone who looks carefully at science knows that’s not the case. The things that matter most to society are the least certain, whether it’s the pace of sea level rise or where, regionally, you’re going to have the worst outcomes, or what’s going to happen with hurricanes.

To be able to navigate this uncertainty, climate change reporting requires that reporters develop a familiarity with several fields of climate science, differing climate models, and different methods and schools of thought in the field of economics. Reporters should also be at least somewhat aware of the various kinds of multilevel, often global institutions and advocacy groups at work on climate issues in order to understand the behemoth of decades of public debate within which their stories may well circulate. New media has added another dimension to this as well. There is a dedicated section of the “blogosphere” that is alive and well to most climate stories and responds vociferously with occasional support but more often with blistering critique. Reporters tend to get the worst end of crowdsourcing when a contentious issue is at stake.
In 2007, Revkin began replying to and intervening in the blogosphere with his own blog, Dot Earth, on the New York Times website. But prior to that, Revkin published an article on January 1, 2007, in the Times that captures the next evolution of the difficulties and stakes of reporting on climate change. Headlined “A New Middle Stance Emerges in Debate over Climate,” the article reported on “some usually staid climate scientists in the usually invisible middle” who were speaking up “amid the shouting lately about whether global warming is a human-caused catastrophe or hoax.” In trying to establish evidence of “the new middle” among climate scientists, Revkin quotes MIT scientist Carl Wunsch as saying: “Climate change presents a very real risk. . . . It seems worth a very large premium to insure ourselves against the most catastrophic scenarios. Denying the risk seems utterly stupid. Claiming we can calculate the probabilities with any degree of skill seems equally stupid.”

The debate then is not over whether or not climate change is an issue or poses a problem with society; rather, it’s about how to talk about it and build “public support.” It’s about the “appropriate response” to the facts—the ethical dimensions and meaning of scientific findings. Revkin later quotes Mike Hulme from the UK as saying that he found himself “increasingly chastised by climate change campaigners when my public statements and lectures on climate change have not satisfied their thirst for environmental drama.”

Hulme’s fear was that “the discourse on catastrophe is in danger of tipping society onto a negative, depressive, and reactionary trajectory.” Hulme and Wunsch are operating in two very different national media environments. And while it is easily argued that the internationalization of climate research and advocacy as well as the global 24/7 media marketplace have rapidly connected these environments, the political and polling responses to climate change couldn’t be more different in each context. The UK has managed to consistently rank higher in public opinion on climate change than the United States, and the UK has a government that has responded with policy changes related to climate change, unlike the U.S. at that time.

Despite these differences, Hulme, Wunsch, and several other U.S. scientists including Roger Pielke, an active political scientist on climate issues, consider themselves apart from what Revkin characterizes as the “shrill voices crying doom [that] could paralyze instead of inspire.” Pielke’s term for this “middle” group is “nonskeptical heretics.” It’s a confusing term and one that requires some grounding in the scientific and policy debates, as
well as the debates over how to explain climate change to the general public. The nonskeptical half of the term refers to the fact that these scientists in “the middle” are not skeptical of the scientific facts related to climate change, but they are heretical because they are unwilling to go along with the strong urges to advocate vigorously for immediate change in the face of the likely catastrophe predicted by various climate models.

The worry, Revkin explains, is that Gore’s now very popular film acts to alarm the public and yet doesn’t go far enough in proposing adequate responses. He paraphrases Jerry Mahlman, a climate scientist at NCAR in Boulder, Colorado, as saying that climate change needs to be treated as “a risk to be reduced” rather than “a problem to be solved.” In contrast, James Hansen and John Holdren, well-known climate scientists, were quoted as those who “say there is no time for nuance” and that “moderation in a message is likely to be misread as satisfaction with the pace of change.” That scientists would be discussing discursive strategies for engaging the public and that it would be considered “news” reflect the tenor of this moment in public climate change discussions and news coverage. What’s more is that the presentation of facts presents a view on the urgency of those facts.

The response in the blogosphere provides another facet that registers in part the hybridity of the digital-traditional discussion and coverage of this issue. Almost immediately after Revkin’s article was published, Patrick Kennedy at the Daily Kos, Roger Pielke, and Carl Pope, founder of Sierra and Huffington Post blogger, took up Revkin’s article, generating discussion and responses online. While quick to defend the veracity of Gore’s film with minor exceptions based on his own research of scientists’ responses, Kennedy thought Revkin did a good job of reporting on the “real debate.”

With the new Democratic Congress and the cooperation of the mainstream media, the phony debate, with climate scientists on one side and the [Senator] Inhofes of the world on the other side, will, with luck, disappear in 2007. The real debate, not limited to climate scientists, is about what is the best way to engage the public and policy makers on the serious challenge we face from global warming and move forward.

