

Slow Fuse

Journalistic Approaches to Climate Change

A report of the Conference on Journalism and the Environment

By
Larry Pryor
Rapporteur

A joint project of
The Aspen Institute
and
The Nicholas Institute for Environmental
Policy Solutions at Duke University



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The reader should note that this report is written from the perspective of an informed observer at the conference. Unless cited to a particular person, none of the comments or ideas contained in this report should be taken as embodying the views or carrying the endorsement of any specific participant at the conference.

Foreword

There is a tendency in the U.S. mass media to cover many issues on a reactive and episodic basis, highlighting yesterday's events rather than shifting the focus forward to anticipate problems, understand their root causes, and begin building a consensus toward policy solutions. There is a broad range of issues that receive such sporadic coverage, often bursting onto the media scene and into national consciousness only when they have reached a crisis point. Among the many are AIDS, terrorism, immigration, poverty, privacy, race and ethnicity, to name just a few. Included in this category are environment-related issues, such as climate change.

To a certain extent, the shifting spotlight of the news business is understandable. Public attention is a scarce commodity and hard news stories must compete with other genres—sports, crime, entertainment, local issues, celebrities and lifestyle information—that draw considerable interest. There just aren't enough hours in the day to report it all. It is precisely for this reason, however, that editorial decisions about the quantity and quality of hard news coverage become a greater public concern. These are the issues that have the greatest impact on the conduct of public affairs and, ultimately, the survival of individuals and societies.

To address the need for improved coverage of the environment across all media, the Conference on Journalism and the Environment was convened in Aspen, Colorado, in July 2005 by two Aspen Institute policy programs—the Communications and Society Program and the Program on Energy, the Environment, and the Economy—and the Nicholas Institute for Environmental Policy Solutions at Duke University.

Journalism faces a particularly difficult challenge in covering issues, like the environment, that are scientifically complex. Such issues often develop slowly and have critically important long-term consequences but few specific news pegs that are necessary to compete against other stories for limited news space or broadcast minutes. The conference discussed climate change as an example of this type of difficult issue. The themes examined and the conclusions reached are likely to be relevant to reporting of other complex and long-term issues as well.

The goals of the conference were to create a greater appreciation among leaders of American journalism of the importance of environmental issues and to develop a set of strategies for encouraging news coverage that broadens and deepens public conversation about environmental concerns. We challenged conference participants to identify the means for increasing the quantity of reporting on the environment and strengthen its information value and impact. Participants identified best practices to assist editors and journalists in thinking beyond the “quick fix” of formulaic reporting to more imaginative approaches that may involve rethinking professional norms and practices.

Participants included editors, producers, reporters, and columnists from a variety of print and electronic media across the country. They represented national news organizations as well as local and regional markets. In keeping with the Aspen Institute method of informed dialogue among people of diverse backgrounds and viewpoints, the group was challenged to weigh competing values and to avoid easy answers. A list of conference participants appears on page 45 of this report.

The greatest strength of this method resides in the expert contributions that grow out of the experience of the participants. The participants in the Conference on Journalism and the Environment provided a wealth of information and a variety of perspectives, contributing immensely to the richness of the discussion. The organizers are grateful to them for their time, their active participation in the dialogue and the preparation of this report, and their wisdom.

Larry Pryor, associate professor of journalism at the Annenberg School for Communication at the University of Southern California, served as rapporteur and prepared this report. He has effectively synthesized the knowledge shared during the conference, putting into perspective the highlights of a wide-ranging discussion and distilling the main themes and recommendations in a way that should be helpful to readers. Mridulika Menon managed the many administrative details of the Forum with good nature and efficiency. The organizers and the participants are grateful for their work.

The Aspen Institute and the Nicholas Institute are grateful for the generous support of the Catto Charitable Foundation for its sponsorship of the conference, and to Jessica Catto, publisher and environmentalist, for her counsel as the concept was developed. We thankfully acknowledge Peter Goldmark for his counsel in developing the agenda and for his lead-off address challenging American journalists to report the global climate change story with a renewed commitment to accuracy, context and relevance.

This report is issued under the auspices of the Aspen Institute and the Nicholas Institute, and the participants are not responsible for its contents. Although it is an attempt to represent the views expressed during the conference, participants were not asked to agree to the wording of the report.

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Slow Fuse

Journalistic Approaches to Climate Change

Executive Summary

Conference Observations:

- Reporters often are frustrated by the inability of daily newspapers and television news to give sufficient attention to topics of importance that are not event based but more complex and trend based, such as climate change.
- Editors of daily publications and broadcasts generally believe that they accord adequate attention to these issues, partly because they regard them as principally the province of weekly news magazines.
- Editors and reporters agree that staffing cuts in major news organizations in the past decade have made reporting on complex, long-term issues of national and global importance more difficult.
- Government action remains the primary “news peg” for daily reporting on public policy, and news organizations are hesitant to “get out in front of the news” for fear of being branded as biased. This assessment is especially true regarding environmental reporting.
- The science of climate change, like nearly all scientific areas, is constantly revising and correcting itself. This process is difficult to report as news, however, which creates a public perception of greater uncertainty regarding climate change science than is actually the case.
- The global, all-encompassing nature of climate change challenges the institutional status quo of journalism. The com-

plexity of climate change can require involvement by “beat” reporters covering business, science, technology, the environment, and politics all at once. Such “team reporting” is not the journalistic norm.

- Visual images and events often drive news coverage. Uncertainty over tying any specific event (e.g., Hurricane Katrina) to climate change reduces and muddles coverage, leading to greater public confusion. This dynamic could be changing as climate change begins to manifest itself in places such as the Earth’s polar regions and Alaska.
- Editors are reluctant to engage in controversial stories regarding climate change because they lack the scientific and technical experience that many of their environmental correspondents possess.
- Behind-the-scenes public relations efforts by private industry and some individuals in government to muddy the water on climate change science and related topics have been exacerbated by the lack of expertise in the media, leading to “he said, she said” reporting and reinforcing public uncertainty.

Recommendations:

Recommended reforms by leading journalists clustered around 10 strategic categories:

- Build scientific reporting expertise. Give reporters more training, education, and time to delve deeply into subjects. Let them work with outside experts and avoid newsroom insularity.
- Reduce the dominance of anchors and give producers and reporters more say on what gets covered and aired.
- Emphasize team coverage and cross-disciplinary reporting.
- Allocate more print space and air time for long-form journalism, such as science sections, special inserts, documentaries, online

news packages, or 90-minute prime-time news programs.

- Leverage high public interest in local weather coverage into awareness of and interest in global climate change.
- Improve editorial understanding of science. Free up more assignment editors and field producers from daily demands and administrative functions.
- Remove artificial management and editorial barriers between print, video, audio, and online news operations. The corollary: Invest more funds in new media.
- Encourage the growth of expertise in the audience. Save stories and build or aggregate information on a Web site and urge readers and viewers to visit it. Make clear to the audience that difficult decisions are likely to be needed.
- Invite readers and viewers through new technology to be active participants in the editorial planning process—not to politicize but to recognize the relevance of the environment to daily life.
- Tell complex stories in more dramatic and compelling ways—neither unjustifiably alarmist nor boring.

SLOW FUSE:
JOURNALISTIC APPROACHES
TO CLIMATE CHANGE

Larry Pryor

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Introduction

Once it's certain a major storm is about to hit, evacuation offers the best chance for survival. But for those who wait, getting out will become nearly impossible as the few routes out of town grow hopelessly clogged. And 100,000 people without transportation will be especially threatened.

-John McQuaid and Mark Schleifstein, staff writers,
the New Orleans *Times-Picayune*, "Washing Away"
(a five-part series), June 23-27, 2002

John McQuaid and Mark Schleifstein's series for New Orleans' main daily newspaper three years ago had the qualities of stellar journalism. Looking back, we can see the bold headings from the *Times-Picayune*:

"IN HARM'S WAY: Levees, our best protection from flooding, may turn against us."

"EVOLVING DANGERS: Scientists say we're more vulnerable than we thought."

"SHIFTING TIDE: The Army Corps of Engineers has made Louisiana habitable ... but it's also caused many of the problems."

This enterprising series must have been warmly supported by the paper's editors when first proposed. Not so, said Schleifstein on September 30, 2005, at the opening panel of the Society of Environmental

Journalists' (SEJ) annual convention in Austin, Texas. "When I presented the idea of doing a series at a meeting of our editors to look at projects," Schleifstein told the audience, "the first thing that was said by an editor was, 'That's just more of Schleifstein's disaster porn.'" Andrew C. Revkin, environment writer for the *New York Times*, who also was on the SEJ panel, said he had a similar reaction from an editor several years ago when he proposed a story on the degradation of water quality in the city's reservoirs. "Isn't that a little ahead of the news?" he was asked.

