The Disconnect of News Reporting From Scientific Evidence

Balanced coverage results in a 'misleading scenario that there is a raging debate among climate-change scientists regarding humanity's role in climate change.'

By Max Boykoff

The procession of hurricanes through the Caribbean Basin, lashing the southeastern United States, has served to spur an increase in news media coverage of various aspects of climate change. These devastating hurricane events provide a news hook through which many journalists have started to investigate the complex nexus of interacting natural forces and potential human influences. Debates regarding links between increased intensity of hurricanes Katrina, Rita and Wilma and global warming notwithstanding, these discussions illustrate the ongoing and contentious battles about what is taking place in our carbon-based industry and society.

These highly politicized debates can be contrasted with the overwhelming scientific consensus regarding the issue of human contributions to climate change (a.k.a. anthropogenic climate change). Since the late 1980's, climate scientists have stated with increasing confidence that humans play a distinct role in changes in the climate. Acting on the science, the world community took initial steps to combat anthropogenic climate change in the form of the Kyoto Protocol; 128 countries have ratified it, but the United States is not among them.

The United States's obstinate anti-Kyoto stance, combined with more recent events, has prompted many foreign leaders, environmental groups, concerned citizens, and local officials to blame the Bush administration for its inaction in this critical issue. For example, German Environment Minister Jürgen Trittin ecently said, "The Bush government rejects international climate protection goals by insisting that imposing them would negatively impact the American economy. The American President is closing his eyes to the economic and human costs his land and the world economy are suffering under natural catastrophes like Katrina and because of neglected environmental policies."

Measuring the Effects of Balanced Coverage

While much focus of ire and frustration has focused on the Bush administration, another significant, yet often underconsidered point of resistance to international cooperation on climate change also revolves around the media's ongoing adherence to the journalistic norm of balanced reporting. By adhering to this norm, the news media presents both sides of a story, with attempts often made to do so in equal measure. But when balance has been applied to the critical environmental issue of anthropogenic climate change, it has served to distort the findings of the world's top climate-change scientists.

My research empirically examined this disconnect. Through content analysis of U.S. newspapers, as well as interviews with key actors at the interface of climate science, policy, media and the public, I looked at how discourse on anthropogenic climate change is framed through the media, thereby affecting public understanding, discourse and action.

Since previous research found that the public generates much of its knowledge about science from the mass media, it is crucial to reflect on the role of the mass media in shaping public understanding of climate science and policy. Interactions between climate science, policy, media and the public are complex and dynamic. It is clear that science and policy shape media reporting and public understanding. However, it is also true that journalism and public concern shape ongoing climate science and policy decisions. Journalist Dale Willman, a veteran correspondent and field producer with CNN, CBS News, and National Public Radio, has commented, "in terms of agenda-setting ... the media don't tell people what to think, but they tell them what to think about."

In a peer-reviewed study published in 2004, coauthor Jules Boykoff and I examined this issue of balance in leading U.S. newspapers—The New York Times, The Washington Post, the Los Angeles Times, and The Wall Street Journal. Each of these newspapers has a daily circulation of more than 750,000. The study found strong adherence to balanced reporting since 1990. This balanced presentation of anthropogenic climate change that was seen from 1990 to the end of the study in 2002 differs significantly from the

perspective put forth in the findings of climate science during this time. While it ought to be the job of journalists to make sure that scientific consensus is conveyed accurately, the reporting was found to be strikingly out of alignment with the top climate science. The principal finding was that U.S. news media effectively provided consistently deficient coverage of anthropogenic climate change.

By adhering to balance, these influential news sources greatly amplified the views of a small group of climate contrarians who contest the notion that humans are contributing to changes in the climate. Over time, these dissonant views on anthropogenic climate change have been frequently granted roughly equal space alongside the research and recommendations of the most reputable climate-change scientists from throughout the world. Therefore, through this type of reporting in the U.S. news media, the American public and policymakers have been presented with the misleading scenario that there is a raging debate among climate-change scientists regarding humanity's role in climate change.

Newsroom Pressures

There are a number of factors and pressures that affect newspaper content, and these are interrelated and therefore very difficult to disentangle. While many of them are codified and explicit, others are shaped by social convention as well as larger political, economic and cultural trends, making them more implicit and difficult to pinpoint. However, the interactions of a number of key processes in journalism have contributed to a distorted discourse about anthropogenic global climate change. Some examples follow:

- In many newsrooms decreased budgets have resulted in more journalists working as generalists, who cover many areas of news, rather than specialists on a particular news beat. Some people have found this trend has had an influence on the quality of reporting. Malcolm Hughes, climate scientist at the University of Arizona, observes, "A lot of the time [when] you give an interview ... there is a huge gulf in the nature of the questions and concerns that come from people working very broadly [as generalists]."
- Inherent challenges exist in translating scientific findings into information for the public in news reports. Scientists have a

tendency to speak in cautious language when describing their research and have a propensity to discuss implications of their research in terms of probabilities. For journalists, this lexicon can be difficult to transform into crisp and clear reporting. Henry Pollack, professor of geophysics at the University of Michigan, refers to this as the challenge of "translating error bars into ordinary language."

These difficulties cause distortions in communications about anthropogenic climate change, such as inaccurate amplification of uncertainty by relying on climate contrarians' counterclaims.

To serve the American public responsibly, U.S. media coverage of the human impact on climate change must improve. Journalists need to acknowledge that their long-cherished norm of balance has become a form of informational bias. What is needed is a more accurate depiction of the existing scientific consensus. And if those who represent the U.S. policy position continue to distort science in pursuit of an agenda that benefits special interests, then journalists must provide the crucial scientific context for the public. In this realm of coverage, journalistic credibility is on the line.

This critique is not meant as an attack on individual journalists. Rather, our focus as researchers has been on examining the institutional features of the news media in its coverage of this issue. But it is true that change will come most likely through the aggregate improvements of individual journalists, editors and publishers. Nor should the focus for improvement solely be on the news media. Political, economic and cultural factors from many sources contribute to this historical tapestry of intransigence: well-paid and skillful lobbyists pressuring national representatives on behalf of fossil fuel interests, the oil and coal industries' tanker-load of contributions to the campaign chests of federal policymakers, and the connections between members of the Bush administration and the oil industry. Responsibility also rests in the scientific and policy communities, as well as with the public.

By the information it receives, members of the public can either be galvanized into action or resigned to passivity. Our research aims to improve the coverage of these climate science issues. The question becomes whether awareness of these journalism practices will result in more accurate coverage of anthropogenic climate change.

Perhaps it is too soon to tell, but what we do know is that with the recent hurricanes in the Atlantic Basin new opportunities exist to expand and improve how aspects of climate change are framed and discussed. It will be up to journalists to decide if they will grab them.

Max Boykoff, who is completing his doctorate in the environmental studies department at the University of California, Santa Cruz, has conducted research examining how U.S. news media coverage influences public understanding of the causes and consequences of climate change. Read the PDF of the 2004 newspaper study:

http://people.ucsc.edu/%7Emboykoff/Boykoff.Boykoff.GEC.2004 .pdf