Kennedy’s reference to “the Inhofes of the world” is an allusion to skeptics like the senator from Oklahoma who called climate change “the greatest hoax ever perpetrated on the American people.” Responses to Kennedy’s blog post ranged from support for Revkin to disgust that he was attack-
ing Al Gore and suggestions that the *New York Times* did not want to see anything done on climate change.

Carl Pope on the *Huffington Post* (hp) headlined his post “Why Media Doesn’t Get It.” He argues, “The American media needs to cover global warming as the urgent real-action-required-now challenge that it is.” He lists a recent NBC story as well as Revkin’s story as evidence that the American media are not covering climate change as such. Though Pope calls Revkin “one of the best writers in the most respected paper,” he took issue with the fact that Revkin’s story reinforced “the misleading notion that there remains a serious scientific debate about whether or not we need to take action.” Again, that scientists would be debating action and response and not the veracity of findings and methods speaks volumes about the ways in which scientists have been drawn into a “debate” of some kind about things decidedly nonscientific and unrelated to their expertise. Pope’s fear was that if the media didn’t “get it,” then the public wouldn’t either, in enough time to make a difference. What lies perhaps at the root of such fears is the need for ways to integrate a spectrum of information about risk into institutionalized mechanisms for communicating and addressing those risks. This spectrum of risk is an essential characteristic of climate change as an emergent form of life that, as Pope signals, exists on ethical terrain (Fischer 2003).

Revkin responded on an interim blog he kept at Amazon.com before launching *Dot Earth* on the *New York Times* website. He initially noted that the piece was “generating quite a few sparks,” citing Kennedy and Pielke’s blog. And he said that one “veteran climate scientist” had sent out a mass e-mail saying Revkin had “done a ‘great disservice’ by writing it [the article] and concluded ‘shame on you.’” Revkin directly addressed Carl Pope and copied the response he had posted on Pope’s blog.

While it may be old news to Carl and many Huffington readers that virtually all serious scientists agree that more CO₂ will make the world warmer (thanks in part, hopefully, to my 20 years of coverage), this does not mean most Americans have absorbed this point yet. There are tens of millions of disengaged or doubtful or simply uninformed people out there, many of whom shy away from loud voices. For them, the public discourse is largely (and incorrectly) a big Fox-style debate. My goal was to point out that *even* the normally invisible middle in climate science sees human-forced warming as dangerous and requiring a prompt response.
Revkin went on to argue that those in the middle don’t want to sound alarmist, but they are not skeptics in any way, nor do they offer comfort to those who downplay the role of humans or the lack of need for action. His main point is that the middle shouldn’t be left out of debates about “how best to limit climate risks in a human-warmed world.” These “middle” scientists, in Revkin’s characterization, are trying to set a different frame for discussion about how to limit risk.

When I asked Revkin about this exchange with Pope and the story he wrote, I prefaced my question by saying that I, too, had heard remarks about alarmism in Gore’s film from scientists I had interviewed. I said that I had also heard several observe that skeptics were (now) saying that climate change may be happening, but not to the degree Gore dramatizes in the film. Revkin responded this way:

The more one side tries to work hard to motivate people around the idea that we face a climate crisis that requires urgent action, the more that it can almost empower those saying it’s all a hoax if the crisis is defined by oversimplifying the phenomena. Because then it leaves you open to criticism that you are not being careful with science. Instead of saying, yeah, it’s a crisis, but it’s on a century scale, and the worst impacts are going to face generations yet unborn, which is most likely the reality and makes it much harder to sell. But, at the same time, it is true to the facts. So there’s this dynamic in this issue that drives it to the edges because everyone hates the middle, which is where we know the most. The middle is gray, and in our current political dynamic, gray doesn’t really work.

That there’s something between crisis and dissent does not generally make news, and environmental policy is often driven by major crises—Alar on apples, the Exxon Valdez oil spill, and the Cuyahoga River catching fire because it was so loaded with polluting toxins and chemicals, to name a few. Climate change instead presents questions of ethics about how to deal with risk, the nature of that risk, and what kinds of institutions and assemblages should be created, mutated, and destroyed in order to address a future with risk (Fischer 2003; Fischer 2009). How much do we want to leave for future generations to deal with? How much do we want to hope that the risks inherent in predictions related to a warming climate aren’t all that bad?