That's the way it was in newsrooms before Hurricane Katrina. One bright spot of the disaster has been that news organizations might be convinced of the value of tackling the difficult "what if" stories. Perhaps they would form interdisciplinary teams of reporters to interact with scientists and with their audiences to make sense of uncertainty, ambiguity, and controversy. In that process, they might save people's lives and mitigate or even prevent disasters in their communities. Perhaps they could make the probabilities and odds of high-consequence events—a 300-year storm, for example—understandable. Leadership at news organizations might galvanize leadership in the community, and citizens could see in concrete terms what might happen if nothing were done. Public investments in risk avoidance might be done on a more rational basis and personal sacrifices and life-style changes equitably shared and agreed to. In short, the 2005 hurricane season was a rare opportunity to do things differently and begin to galvanize public discourse.

In the immediate aftermath of the hurricane, reporters in the field had an impact on post-Katrina recovery, by challenging official accounts with passion and conveying damning images, shaming agencies into action and giving voice to victims. They talked back to out-of-touch anchors and goaded editors to allocate more resources. Yet the default mode of today's U.S. journalism is reactive, not anticipatory, and, to date, Hurricane Katrina has not altered that practice. For the most part, this change to long-form journalism has not yet happened.

As the waters receded, so, seemingly, did interest by editors and news producers in the deeper layers of the Katrina story—the "how did we get here" narrative. Under the usual pressures of accommodating daily stories and reporting official actions, in following the newsroom traditions that give first priority to the timely, the combative, the sensational, the dramatic and odd, in-depth stories—"thumbsuckers," to use

newsroom parlance—were postponed, shunted to weekend analysis sections or dropped entirely. They became orphans, thanks to competition from other big stories and “lost pets and strippers,” to borrow Revkin’s ironic explanation.

In examining coverage in the wake of Katrina, these questions remain: What prevents major news organizations from getting to the underlying levels of truth about a complex set of issues? Why did erroneous stories, based on shaky sources, crowd out a meaningful search for an underlying reality? Why had the media not done more to develop the strategic capabilities needed to convey a complex story? Were lost pets and analysis of levee construction design “either-or” topics for editors and anchors? The city’s near-destruction, based on what we can take from the 2002 series by McQuaid and Schleifstein, could have been linked to the culture of the Army Corps of Engineers, the folly of development in coastal wetlands and on barrier islands, a single-minded oil industry, city boosterism, political corruption, bureaucratic mentality, and the newspaper’s culture itself. Schleifstein said that while he and McQuaid were working on the series, editors made clear to them that they didn’t agree with an approach that questioned the future of the newspaper and even the city itself. “They said, ‘Why would you want to do that?’” After the series was published, it seemed to lead to nowhere.

The Aspen Conference

Flood destruction along the Gulf Coast and a massive environmental diaspora provided journalists with an opening to probe the “what ifs” of another important layer of the story—climate change. Indeed, a flurry of stories in the mass media in September and October 2005 explored a potential link between violent weather and human-induced changes to the Earth’s atmosphere. More recently, several major news organizations have featured coverage of climate change and its implications, giving some cause for optimism that more prominent coverage will follow. On the whole, however, the media have been slow to publish or broadcast science-based stories that deal in coherent ways with how the hurricanes and tornadoes of 2005 might or might not have been an opening phase of violent weather; how linear projections of a warming planet may be underestimating the threat, given nature’s capacity for abrupt surprises; and how scientific uncertainty must be

recognized and managed at the local, national, and international levels.

A July 2005 conference in Aspen, Colorado, looked at news coverage of climate change as a proxy for many complex issues with long lead times and, by implication, no daily news pegs. The conference was convened by the Aspen Institute and the Nicholas Institute for Environmental Policy Solutions at Duke University in response to concerns about the declining amount and quality of environmental coverage available to the public. Although the conference took place shortly before the season's horrendous hurricanes, discussions dealt with severe weather and its possible links to climate change. A dynamic case study involved having the participants cover a hypothetical story about a causal association between warming oceans and increasingly extreme weather patterns.

The sponsors asked 25 participants to explore innovative and practical approaches to covering timeless, complex issues more effectively. They were asked to propose ways of communicating that would broaden public conversation and deepen public knowledge. They were asked to address how to:

- Strengthen the information value and impact of journalism;
- Identify resources and professional changes needed to successfully implement these strategies; and
- Leverage newsroom resources, through best practices, to build the capacity of news organizations to cover complex issues like climate change.

A majority of persons around the conference table at Aspen were working journalists, including editors of major papers, veteran environment reporters, columnists, editorial writers, and assignment editors, as well as experienced broadcast news managers, reporters, and producers. In addition to the journalists, participants included representatives of the energy industry, the environmental movement, academia, science, law, and public policy. (A complete list of conference participants appears on page 45 of this report.)

The objective of the conference, in the two days allotted, was not to sort through the science and resolve controversies surrounding climate

change but to look inward at the workings of news organizations and the journalism profession to identify barriers to excellence and connecting with audiences. The group also turned outward from newsrooms to look at broader economic and social issues that inhibit effective communication on complex subjects of vital public interest, such as poor science awareness among the public and politicization of government regulatory and natural resource agencies.

The conference opened with an address by Peter Goldmark, director of the Climate and Air Program at Environmental Defense, that was intended to define issues and problems (see address beginning on page 31). This address was followed by a discussion of substantive issues associated with climate change that were raised in the opening talks. This discussion provided context for an examination of how effectively journalists cover the environment and related issues. The next phase of the conference consisted of an exercise involving how to handle a hypothetical story that tied climate change directly with the destructive effects of periodic El Niño events. Conference participants, divided into three news teams, had to make their stories both compelling and based on sound science while dealing with many of the questions now facing news organizations as they cover the association between climate change and severe weather. Once the teams had prepared and pitched their stories to the group as a whole, the participants critiqued the stories; these critiques provided the basis of strategies and recommendations designed to deepen coverage of climate change and the environment.

Finally, the conference discussion led to a set of criteria for evaluating journalistic coverage of the environment that might be applied to other issues with inherent complexities. The emphasis was on how to get beyond the “quick fix” of formulaic reporting to more inventive approaches that might involve fundamental shifts in professional habits, norms, and practices. There was little agreement, however, on the depth of changes to be made. Some participants wondered whether talking in terms of deep reforms was realistic, given today’s financial restraints on traditional news organizations and the turmoil of the changing media scene.

Suggested changes—presented in general terms here and explained in more detail below—centered on the following topics:

- Strengthen newsroom resources. Staff hemorrhaging is leading to boring, shallow, and uninformed journalism.
- Brand complex story topics, market them, and put an emphasis on compelling narratives and new ways to present news.
- Train and encourage reporters to tell stories through a variety of media—print, broadcast, and online.
- Build better ties with the audience and the community. Invite the audience to participate in conceptualizing stories and making assignments.

The Internal Limits of Newsrooms

A case can be made that the U.S. public is far less aware and informed of climate change than readers and viewers abroad. One conference participant cited the absence of any meaningful discussion on the environment during the 2004 presidential campaigns and the consequent policy actions of the Bush administration to trim or reverse national policies that have been regarded as important for improving the health of the environment. The case might also be advanced—as it was at the conference—that insufficient news coverage of these important issues contributes to the current state of public awareness on the issue of climate change. In any event, lack of coverage—as measured by various content analyses of the news—certainly does not help the situation.

Conference participants considered why coverage may be lacking in this country or the public might not be aware of efforts by some news organizations to explain the consequences of chemical emissions from industrial and transportation processes. The early discussions focused on problems within newsrooms. Although the journalists at the table represented a wide variety of backgrounds, daily job functions, and geographical mix, they found common obstacles that exist to doing “good journalism”—a term that also got fleshed out over the two days.

Many theories have sought to account for what news organizations do or don't do. Suspect motives range from outright control of news by economic elites (e.g., Marx and French postmodernists) to manipulation of

the media by public relations practitioners in the pay of elites (e.g., Daniel Boorstin) to willful ignorance and laziness (a common blast from the Blogosphere). Some of the most revealing analysis, however, has focused on the internal workings of news organizations. Media critics look at the stresses between reporters and their sources; between editors, broadcast executives, and their reporting staffs; between news executives and their publishers or station owners; between the large media chains and investors on Wall Street; and, most important, between news organizations and their audiences. Within each of those relationships are microcosms with their own sets of combatants: expert reporters and general assignment editors; creative producers and op-ed contributors and fact-bound reporters; fearless editors and worried publishers; profit-driven media conglomerates and feral stock analysts; “public representatives” in newsrooms (sacrosanct ombudsmen and harried desk clerks) and angry readers and viewers.