Journalists are tasked with articulating the ongoing societal relationship with notions of and futures with risk. Ulrich Beck (1992, 2002) has
theorized that the current epoch is marked by a transformation from modern industrialization to a risk society, marked and marred by unintended and unpredictable consequences. In these terms, predictions related to climate change illustrate that industrialization has created human comforts and widespread urban living, as well as visible, felt instability and chaos at the Earth’s poles that will filter downward/upward to the industrial infrastructure that spawned such chaos at some point in the near and/or distant future. This disconnect between cause, consequence, and the conditions that make decisions that cause such consequences possible defines the risk society such that, Beck argues, “its heart rests in the mass media, politics, and bureaucracy—not necessarily at the site of its happening” (2002, 4). This is the disconnect that vernaculars bring into sharp focus—that the discourse at the level of policy and media is not always recognizable on the front lines whether they’re in rural Alaska or rural Oregon. Local reporting provides a site of tension and a clash between seemingly disparate forms of life—a moment where observations of causes and effects on the ground talk past each other, making it easy to deny, ignore, or rage against the claims and/or priorities of each other.

Despite the power afforded to media to shape discourse, mainstream media has struggled with its own set of negotiations as climate change has developed as a news story, a scientific fact rife with uncertainty and a wide spectrum of possible outcomes, and an issue for advocacy. Every journalist I spoke with or heard speak on numerous panels and at workshops can cite multiple instances of such challenges, and many have developed a point of view about how and what has gone wrong and right with reporting on the issue. Beck notes that risk society could also be considered the “science, media, and information society” where debates and struggles occur over how to define risk and its degree, scale, and urgency. “The middle” that Revkin identifies is exactly this kind of problem, buffeted as it is by those on either side who make claims to what must or must not be done in order to prepare for the immediate or distant future of risk.

Information via media, and in particular mainstream media, is seen as essential to the workings of democracy. Schudson (1998) has argued that the informed citizen that undergirds dominant democratic ideals is rapidly being reformed into a monitory citizen with access to multiple and continuous streams of information. The journalist then is caught between demarcating the outlines of risk, multiple forms of life that all seek to define climate change in various ways, and traditional notions and obligations associated with professional norms. And in the background
remains the “starling effect”—the robust questioning and counterclaims from those who recognize climate change as a problem with ethical and moral contours and those who do not.

What these more iterative and interactive processes confront is that media is most often only able to deliver a version (or versions) of the truth: a professionally coded point of view or an interpretation of “what is really happening.” And while there is the arresting headline to create, there is a tacit acknowledgment of such interpretations building up over time and space. Yet professionalism and the system by which news is produced have created enormous barriers for others to add to dominant interpretations and conclusions. This is in part what the confrontation with new, social, and multiple media entails—and what makes blogging and social media such a rich, multilayered set of interventions. The increasing circulation of other narratives has laid bare the notion that facts get constructed, produced, and socialized. It has in many ways opened up the epistemological aspect of claims as well as the ethical component—and shown how they are, despite best efforts at objectivity, inherently linked and particularly so on an issue like climate change where facts must and do lead to larger moral and ethical questions.

In 2010, Revkin’s Dot Earth blog moved from the news section to the opinion section of the New York Times when he took a buyout package in late 2009 and ceased to be a staff reporter. Some reports like that by Bud Ward pointed out that Revkin was exhausted by the pace of 24/7 reporting as well as by the major furor caused by several articles he had written—one of which is the “middle” story I detail here. Revkin remained relatively quiet about those factors on his blog. When it moved to the opinion section, he said that such a move allows him “to say what I think in ways I could not when I was a Times reporter” (2010). Does this make him an advocate? Some of the comments to this blog post titled Dot Earth 2.0 lamented the end of what they felt was a last bastion of real debate and discussion, where both (or many) sides of arguments were well represented. Revkin answered this by saying: “Don’t expect momentous changes. I’m not going to suddenly be revealed as an ardent liberal or conservative. I am an advocate, for sure—for reality.”

This is likely a statement many journalists would agree with, and it speaks to the ethical obligations inherent in reporting. Yet what form of life composes which spectrum of reality—in other words, reality for whom, and by whom? And could advocating for “reality,” however defined, constitute a form of near-advocacy?
Conclusion

Climate news and feature stories that end up in major media sources are now subject to immense scrutiny, criticism, and counterclaims from concerned audiences with diverse perspectives and vested stakes and the means and channels in which to respond. This is what a plethora of new sources online facilitate, and it is in part what makes covering climate change a more challenging task than it’s ever been. For those engaged in this issue, how evidence is deployed, who is speaking for it, and where scientific knowledge has been produced are vital details. The role imagined for journalism in our democracy has traditionally been one of informer, agenda setter, and watchdog. This function of forum provider, chief discussant, and extant verifier is still a very new one for journalists and news providers to navigate or even to understand.22