These multiple stress points, inhabited by real people with conflicting traditions and agendas and varying notions of “quality journalism,” reveal insights into why some news topics receive prominent coverage while other topics are confined to a few conscientious newspapers, specialized magazines, and public radio and television. Newsrooms reflect a daily interplay between their public service mission and economic limitations, between creativity and what’s realistic, between leadership and institutional inertia, between strong personalities and raw status. The conference focused first on this real-world environment of news decision making.

Several key issues emerged at this stage of the conference discussion. Foremost were the difficult problems the media face in dealing with academic research and the peer-review process and why science does not affirm or prove absolute knowledge. Journalists who cover science, medicine, and the environment must deal with words and phrases such as “suggests” or “may”—caveats that specify limits to the knowledge at hand. They have to convey complex and often slippery concepts, such as explaining probabilities and statistical significance (“sampling or chance could account for the observed variation”) to a public with relatively poor math understanding.

The basic question centered on how news organizations should approach a topic such as climate change because—before Katrina, at least—it typically did not lend itself to images or hard news stories

keyed to events. At the time of the conference, Chris Peck, editor of *The Commercial Appeal* in Memphis, Tennessee, observed, “This isn’t a big enough issue, frankly. It’s not the war on Iraq. It’s not a mass murderer or [something that] has that urgency. It is more an issue related to the general direction of the newspaper.”

Peck went on to make a comparison between climate change and the terrorist attacks of September 11, 2001. “How can you cover climate

“I think mainstream journalists have a window of opportunity to talk about climate change against the backdrop of compelling recent news events.”

Chris Peck

change so that it gets the attention that I think it deserves? We understand that some things are not as flashy as [flying a plane into] the Twin Towers. That’s the trick of journalism. People need to know about this, even if it isn’t one of those things that is as important or as flashy as those iconic images.” Before trying to hook the audience, he said, the first step should be for “journalists to believe or recognize realistically that this is one of those issues that we *should* care about.... I don’t think that if you went around the country today you would find many editors who would put global climate change on a par with terror. Maybe it should be there.”

In a post-Katrina communication, Peck reflected on his earlier comments. “At Aspen, I said that climate change wasn’t a big enough issue on the radar screens of American journalists. I would amend that today. Katrina, and the tsunami, and related stories about the impact of energy price increases on America, have shone a brighter light on the issue of climate change,” he wrote. “Now, in fact, I think mainstream journalists have a window of opportunity to talk about climate change against the backdrop of compelling recent news events,” he concluded. Peck’s written comments highlight the importance of a news hook, good visuals, and a compelling story to engage interest and validate decisions to cover the issue of climate change.

Yet even today, with the evidence of the Gulf Coast disaster still fresh, it’s not certain whether concern within newsrooms for climate change permeates much beyond the level of specialist writers and the more-

attuned editors and producers. The problem of how to convey such a complex topic still exists, even if the general public now may have a better awareness of the potential dangers and might be more receptive. The journalist's best tool is still the narrative, whether text or visual.

"This can't be just a scientific debate," said Robert J. Rosenthal, managing editor of the *San Francisco Chronicle*. "We have to *show* people what is happening. We tell stories and stories can reach people."

The broadcast people at the conference said that without images to convey the story on a daily basis, they had an even bigger problem. "If we just go out and snag some video of rising sea levels," said Deborah Potter, executive director of NewsLab, who spent 16 years as a network correspondent for CBS News and CNN, "they'll think we're making something up. It raises all kinds of obstacles if you have to rely on pictures for storytelling."

"It raises all kinds of obstacles if you have to rely on pictures for storytelling."

Deborah Potter

"We cover events," said William Raspberry, Knight Chair in Communications and Journalism at Duke University and at the time of the conference a *Washington Post* columnist. "A politician makes a speech, that's an event. We are very good at that. Carl Sessions said that 2,000 years ago we would have covered the hell out of the crucifixion but missed Christianity. We are being asked to do something...that we are not equipped to do." Kenneth Cooper, national editor of *The Boston Globe*, replied: "I wouldn't say we have never covered something long-term.... I think it's something we can do, but I think magazines can do it much better than we can."

The magazine medium—with examples such as *The New Yorker* series "The Climate of Man," in April-May 2005 by Elizabeth Kolbert and a prescient *Business Week* article in August 2004 on the economic implications of climate change—came in for special praise. Magazines, representatives of other news media acknowledged, give their reporters more time to do investigative work, pay them better, and provide them with ample space to deal with complexity. "There's an awful lot of pressure to say the news is what happened yesterday," said Seth Borenstein, an environment writer for Knight Ridder newspapers. "It's very low to

the ground. What you are talking about are giant issues that are cosmic, and we're not that good with cosmic."

Moreover, if journalists force coverage of a topic, go beyond the flow of daily events, and attempt to set the news agenda, they open themselves to charges of bias. As a result, the path they take most often is reactive, not confrontational, especially with regard to controversial topics such as energy use and climate change. Is the role of journalists to step out in front of an issue, editors ask, when scientists still speak with caveats? As Chris Peck, editor of *The Commercial Appeal* in Memphis put it, "You can't lead a parade if there's no one behind you."

“Carl Sessions said that 2,000 years ago we would have covered the hell out of the crucifixion but missed Christianity.”

William Raspberry

Issues and Influences Beyond Newsrooms

The question of why atmospheric science seems to get short shrift in the U.S. media led the conference discussion into the political and public policy arenas. Three speakers provided scientific and political context for examining this question at the start of the conference, and the

issue resurfaced throughout the discussions.

Peter Goldmark of Environmental Defense spoke about the problems journalists face in covering issues such as climate change that develop slowly and involve inherent complexities and uncertainties. Goldmark has had a long career in journalism, most recently as chairman and chief executive officer (CEO) of the *International Herald Tribune* from 1998 until he left the paper in January 2003. He also served as president of the Rockefeller Foundation.

Goldmark was introduced by James Gustave Speth, former advisor on environmental issues for presidents Carter and Clinton, founder of the Environmental Defense Fund, and now dean of the School of Forestry and Environmental Studies at Yale University. Speth drew from his book *Red Sky at Morning: America and the Crisis of the Global Environment*, a seminal text in the environmental field, in his brief

remarks. Leading off the first plenary session was Timothy Profeta, a lawyer who served as environment counsel for U.S. Senator Joseph Lieberman and now is the founding director of the Nicholas Institute for Environmental Policy Solutions at Duke University.

Speth challenged the journalists for clinging to outmoded conventions that prevent in-depth coverage. “Issues continue to be heavily shaped by government. It is government actions and statements that provide the news peg,” Speth said. “The depressing truth is that the rules of the game make it tough to tee up an issue without a news peg.” The current administration has been anything but willing to provide a news peg for examining the looming issue of climate change. Both Speth and Goldmark noted the Bush administration’s resistance to any mandatory action at the federal and international levels, while other developed nations are moving ahead, under the Kyoto Treaty, with mandatory greenhouse gas controls.

The revelation in June 2005 that a White House official who had once led the oil industry’s fight against limits on greenhouse gases had softened a government climate report was cited as one example of the administration’s “war on science.” Several journalists at the conference pointed out that since 2000 the politicizing of what the media had treated as an echelon of professional government sources has presented major problems in news coverage. Maintaining a posture of neutrality and objectivity in reporting is difficult, they said, when public institutions such as the National Oceanographic and Atmospheric Administration (NOAA), the Environmental Protection Agency (EPA) and the Department of the Interior become politicized and their reports, press releases, and even their data contain deliberate misrepresentations and ideological messages.

The difficulties the media face become more severe, the speakers said, when the oil industry and its lobbyists create think tanks and pay academics with dubious credentials in the field of atmospheric science to publish books; generate research that is not peer reviewed but is

“The depressing truth is that the rules of the game make it tough to tee up an issue without a news peg.”

James Gustave Speth

released publicly as if it had been published in a journal; make television appearances; publish op-ed essays; and testify before Congress on what the lobbyists and critics call the “bogus science surrounding global warming.” Industry-sponsored and sympathetic academics argue that the human contribution to warming trends is negligible, if it exists at all, and that climate change and computer models predicting future atmospheric and oceanic changes remain “unconfirmed” by empirical evidence. This obfuscation of science and the dilemma that the debate among “experts” causes for news organizations became a prominent theme of the conference discussion. Participants said it created a barrier to even approaching editors or producers with controversial, science-based story ideas.

Maintaining a posture of neutrality and objectivity in reporting is difficult, when public institutions become politicized and their reports, press releases, and even their data contain deliberate misrepresentations and ideological messages.

Charges of bias and alarmism are particularly sensitive for journalists on the environment beat—which is a recent creation, compared with standard beats such as crime and politics. It began in the early 1970s, riding the public indignation inspired by Rachel Carson’s *Silent Spring*, and grew in importance as the global environmental movement expanded. “One of the issues I have as a reporter covering the environment,” said Seth Borenstein of Knight Ridder, “is that all too often those of

us who cover the environment are called *environmental* journalists and are thought of as an extra arm of the environmental movement. We have to work darn hard not to get tainted that way.... It’s not my job to put [the news] out there in terms of what *should* be done. My job is to say, ‘Look, here’s what’s happening.’”

The threat to a news organization’s credibility in a portrayal framed by political and economic opponents as being biased and not objective becomes magnified in a divided culture in which even high school biology instruction is under attack. Wariness in newsrooms starts at the

White House and the Bush administration, which has resolutely downplayed the role of fossil fuels and other chemical emissions in altering the planet's atmosphere. Habitat protection and species diversity rank near the bottom of the federal government's priorities. The effect these official policies have had on public opinion and whether they have contributed to the president's lower approval ratings is debatable. Nevertheless, a position to downgrade environmental concerns taken so publicly and consistently by the dominant voices in government has created difficulties for reporters seeking to pitch contrary stories to editors. Editors tend to insist on balance in coverage and to include "the other side"—even if the official or industry viewpoint, in the eyes of an experienced specialist writer, is worthless. "Editors don't understand the nuances," said Borenstein. For many of them, he said, issues must be black and white, or a story proposal dies.

Speth and Goldmark both argued that waiting until certainty exists on climate change was a misuse of science. "You cannot find a body of scientific inquiry that is not constantly revising and correcting itself," Goldmark said. "It is inherent to the system. The idea of the greenhouse effect having an impact on global warming has been around for a long time. There is now a large...core consensus [in the global scientific community] that there will be very disruptive consequences unless something is done."

Although scientists are engaged in continuing and important research into questions such as the regional impacts of climate change, rates of acceleration of global warming, and the possibility of abrupt climate change, Goldmark said, broad agreement now exists that the atmosphere is in fact warming rapidly; that human activities play a major role in that warming; and that a wide spectrum of phenomena, from agricultural productivity to ocean temperature and freshwater runoff, will be affected. Disagreements and arguments now play out at the edge of the science, over issues such as cloud formation and the effects that cloud cover will have on the intensity and location of climate change. Other controversies

"It's not my job to put [the news] out there in terms of what *should* be done. My job is to say, 'Look, here's what's happening.'"

Seth Borenstein

involve the influence of heat-trapping cities and warmer agricultural areas on surface climate trends. A related issue centers on arguments over errors in satellite and balloon studies that may explain why some researchers may have underestimated warming in the upper atmosphere.

In his overview Profeta cited two delay factors in the climate change debate: institutional resistance to change and the vulnerability of the topic to confusion. “There is inertia in our political system, and there is a lot of interest in keeping the status quo,” he said. Profeta observed such resistance to change first-hand while working on environmental issues for Senator Lieberman. With regard to confusion, Profeta noted that “the issue is coming clearer...but it is easy to obfuscate the facts and our understanding of the issue...and create two sides so that the issue doesn’t become crystallized.”

“You cannot find a body of scientific inquiry that is not constantly revising and correcting itself. It is inherent to the system.”

Peter Goldmark

Profeta cited new public attitudes that might ease the news media’s burden of proof amid uncertainties: the inevitability of climate change and its increasingly visible manifestations, such as violent weather, cherry blossoms in January, and summer heat records. “Once you believe the science,” Profeta said, “there has to be a response. Things come home to roost. If you believe this, you have to do something to plan for it.” Furthermore, he said,

“Where there is change, there are opportunities...there are winners and there are losers. As those opportunities become more and more clear, people begin to invest in them.” Profeta noted that the business sector and major corporations such as General Electric, Dow Chemical, Ford, and BP are “starting to consider what program they can live with so that they can plan.” As a result, institutional resistance is losing its political force, and, as President Bush goes deeper into his second term, “you can see more and more corporations coming to the fore.”

The theme of uncertainty and the inability of journalists to deal with it threaded through the conference and accounted for at least a partial explanation of why editors are reluctant to engage in the global warming controversy. Many of them know far less about the methods and limitations

of science than do their specialist writers. Journalists—especially experienced, senior decision makers—have had a long tradition of shared culture with politicians and government sources and the realm of policy uncertainty. The same could not be said of their relationships with scientists until the last few decades, when more specialist reporters developed skills in working with scientists and earned their respect. Skeptical editors have been known to be critical, however, of environment and science writers for being too close to their sources and allowing these “experts” to set the agenda in the public sphere. They also express concerns about professional organizations they consider biased or rivals for reporters’ loyalty, such as the Society of Environmental Journalists and the National Association of Science Writers.

Specialists, who have gained considerable effectiveness through these independent organizations, can cite examples of how political and economic elites—and the scientists and spokespersons they support financially—use uncertainty as rhetorical and political tools to keep the generalist press off balance and passive. From the specialist reporter’s perspective, industry and government propagandists work around them and use general assignment reporters, their editors, and the wire services to give visibility to misleading but seemingly substantiated scientific claims. These same sources with hidden agendas also form a pool, managed by public relations firms, from which the wires and 24/7 cable television draw to “balance” science and environment stories.

Credibility issues extend beyond problems created by traditional newsroom divisions between general assignment personnel and specialists. The loss of credibility by once-trusted institutions reflects on reporters and makes all of their work more hazardous. “I know we have to set the stage differently,” said Robert Rivard, editor of the *San Antonio Express-News*, “particularly in terms of the he-said-she-said kind of journalism that we are all struggling with. It’s not just global warming.

“Where there is change, there are opportunities... there are winners and there are losers. As those opportunities become more and more clear, people begin to invest in them.”

Tim Profeta

Newspapers in particular are coming to grips with the fact that we are being asked to portray a world in which there is no torture, where there is no kidnapping of people and sending them to countries where there is torture, where freedom is on the march. There is a false sense of everything put forward by the government, so good reporting also gets knocked down. It creates an environment where newspapers are reporting two diverse points of view about something.”

Wide divisions in public opinion can influence how news organizations deploy their news-gathering resources. Surveys and audience responses indicate that the news audience approaches the local quality of life, public health, and the readiness of first responders much differently than it treats global environmental issues. Planning and zoning

“I know we have to set the stage differently, particularly in terms of the he-said-she-said kind of journalism that we are all struggling with. It’s not just global warming.”

Robert Rivard

decisions and reports on local health threats get close audience attention, regardless of whether a reader, viewer, or listener is conservative or liberal. The consensus of journalists at the conference was that the “environment side” usually wins with regard to local issues. Water quality controls, restrictive zoning, and efforts to stop projects that will add to an area’s traffic and air pollution usually prevail. Yet this “green tilt,” which once extended to the national and international levels, often stops at a state’s borders. “Maybe global warming is too big,” mused one participant.

The emphasis on local environmental stories reflects how newspapers distribute their editorial resources. “At most regional papers,” said Robert Rivard, “the environment is a big story. You can keep two or three reporters busy full time just on this—developers, water, local utilities. For most people, those issues are right in their faces.... But on a global basis, we’re running wire copy on global warming. What we do for a living [as editors] is to juggle things and give the emphasis to what you [the audience] are challenging us to do, and at the same time we’re struggling with everything else.”

Several editors noted that in their circulation areas the business community regards the media as being biased against business. If a regional news organization questions the adequacy of water supplies to meet development needs or the ability of a utility company to reduce pollution at a proposed coal-fired power plant, the Chamber of Commerce or manufacturer's association fires off a negative response, no matter how clear the scientific and engineering evidence in favor of the reporter's critical coverage might be. "What they are very good at is rallying the business community to say, 'Are you against more energy?' and that's not the issue at all," said Rivard. "Our job is to focus light on the question of whether this coal-burning plant is going to meet standards it should meet.... [But] instead of dealing with a real issue, there's a lot of disagreement and lots of politics designed to knock off track any reporting about it."

Other factors may have turned off national public discourse on global environmental topics, conference participants noted. The combined power of corporate campaign contributions, lobbyists, and public relations firms in Washington and today's brand of confrontational politics may all play a role. "This is a bare-knuckles fight we are covering," said Randy Lee Loftis, senior environmental correspondent for the *Dallas Morning News*. The high stakes for the oil and utility industries over the future of fossil fuels dominate all aspects of the public debate. Neither side provides conclusive facts on whether the planet is warming because of natural cycles or being cooked by chemicals set loose by fossil fuel emissions, mainly from vehicles and power plants. Why would a sensible citizen want to enter into such controversial, badly marked territory? Moreover, who wants to go there if mandatory controls on the use of fossil fuels might mean downsizing cars, buying new appliances, remodeling homes, changing diets, and converting the swimming pool into a vegetable garden, and many other possible disruptions to a familiar, comfortable lifestyle?

"This is a bare-knuckles fight we are covering."