Revkin’s career trajectory illustrates the ways in which notions of audience and journalism are changing. He is among an elite and small cadre of science journalists who have shaped media conversations about climate change—indeed, it is arguable that Revkin has established a standard for journalistic articulations of it. Yet even before he left his full-time reporting role, he was experimenting with the ways that blogging and social media opened up new avenues for interaction and experimentation. What blogging makes possible and evident is a tracking of the minute shifts and ways in which climate as a form of life is continually expanding and contracting. Blogging provides a way for direct public response to what journalists like Revkin are reporting on, and bloggers create audiences of their own that continue to debate and respond to what is being reported on and what blog commentaries are being offered on the reporting. As media technology expands, these conversations and interactions will only expand and transform existing media platforms (Domingo and Heinonen 2008; Hermida 2011; Jenkins 2006a; Jenkins 2006b; Jenkins and Thorburn 2004; Usher 2010). Emerging conversations on and via Twitter (a micro-blogging platform) that point back to longer blog responses and/or facilitate discussions about conference presentations, news articles, or recently published research provide a current example.23

Beck’s 1992 observations about our “risk society” are turning out to be extremely prescient, then, when applied to climate change reporting—regarding journalism’s role as articulators, cries of alarmism (or indifference), and the increasing antagonism between producers and consumers of risk. The late Stephen Schneider put it aptly when he told the reporters
in Oregon that “all good science . . . gives you probability distributions”—in other words, a range of risks that produce a range of unevenly distributed effects and potential scenarios that benefit some and devastate others. Yet scientific consensus as it is reproduced in media often elides a wide spectrum of risks in favor of generating a unifying message so the public is not confused; this is what Revkin’s articulation of a “middle” pushes against. Wunsch, in the article, even takes aim at the notion that scientific evidence can produce reliable probability distributions, yet this has been seen as a key application of climate change for public and policy engagement. Charges of alarmism are levied by skeptics at anyone who acknowledges the ill effects of a future with climate change, but it’s also applied to those unable to articulate adequately just what a spectrum of outcomes might entail.

Climate change reporting has begun to shift toward thinking through what to do about climate change, and it is in this sense that reporters must navigate a stance with regard to near-advocacy. Facts are not settled, nor is it certain exactly how findings and modeling might evolve in relation to new findings and models. So what or whose truth and when are particularly key questions when it comes to assessing a future with, and reporting on, climate change. In this sense, journalists must contribute to articulations of climate change’s form of life: what it means, how to speak about it, what knowledge is relevant, and why it matters. Journalists also must struggle with the evolving nature of that form of life and the rules and grammars that are prescribed by scientists, advocates, and political figures of all stripes. Climate change as a form of life is a contrast to considering it a stable entity or suite of facts that journalists are having a hard time explaining to the public so that they either care enough to do something about it or “understand” the science. Climate change, as an evolving form of life, demands that journalists rethink professional norms and practices, particularly around gatekeeping, objectivity, conceptions of “the public,” and what’s deemed “relevant.” Near-advocacy thus operates on a spectrum that recognizes both the collective and individual efforts of journalists to negotiate and develop their own relationship-building efforts with “the facts.”

At the SEJ conference in 2008, one reporter claimed that all climate stories were already being funneled to policy and political reporters at their media outlet—in other words, that it had ceased to be a “science story.” But the definition of climate change as a form of life remains in flux, and increasingly as blogs and other forms of media intervene to shift
the reception of original reporting, this resistance is likely to produce more hybridity, expertise morphing, and debate for those with a stake in how risk is accounted for. Blogging and other means of talking back to journalists and weighing in on public discussions also have the effect of making journalistic norms evident and holding journalists to account (see Singer 2005). Ethical or good journalism is seen to be independent, unbiased, and objective, and when it is seen to do or be otherwise, the outcry from active audiences and commentators is deafening for those with profile and reach like Revkin.

Finally, media change is altering not only how media are produced and consumed but also the role of information in society. Whether and how the public comes to be engaged with climate change is determined not only by access to information about it, but by the ways in which it becomes meaningful—by the form of life it assumes. Journalists are messengers whose ability to invest meaning, ethics, and morality are limited by professional norms of nonadvocacy, near-objectivity, balance, and accuracy. Climate change sounds different within communities formed through belief, identity, and shared values than it does coming from journalists who are usually hoping to reach the widest possible audience. Accounting for this difference and the vernaculars therein provides a challenge for societal expectations of actively engaged citizens and the delineation of civic epistemologies—for the way that scientific evidence and findings come to matter for a society.