Randy Lee Loftis

Conference participants noted that attacks on science—and, by extension, the news coverage based on it—come at a vulnerable time for traditional journalism, which also is under economic assault as

print circulation falls and network and local broadcast news ratings sink. Corporate management's response in most cases has been to cut costs, including reductions in the size and quality of newsroom staffs and the amount of print space or broadcast air time devoted to news. Even the best newspapers have struggled to sustain their editorial staffs while avoiding the pressures of near-term profits. They can still demonstrate the long-term economic benefits of practicing quality journalism and investing in strong newsrooms. The demands of corporate analysts with little understanding of journalism and investors who follow them, however, force publicly traded major media companies to require their subsidiary news organizations to take the contraction path. Editorial budget cuts often target Washington bureaus and foreign correspondents—the very resources needed to cover stories that have a national or global scale.

Staff cutbacks create real-world choices in newsrooms. For example, an editor might be forced to take an environment writer off a story he or she is working on to have that reporter cover a shuttle launch because environment specialists have enough of a background in science and technology to enable them to cover a variety of topics. In the affluent past, a news organization might have had a full-time aerospace reporter, or more than one. “This is a huge issue,” said one editor. “It’s the cutbacks in newsroom resources that are undermining how we can get people to do this more conceptual work.... It takes time and it takes training, and cutbacks are a really insidious thing that’s been going on for the last 10 to 15 years, and it has not only affected [environmental coverage] but every aspect of journalism.” Generalists in newsrooms for many years have expressed an aversion to specialized beats and what they regard as inequities in salaries, status, and assignments. That trend may be becoming more pronounced as editors now must exercise triage and choose carefully which type of reporter to hire, keep, or lay off. Specialists, like talented athletes, come at a high price.

Publishers and broadcast entities are scrambling to beef up their Web sites and catch up to new technology such as blogs, podcasts, and wikis as a way to reach an audience that is migrating from traditional media to the digital world—and taking advertisers with them. It isn't clear, however, that national and regional media organizations know how to make money at this new digital game. Nor is it clear that their

traditional rules of objectivity and verification will even allow them to play effectively on the Internet. Many local news outlets show a greater ability to create new citizen voices, attract Web ads, and build audience loyalty, but these organizations probably are least equipped to cover global issues.

Journalists' Outlook

As major media organizations cut back on experienced reporters and close bureaus, the question becomes: How are smart, innovative investigative and specialist reporters—those most needed to cover complex, long-term issues such as climate change—going to be financed and supported logistically amid unstable media change and harsh cutbacks? While traditional newsrooms threaten to turn into information Rust Belts, online news organizations, for their part, have been slow to compete with traditional newsrooms in producing reliable content, and they offer little original reporting.

That assessment of the future of news, voiced in various ways at the conference, sounds bleak. Yet conference participants also emphasized the positive side of the ledger. On balance, the participating journalists remained confident that their multiple roles as watchdogs, citizen informers, and fact verifiers still had relevance and value to society. In one form or another, the beat system of news coverage and “shoe leather” practitioners would still be needed by the “pajama clad” bloggers.

Most journalists at the conference supported the statement that topics such as climate change offer “an opportunity to do some great journalism” and reaffirmed the need for their unique skills at digging out and telling distinctive stories. Trends, they said, can be reversed. “Editors have extraordinary leeway to turn on a dime with their staff,” said Robert Rosenthal, managing editor of the *San Francisco Chronicle*. “It’s really easy to make changes. It takes a leader, someone who gets everyone in his office and says, ‘Okay, we’re going to do this.... Stop doing other things.’ You get everybody involved, then you make sure it works.... Every paper has a different dynamic, but it’s still about leadership.”

Several editors said that the image of penny-pinching, obdurate publishers is something of a myth. They *can* be persuaded to spend money to cover complex, interdisciplinary stories. “The role of the editor is to

keep the publisher apprised, to tell the person what you are doing and why you are doing it and maybe to lobby someone on the business side [for support],” said Chris Peck of the *Commercial Appeal*. “But I don’t know of any editors who would have to go to their publishers to get permission to cover a story.”

Nevertheless, editors at the conference said it would be wise to package and sell a major editorial blitz to the publisher, perhaps in an e-mail and then at a lunch. One said he might commission a poll first to “find out what the awareness of the issue is.” Another said he might include an outside expert at the lunch who could frame the issue that needed to be covered. “The value of the expert is something we can use,” he said. Publishers, several conference participants said, are open to doing business in an alternate way—“to do news differently,” as

“Every paper has a different dynamic, but it’s still about leadership.”

Robert Rosenthal

Rivard put it, “to engage people in what we do. Mainstream media is viewed as Old School, dinosaurs, but we can take a chapter out of New Media.” When all else fails, he said, “I would have a come-to-Jesus conversation with the publisher.... Everything is not about return on investment.... We are community oriented, so what is our mission as a public trust?”

Journalists at the conference seemed adamant that newsroom barriers to telling long-form, complex stories could be overcome. “Maybe our best mode is when we are thinking conceptually, making judgments about what is important, gathering the resources that will get the job done, what it will take to move conceptually from story to story,” said Kenneth J. Cooper, national editor at the *Boston Globe*. “I’d work with the reporters and come up with distinctive stories that we can do that are different from what everyone else is doing.” Media critics who predict the doom of traditional journalism tend to overlook that intense sense of competition in newsrooms.

Moreover, journalists—especially the staffs at large news organizations—have proven their adaptability. The journalists at the conference said they were prepared to shift into new modes of operation and adapt technology to new forms of storytelling, especially given the threat of competition from the Internet. “We can conceptualize a story such as

global warming in a new way from ones traditionally used to frame stories,” said Robert Rosenthal of the *San Francisco Chronicle*. “The shift would be away from day-to-day coverage...so that we give people the information they need so they can make decisions and not be surprised. It’s a shift to what is coming over the horizon tomorrow.... The core of what we do is built around events, but this is a different way of doing it.”

Reflecting on what will be needed to bring about significant change in traditional media, Rosenthal said, “It involves passion, for one—a passionate reporter. And it takes a passionate leader who believes that something should happen.... News coverage does not exist in a vacuum. It exists in the social and political and economic forces that we cover. It’s essential that there be scientific advance and that we cover that.... The reason that we are here today is because this is an issue of life or death. And the way I would approach this is that life is more compelling than death for a lot of people. Death is a long way out, as is climate change, but life is what we’re living today and you don’t often see this issue cast as a matter of life.”

Bill Brier, vice president for policy and public affairs at the Edison Electric Institute, underscored the need to develop technological solutions to concerns about global warming, rather than debate climate change science. “The U.S. power sector has moved beyond debating the science of climate change, and we’re now focused on how we can address it,” said Brier, who represents an industry that burns vast amounts of fossil fuels to produce electricity. The power generated also sustains much of the modern lifestyle, he said, which will make major changes in energy consumption difficult. “Energy consumption and greenhouse gas emissions are inextricably intertwined with our economy,” he said. “You can’t drop a regulatory hammer on the U.S. economy through imposition of mandatory greenhouse gas regulations in the absence of new technologies.”

“Everything is not about return on investment.... We are community oriented, so what is our mission as a public trust?”

Robert Rivard

Some members of the utility industry agree with environmentalists that controls of greenhouse gases are inevitable, Brier said. “The issue for us is not the science of global warming but the science of how we cut our emissions,” he said. “This country is almost entirely dependent on fossil fuels for electricity generation, with 51 percent of that capacity provided by coal and 20 percent by natural gas. A national lifestyle characterized by fossil fuel dependence has created a societal problem, as well as an economic one.” Moreover, Brier said, “demand for electricity is expected to increase 50 percent over the next two decades”—prompting some utility officials to call for regulatory certainty with respect to greenhouse gas regulation to reduce investment uncertainties and facilitate long-term planning.

“The U.S. power sector has moved beyond debating the science of climate change, and we’re now focused on how we can address it.”

Bill Brier

Suggested Changes

The goal of the conference was to identify ways to leverage newsroom resources, whether they are declining or not, and use best practices to improve journalism. Suggested changes surfaced throughout the conference, which was a rare opportunity to probe the judgment and thought processes of top-ranked working journalists, as well as to observe how they would deal with a complex hypothetical story on a tight deadline. Reforms clustered around several strategic categories:

Stop editorial budget cuts. Rebuild staff expertise, said one broadcast producer. Shift a network science correspondent over to the environment beat, along with a producer or editor devoted full time to the project. Reduce the dominance of anchors and give producers and reporters more say on what gets covered and aired. Give reporters more training, education, and time to delve deeply into subjects. Let them work with outside experts and avoid newsroom insularity. Several proposed tactical changes fell into this wish list:

- Put emphasis on team coverage and cross-disciplinary reporting.
- Create enough “slack” in newsrooms to relieve specialists and investigative reporters from having to respond constantly to daily news demands.
- Provide reporters with adequate travel and expense money.
- Give reporters better communications equipment and the training to use it.

Improve newsroom management. Participants saw a need to change the attitude of editors at the lower ranks so that they would know the organization’s priorities and would learn to be “less science phobic.”

In other words, free up more assignment editors and field producers from daily demands and administrative functions, allowing them to better assess the work of specialists, cooperate with them on story ideas, and guide them to better results, including by means of skillful copy editing. Giving primary editors and producers more time to concentrate on content also would allow them to engage more directly with their audiences.

Remove artificial management and editorial barriers between print, video, audio, and online news operations. The corollary: Invest more funds

in new media. Online revenues might be used to support traditional newsrooms. Give specialists multimedia training, such as how to handle a digital camera, so that they can tell stories effectively across all platforms. Encourage them to think of graphical elements and in visual terms.

“Maybe our best mode is when we are thinking conceptually, making judgments about what is important, gathering the resources that will get the job done...”

Kenneth J. Cooper

Engage readers and viewers not just in dialogue but invite them to be active participants in the editorial planning process. Let readers “help guide us in what is important,” said Robert Rosenthal of the *San Francisco Chronicle*. “Not to politicize it ...but [to recognize] that it’s not just a story about the environment but about lives and how we live them in this country.”

“We need to create a stage for a topic like this. Brand it-call it ‘Wild Weather,’ and give it a franchise that’s going to push that story into the paper, on air, online....”

Dianne Doctor

Encourage the growth of expertise in the audience and within the physical community. Save stories and build or aggregate information on a Web site, and urge readers and viewers to go there and find background information. Make clear that climate change may be a matter of survival and that they probably will be called on as citizens to make some difficult decisions about energy use and lifestyles.

Leverage high public interest in local weather coverage into an awareness and interest in global climate change. “We need to create a stage for a topic like this,” said Dianne Doctor, senior vice president and news director at WCBS-TV New York. “Brand it-call it ‘Wild Weather,’ and give it a franchise that’s going to push that story into the paper, on air, online.... We need to create support for a story like this.”

Allocate more print space and air time for long-form journalism. Such formats include science sections, special inserts, documentaries, online news packages, 90-minute primetime news programs devoted to complex topics, and interactive combinations of these stories across all platforms.

Tell complex stories in more dramatic and compelling ways. Tell stories in ways that are neither unjustifiably alarmist nor boring but reflect a return to eloquence and accurate but shocking statements.

Conclusion

Conscientious news organizations can claim, with some justification, that they have provided the public with “sound, accurate data” on the major science-related issues. To observers on the outside, however, the effort appears to be short of what today’s imperfect world requires. The passion and purpose generated during the great moments of American journalism history—such as the muckraker era, the civil rights movement, the Vietnam War, and Watergate—still seem largely absent. Attention to leadership, resources, technology, and an awareness of journalism’s public mission goes only so far. What seems lacking in journalism today, as expressed by the conference participants, is the moral compass needed in entering what the *Columbia Journalism Review* referred to in the headline on its November/December, 2005, lead story on the coverage of Katrina as “Uncharted Waters.”

Internal and external obstacles to successful best practices are greater than ever—as this report documents. A frequent charge aimed at “mainstream journalism” by its critics on the Internet and in the scientific community holds that reporters covering a scientific controversy act “more like stenographers than a vigorous fourth estate that watches over public institutions.” This allows “state-sanctioned deceptions” such as administration attempts to “frame” or control discussion of climate change by government scientists to become established truths. But this criticism fails to account for the difficult position in which journalists covering the environment find themselves when their knowledgeable science or professional sources in government become inaccessible and are replaced by “official” spokespersons. Without good data or reliable named sources to offer their editors, specialist writers lose much of the leverage that expertise once gave them. They are told to stay within the laws of “objectivity and balance” and to avoid advocacy.

As several of the newsroom leaders at the conference stated, however, these obstacles are not insurmountable with regard to increasing the amount of reporting on climate change and the environment generally. It is still possible to reassess the way a news organization approaches its coverage of complex, slowly developing trends and issues. The issue, they said, comes down to newsroom leadership and a desire to seek honesty and excellence in journalism at the expense of reporting that is convenient or conciliatory. If newspaper editors do have the leeway “to turn

on a dime with their staff,” as Robert Rosenthal of the *San Francisco Chronicle* asserted, these newsroom leaders and their counterparts at broadcast, cable, and new media organizations must make the turn.

Climate change and environmental deterioration—like terrorism, the threat of nuclear proliferation, persistent poverty, and other complex issues that require specialized knowledge and enterprise to report—are important stories whose significance carries beyond the events of the day. These issues pose serious challenges to U.S. systems of economic production, consumption, and energy generation—in short, to the American way of life. Enterprising leaders in journalism who recognize the potential impact of the larger stories must step forward to say, “Here is how we will cover this story going forward.”

The public, in its acceptance of the Internet and the many niche news sources that now exist, shows a desire for independent voices—storytellers who can bring depth and perspective to their narratives, who can deal with complexity and “think whole.” They admire the romance and élan of “backpack journalists” and feisty bloggers. Yet audience surveys also show a hunger for substance. Give us the facts, the public is saying, but dig deep and show us the foundations of reality and the wonders of discovery as well. Have a higher regard for the intelligence of citizens. One television journalist at the conference lamented the “dumbing-down” attitude in newsrooms: “It’s like the way we cover politics. Every election year we say, ‘Yeah, we know we should be doing it, but the voters aren’t ready for it.’”

Clearly, journalists want to improve. Participants at the conference showed extraordinary awareness of the need for journalists—whose culture often is accused of being elitist, self-absorbed, and aloof—to reconnect with audiences. They came to the conference armed with stories of how their own organizations are pushing to create ways to bring more and better information to their audiences and to invite audience members into the process to improve the practice of journalism. The push for transparency and self-examination at major news organizations today demonstrates a belief that journalists cannot take their audiences for granted.

With pressure from both Wall Street and the Internet and as staff cuts and newspaper franchise sales shake the industry, most editors, news directors, producers, and journalists know that fundamental changes must be made. In the environmental context, Marla Cone, who writes about chemicals for the *Los Angeles Times*, noted in a recent appreciation in the *Columbia Journalism Review* of the work of Rachel Carson that “newspapers today tend to simplify issues related to environmental health and publish pieces that tell readers essentially nothing.” The same can be said of much of the broadcast and cable news coverage as well. What is needed, Cone says, is a commitment to explain to readers the risks of chemicals in terms people can understand. She quotes from Carson’s final chapter of *Silent Spring*: “We stand now where two roads diverge. The choice, after all, is ours to make.”

Conference on Journalism and the Environment

Keynote Address

Peter Goldmark
Director of the Climate and Air Program, Environmental Defense
and
Former Chairman and CEO, *International Herald Tribune*

July 11, 2005
The Aspen Institute
Aspen, Colorado

I'm aware this audience is full of people from the field of journalism. I'm going to be a little bit provocative, but the directions in which I'm going to be provocative are directions that I think are fundamentally sound. So let me ask you to suspend disbelief. Just ride with me a little while.

First, I'm going to start with a story in a time and a place that is not here, and I'm going to bet my Colorado lottery ticket that it's a story very few of you know.

A group of men are sitting around talking. By and large, they have names you and I do not know: Thomas Clarkson, John Newton, Granville Sharp, and James Stephen. There are 12 men, in fact—12 angry men. It is a fascinating series of conversations they are having. But even though it will launch one of the most dramatic and far-reaching changes in human history, until this year no thorough history of their thought and how their thought advanced and started a series of changes that changed the world has been written.

The period is the 1780s.

Their thoughts led to an enormous and very fundamental shift in how human beings—all human beings, all over the world—viewed themselves and human society. This shift is fairly close to us in time, but we never think of it as a big shift because we are on the other side of that shift. And we seem not to have learned a great deal about how it happened.

The issue, of course, was slavery. For most of human history slavery was an accepted part of the order of the world. It existed in many different parts of the globe, and it was viewed by almost all societies as a legitimate dimension of the way humans ordered their affairs.

Somehow, through the process launched in the 1780s by this small group of, in the first instance, men—they were joined by women later—through an evolution that lasted about six decades, we got to a point where everybody's view of slavery in the world was essentially that it was illegitimate and an unacceptable part of human activity. It didn't mean that there wasn't still some slavery left in some regions. It meant that our attitude, as a whole, about whether slavery was legitimate and whether it had a place in human affairs had changed. Now that is a fundamental shift in the space of decades—and it happened fairly recently.

I am going to suggest that the drama and the far-reaching nature of that change in human thinking parallels one that we have now embarked on in our time—and that is the change from thinking that natural resources are limitless and our environment endlessly resilient to realizing that we must change our pattern of economic behavior fundamentally, or we will critically endanger and finally doom the entire human adventure.

Don't be thrown by this. I've discussed this with other groups, and this parallel at first throws people. That's why I'm using it. Resist saying, for the moment, "That's not a good parallel, it's a very different issue." Of course it's a different issue—in some ways. But I'm interested in the common features, and I'm interested in its structure as an issue. Both issues are fundamental.

The slavery issue became one of the first global issues in the history of our kind.

It was a long time building before it became an issue that preoccupied governments; indeed, one major government with which you may be familiar was formed on a very precise understanding to sidestep that issue entirely.

And the issue of slavery and the evolution that I'm talking about were poorly covered and understood by the press of the day. If you go back to the press of that day, what do you think you'd find—the evolution of the slavery issue or the Napoleonic wars? Take it from there.

In our time I believe it is possible to say that there are a handful of truly decisive, critical issues. One of them is the environment. It is now reasonably clear that all six billion of us on this planet cannot continue in the direction in which a few “advanced” countries have been going and expect to survive and prosper. Another billion cars or more, a thousand new coal plants over the next decade, predatory overfishing, tumbling water tables, unsustainable food production, and so on: That future simply doesn’t work.

That’s quite a change from when I was growing up. You know the view of the world we absorbed when I was growing up? I grew up in the period after World War II—that’s when I went to school. The image of the world we absorbed—it wasn’t taught explicitly—was that you could see the evolution of the world as other countries trying to be like the United States. You could imagine them strung out in a line behind the Pied Piper of Hamelin, and we were the Pied Piper. And there were Ecuador and Pakistan, elbowing each other to see who would be 17 and who would be 18 in the string of nations trying to be as democratic, as industrialized, and as wealthy as we were.

What do we know today? We know two things: The world can’t be like us and survive. And we have come, finally, to understand that *we* can’t be like us and survive.

That is the new ground, the difficult ground, on which we now stand.

We are approaching all this faster than most analysts predicted. In this broad drama there is one iconic issue that stands out—and that is climate.

Global warming affects the two most fragile of the five reservoirs of which our earth consists. It’s a very simple way to think of the earth and its system: five reservoirs, each self-contained, each with its own properties, but each communicating with the others—that is, the chemical components of each one can find their way into any of the others. Those

It is now reasonably clear that all six billion of us on this planet cannot continue in the direction in which a few “advanced” countries have been going and expect to survive and prosper.

five reservoirs are the atmosphere, the ocean, the earth's crust on which you and I are standing, magma (which we see when it appears as lava, for example, in a volcanic eruption), and the core. For today we will say

Global warming is a problem that comes to us in scientific terms. It is science that identified the problem, that has studied it, and that seeks to understand how it works. And it will be science and technology that will provide the road map for dealing with it.

the core is one reservoir. You can make a strong case that it is really two. For today we'll say one.

Of these reservoirs, the human experiment has begun to affect two seriously: the atmosphere and the ocean. Those are the two that are the most closely related.

What's interesting is that the greenhouse gases that are behind global warming are a basic by-product of the industrialization and economic expansion that have powered the growth of the dominant system of production and consumption of our period of history. I would say this issue is iconic or paradigmatic for the following features:

- Global warming is a problem that comes to us in scientific terms. It was the mastery of science and technology that drove growth and gave birth to the systems of production that now comes full cycle and causes global warming. It is science that identified the problem, that has studied it, and that seeks to understand how it works. And it will be science and technology that will provide the road map for dealing with it.
- It is truly global. The atmosphere and the oceans are fluid; they are worldwide, and they respond to the molecules put into them, whatever the sources of those molecules. The phenomenon is global, and the solution must be global. We have not had a lot of problems that require global solutions. That, I believe, is one of the reasons we've had difficulty in terms of the press covering it well.

- On the scale of most human problems, it is a relatively slowly unfolding problem. Although it has accelerated noticeably in the past half-century, the human contribution to global warming is still overall only about 200 years old. But it is also a problem that builds up relentlessly. Like a vast debt accumulating according to the remorseless laws of compound interest, it builds up slowly but steadily, gathering enormous momentum. It does not go away, and it has an enormous lag effect. If we emitted no more greenhouse gases starting this evening, the next couple of decades of warming are locked into the atmosphere over our heads already. That means we have some time, but we do not know exactly how much time. We know that every year, every tick of the clock, during which we don't address this problem makes the danger this problem presents that much more dangerous; it makes our task of modifying our patterns of production and consumption that much more disruptive, that much less manageable. We don't know exactly how bad it will get, and when. But we do know that however bad it is going to get, it will be even worse if we wait and do nothing. We've not had a lot of problems like that.

The phenomenon is global, and the solution must be global.

Global warming is a paradigmatic problem of our time because it affects us all, whether we as individuals are helping to cause it or not; because it arises from and must be understood and addressed through science; because it is closely, fundamentally linked to the basic economic processes of our civilization; and because it cannot be solved unless we act together on a global scale. With the exception of science, many of those features were true of slavery.

So what is the state of the science? I'm going to be fairly brief here. I found the summary in the reading material excellent. I would add to what is there only two points to bring it up to date.

1. The reading leaves the impression that skeptics about global warming challenge the proposition that human activity con-

tributes to it. I believe we have largely passed beyond that. Most skeptics no longer challenge the role of human activity. They now concede that human activity is contributing to global warming. What some of the skeptics doubt is whether this human activity will produce as much warming or have as much impact as the core consensus of science considers likely.

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I also think that if you look at President Bush's remarks in the run up to the [July 2005] G-8 meeting—this was essentially a statement that British Prime Minister Tony Blair dragged the president to agree to and to make—you will find for the first time a recognition that humans are contributing to global warming. I believe that statement marked the end of the period when the skeptics said, “No, human activity doesn't have much to do with this problem.” The skeptics will remain, and they will challenge on other issues, but I believe we are essentially moving out of the period when the skeptics questioned the presence of significant human influence in global warming even as we are standing here, and that is not reflected in your reading.

2. What the reading also does not reflect is that in the past year or two we have had a growing tide of confirmatory evidence and studies (confirmatory of what I'm going to call later the core consensus). Some of the most important studies show for the first time that the pattern of warming in the oceans around the world fits our understanding of what should be going on there if global warming were in fact happening. Let's just pause for a minute on the ocean. The heat capacity of the ocean is many hundreds of times as great as that of the atmosphere. So where is most of this heat, which is just energy, going to go in the end? It's going to go in the ocean. If we understand this thing half right, there should be patterns in the ocean that we can connect

with this process. That is beginning to be studied and detailed. As this evidence begins to come in, some of the skeptics who are agnostic on global warming are signing on to the core consensus. Many of the apparent discrepancies the skeptics formerly pounced on, such as apparent differences between temperature measurements taken at the surface of the earth and those taken in space by satellites, have been explained and corrected. So there is a strong tide of wide-ranging, confirmatory evidence coming in that global warming is happening and that it may be accelerating significantly.

Beyond these two additions to the picture presented by the reading, I want to make two more general points. This begins to build a bridge to why I think this is a difficult issue for our press.

The first general point has to do with the nature of scientific inquiry and discourse. Unlike religious faith, science does *not* prove or affirm things absolutely. You cannot find a body of scientific endeavor and inquiry that is not constantly evolving and revising and correcting itself. It is inherent to the system.

The idea of the greenhouse effect and global warming has been around for a long time. Tens of thousands of scientists have worked on it. There is now a large degree of agreement on what I'm going to call the core consensus, and there is a large degree of agreement that there is a real danger of very disruptive consequences if nothing is done to change this pattern. Most of the scientific work that underlies this consensus and on which we rely to reach this conclusion has been published through the peer-review process. That's how the scientific community tests itself; that's one of the ways in which scientists compete—by challenging each other's articles in the peer-review process.

Are there respected and serious scientists who disagree with this consensus? Whose work has been peer-reviewed and published? Yes—there are some. But what is remarkable on this subject compared to many others is how few of them there are compared to the number who support and subscribe to the core consensus described in your reading. Are there aspects of global warming that we do not understand and to which the international consensus does not apply? Yes. What's an example of that? An example is this: How does global warming affect cloud formation

and cover? Obviously, cloud formation and cover are going to have an effect on the intensity, location, and degree of global warming.

So there is a core consensus, and, as in any other scientific field, there is an edge of that consensus where people are disagreeing. These are the fronts of exploration and the cutting edges of new research.

The second point is that only in the United States is there the appearance of a serious scientific debate around what your reading calls the core consensus. The present administration, assisted in part by a series of think tanks, has decided to challenge the science, apparently as the most effective way to prevent the drive for serious action on global warming. The most famous recommendation along these lines was made by Frank Luntz, some of whose work you have in your reading. His political advice to the White House was that only by attacking the science could they slow down the drive to act on global warming.

What is interesting is that the advice to attack the science came not from a scientist but from a political analyst.

What is interesting is that the advice to attack the science came not from a scientist but from a political analyst.

If you are interested in what the scientific community believes, I think the most revealing piece to read is a very short paper that appeared in *Science* in December 2004. What the author did is very interesting. She took 928 papers dealing with climate change, published over a decade in refereed journals—which means they were all peer reviewed—and she simply sorted them by what they said into six categories: they explicitly endorsed the core consensus, they implicitly endorsed the core consensus, they talked about something else such as the paleological record...and the sixth category was that they implicitly or explicitly disagreed with the scientific consensus. The results? Seventy-five percent either explicitly or implicitly agreed with the consensus view; the others commented on these other aspects, particularly paleoclimatic scientific studies; and none—over 10 years in refereed journals, not one out of 928 papers—rejected the consensus view. Why? Her last paragraph is really interesting: “Many details about climate interactions are not well understood, and there are ample grounds

for continued research.... But there is a scientific consensus on the reality of anthropogenic climate change. Climate scientists have repeatedly tried to make this clear. It is time for the rest of us to listen.”*

The paper I ran and the news organizations many of you are associated with have all reported this issue from time to time as if there were a huge scientific debate. Do not believe for one minute that there is a scientific debate around the core issues among people whose work has been subjected to the same scrutiny and whose credentials and academic standards are the same.

It’s a little bit as if we had a seminar with two panels on hitting a major league fastball. If I put on one panel Hank Aaron, Ty Cobb, and Ted Williams, and I put on the other panel Charlie Firestone, myself, and Ken Cooper, we might have a lot of different views about what it takes to hit a major league fastball, but you would have a lot of trouble saying there is a serious dispute between two equally qualified schools of thought.

It is my opinion that the difference in the qualifications of the two schools in this country is about that great. This gap does not seriously exist in any other country in the world. For the press, that ought to give you cause for thought. Why does this so-called scientific uncertainty not exist anywhere, except in the country where a political clique and some fossil fuel financiers decided to create the illusion of it?

Now a word about the journalistic part of the problem we are here to explore. First, I’d like to try to slay a couple of mythical dragons.

Myth #1: The first myth is that no one trusts the press these days. It’s true, shrill and partisan rhetoric is rife, and vituperative cant fills the air. One of you in this audience agreed with me earlier that there is an ability to bring political pressure on publishers and owners with a degree of precision and effectiveness that did not exist in this country 10 to 15 years ago. But that is not the first time in our history that this has been true. There is little evidence that persuades me that Americans have lost much of their grudging, sour-grapes respect for the press. A survey this spring by the Missouri School of Journalism found that two out of three Americans called journalism “credible”; more than half rated newspapers and TV news “trustworthy.” They agreed—62 percent to 18 percent—that “journalism is mainly a force for good.”

We must not confuse these findings with the things they don't like and that they really rip into the press for. Do they see bias in news reporting? Yes, they said they saw it all over the place. Are they critical of journalists for invading people's privacy—an activity they seem at once to deplore and relish? Let's not confuse these two things. My proposition is that it is a myth that the American public no longer has grudging respect for the press and no longer recognizes that the independent press has an important and generally positive role to play in the way our republic works.

Myth #2: The press is willfully or irresponsibly avoiding important issues. I just don't see it. Here are the words of the head of one of our national TV news networks: "It's been abundantly clear...that if Americans get it wrong at this point in our country's history, our survival may be at risk." Quite apocalyptic for

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a toughened journalist, wouldn't you say? I don't think the press is avoiding covering the climate issue. I just think it's a really tough issue; it's an enormous issue that is different structurally from most other issues we cover, and I don't think they've figured out how to cover it because it's so different from what they cover day to day.

Myth #3: The press is free to set the news agenda. That is very rare; that's a minority of cases. The press, in terms of public issues, doesn't feel free, and it doesn't act free—and it never really has. The news agenda—what to think and talk about—has been and continues to be heavily shaped by government. Government actions and statements provide the news peg. And the depressing truth, as one of our national columnists writes, is, "The 'rules of the game' make it hard for us to tee up an issue... without a news peg." And it is government that most often sets the news peg. That was true back when slavery first surfaced as an issue, and it's true of global warming today.

Let me remind you of one other unpleasant reality. The tradition of an independent press—or a free press, as it is normally called—does not stem back in history to where some of the other traditions of our democratic and republican form of government arise. It does not go back to

the Greeks or the Romans. It goes back a few hundred years or less, and it is fragile. It is recent, and it is not 200 years of unbroken glory. This is a new tradition; it is fragile, it is growing, it is learning, and it is under some very real pressures now. Like the idea that slavery is illegitimate, the idea of an “independent press” is not a classical or ancient value.

One of the ways journalism is really being tested is on complex scientific issues and on issues with a long time horizon. These are tough issues. I believe also that there is a wavelength problem.

An issue such as climate change is slower in its development than most other issues you deal with. It doesn't fit the tempo of daily journalism, or even weekly or monthly journalism. It defies deadlines, beats, assignments. It even defies ratings and profit cycles. It is on a different wavelength that we haven't learned to cover. It is a gradual, compounding problem whose advance is measured in decades. Of the three parties involved in the news, neither governments nor journalists nor we citizen consumers of the news are very good on issues that fall on that part of the wavelength spectrum. Consider: If the press couldn't muster the discipline and the news judgment to focus on the danger of terrorism in the two decades before 9/11, despite all the warnings that were in fact there, the evidence, and the opinion of informed experts on counterterrorism, are we surprised that they have not been able to focus on climate change or the environment?

Of these three groups—government, journalists, or citizen news consumers—to which one should we look to think through and pioneer the changes necessary to deal with this new class of global, long-wavelength, supercritical issues?

We are here for the next two days because the most likely group to think through this problem is the journalists themselves. It is an irony of the present situation that the country with the most independent and diverse press in the world—the United States—is also the country whose government is mired most deeply in grotesque and self-defeating denial on the subject of global warming. Maybe that is an opportunity, or maybe it is just a crazy contradiction contrived by whatever ironic fates rule our lives.

One of the fascinating and perverse things about the independent press is that tough, serious, new thinking rarely comes from outside.

That's one of the prices of independence—the press is not really, by habit or history or inclination, all that interested in how others think they should be doing their job. Change normally has to come from inside the ranks of journalism itself.

So that is what we are here to explore—to try some tough, serious, new thinking on one of those long-range, slow-wavelength, supercritical issues.

I will tell you what I think. I think climate change and the environment is one of the biggest stories of our lifetimes. I think we will eventually learn how to cover it. I also think an independent press is the oxygen of democracy—you cannot find a democracy in this world that has long survived without an independent press. Without that oxygen, without an independent press, democracy suffocates and dies. And I think those of us who care about our democracy, about the press, and about the future of the human experiment had better be willing to spend a little time thinking and talking about how to cover the issues on which the outcome of that experiment may hinge.

**Change normally
has to come from
inside the ranks
of journalism
itself.**

So in that spirit, I think we ought to thank Henry and Jessica Catto, who made this conference possible, and the Duke University Nicholas Institute for Environmental Policy Solutions, and let's be thankful that we live in a society that affords us the space and the time to have this kind of conversation, because that should not be taken for granted.

* Naomi Oreskes, "The Scientific Consensus on Climate Change," *Science*, 3 December, 2004, p. 1686.

APPENDIX

The Aspen Institute
and
The Nicholas Institute for Environmental
Policy Solutions at Duke University

***Conference on
Journalism and the Environment***

Aspen, Colorado
July 11-13, 2005

Conference Participants

Seth Borenstein

National Correspondent
Knight Ridder

Bill Brier

Vice President
Policy and Public Affairs
Edison Electric Institute

Jessica Catto

Trustee
Conservation Fund
Conservation International
National Parks Conservation
Association
World Resources Institute

Jennifer Christensen

Associate Investigative Producer
CNN

Kenneth J. Cooper

National Editor
Boston Globe

Heidi Cullen

Climate Program Manager
The Weather Channel

Dianne Doctor

Senior Vice President and
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The Aspen Institute

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Deputy Executive Director
Sierra Club

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The Aspen Institute

Peter Goldmark

Climate and Air Program Director
Environmental Defense

Note: Titles and affiliations are as of the date of the conference.

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Nicholas School of the
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The Commercial Appeal

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Robert J. Rosenthal

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San Francisco Chronicle

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Daniel A. Shaw

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Denver Post

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The Aspen Institute

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Greenwire: <http://www.eenews.net>

Global Warming Links: <http://www.autobahn.mb.ca/~het/global-warming.html>

National Center for Atmospheric Research: <http://www.ncar.ucar.edu/>

National Oceanographic and Atmospheric Administration (NOAA),
National Climatic Data Center:
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news@nature.com: <http://www.nature.com/news/infocus/climate-change.html>

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Roger A. Pielke Sr. Research Group: <http://climatesci.atmos.colostate.edu>

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U.S. Global Change Data and Information System: <http://globalchange.gov/>

