

The Culture and Discourse of Climate Skepticism

Andrew J. Hoffman
Stephen M. Ross School of Business
University of Michigan

Ross School of Business Working Paper
Working Paper No. 1152
November 2010

This work cannot be used without the author's permission.
This paper can be downloaded without charge from the
Social Sciences Research Network Electronic Paper Collection:
<http://ssrn.com/abstract=1713760>

The Culture and Discourse of Climate Skepticism

Andrew J. Hoffman
University of Michigan
ajhoff@umich.edu
734.763.9455

November 22, 2010

DRAFT

PLEASE DO NOT CITE, QUOTE OR DISTRIBUTE WITHOUT CONSENT OF THE AUTHOR

Forthcoming in *Strategic Organization*

Andrew J. Hoffman is the Holcim (US) Professor of Sustainable Enterprise at the University of Michigan; a position that holds joint appointments at the Stephen M. Ross School of Business and the School of Natural Resources & Environment. Within this role, Andy also serves as Associate Director of the Frederick A. and Barbara M. Erb Institute for Global Sustainable Enterprise. His research uses a sociological perspective to understand the cultural and institutional aspects of environmental issues for organizations. He has published eight books and over ninety articles and book chapters on these issues. His email address is ajhoff@umich.edu and his web page is <http://www.andrewhoffman.net>.

INTRODUCTION

The current public debate over climate change centers on two primary themes. The first is the scientific consensus that human behavior is causing a rise in greenhouse gas (GHG) levels, and that these gases are altering the global climate. The second is the policy consensus that the solutions to this problem lie in technological development and behavior change that must be spurred by a government-induced carbon price. To many, these two themes cover the entire climate change debate. They are wrong.

While the scientific, technical and policy components of the issue are critical, climate change is also a cultural issue. More importantly, it is a highly contested cultural issue in which competing movements engage in discursive debates – or framing battles - over the interpretation of the problem and the necessity of solutions. This dimension of the issue is overlooked because social scientists who can identify and analyze it have been notably absent from the public debate. Even more surprising, they have largely neglected to attend to the issue even within their own academic realms.

Climate change in the social and managerial sciences has been very slow to develop (Goodall, 2008), and more recent attention to the issue by business and social science researchers has ignored debates over the reality of climate change and moved straight to an assessment of strategy options available to individual and organizations to address the issue. In fact, our social science discipline either takes a relatively dismissive attitude toward those who challenge the scientific view that climate change is real – dubbed “climate skeptics” – or subscribes to them sinister motives and neglects their beliefs altogether (see McCright and Dunlap (2000, 2003 and 2010 for exceptions) for exceptions). In this essay, I argue that this neglect is a problem and highlight how researchers can advance their scholarship and social relevance by studying the ongoing debate over climate change.

THE CULTURAL DIMENSIONS OF CLIMATE CHANGE

The scientific community has concluded that human activity is a major cause of GHG emissions and that these emissions influence global warming (this author subscribes to this view, most notably stated by the Intergovernmental Panel on Climate Change and the National Academies of Sciences). However, there is clearly more than science at play in shaping the public and political debate on climate change. It is striking that one of the strongest predictors of an American’s beliefs regarding climate change is his or her political party affiliation. According to a 2009 Pew survey, 75 percent of Democrats believe there is solid evidence of global warming compared to 35 percent of Republicans and 53 percent of Independents (Pew Research Center 2009b). This variance can only be explained by the presence of a deeper ideological and cultural influence on both the definition of the problem and consideration of solutions.

Curiously, academic fields that study cultural, social, and organizational phenomenon have been largely absent from the study and discourse of why climate change remains an undecided and frequently polarizing policy problem. And in the vacuum of their contribution, most academics and policymakers who support climate action have narrowed their discussion to the relative value of different economic and technical fixes. This work is valuable, but it neglects

deeper political and cultural forces at play that hinder deep changes in sustainability behavior among individuals and organizations, including passage of U.S. climate legislation (Grey and Stites, forthcoming).

One has only to watch the testimony during the 2009 debate over the Waxman-Markey climate bill (HR 2454) in the U.S. House of Representatives to see the vehemence of the ideological divide among those supporting and opposing climate science and action. While evidence is presented by notable scientific bodies, Rep. Paul Broun (R-GA) claimed that climate change is nothing but a “hoax” that has been “perpetrated out of the scientific community.” Rep. Steve Scalise (R-LA) stated that the causes of global warming are far from settled (Krugman 2009). And in February 2010, Sen. James Inhofe (R-OK) issued a report that named 17 climate scientists and suggested that some of them may have engaged in “potentially criminal behavior” (Harris and Brouwer 2010). Such rhetoric is indicative of a deep cultural clash between those who support climate action and a skeptic counter-movement.

THE SOCIAL SCIENCES, THE CLIMATE CHANGE DEBATE, AND CLIMATE SKEPTICISM

As an organizational theorist, I believe that failing to attend to the deeper social and cultural forces within the climate conflict, and in particular the counter-movements that resist the dominant logic, is problematic for two reasons.

First, neglecting the skeptic movement hinders our ability to understand why public opinion shifts on climate change. The Pew Research Center found that the number of Americans who believe there is solid evidence that climate change is happening dropped from 71 percent in 2008 to 57 percent in 2009 (Pew Research Center 2009b), a phenomenon that is also occurring in countries like the U.K. and Germany where climate change belief has historically been stronger than in the U.S. (BBC, 2010). The *Six Americas* survey from the Yale Project on Climate Change found the biggest shifts occurred among the most alarmed and most skeptical from 2008 to 2010 (Leiserowitz, Maibach, and Roser-Renouf 2010). The percentage of respondents claiming to be alarmed by climate change dropped from 18 to 10 percent and those in the dismissive category increased from 7 to 16 percent. Such surveys provide invaluable snapshots regarding where public opinion stands on climate but do not explain *why* these shifts occur or *how* they weaken/strengthen climate resistance in the policy realm. The answers can be found in studying the cultural elements of the climate conflict presently occurring (see Norgaard 2006 as an example).

Second, neglecting skeptics does nothing to alleviate the continued polarization of the climate legislative debate around the world (most notably in the 2009 failed debates in both the U.S. House and UN negotiations in Copenhagen). Skeptics retain a seat in the policy debate, and even though the majority of scientists, academics, and many policymakers and business leaders reject the skeptic movement’s viewpoint, it is impossible to evaluate the most effective way to counter their views without understanding the underlying motivations and cultural foundations of their arguments.

The dearth of research on climate resistance, uncertainty and apathy is not all that surprising, however, as it closely mirrors a longstanding problem in social movement theory. For decades,

social movement theorists have been criticized – and have criticized themselves – for not attending enough to politically conservative movements, although this has begun to change (see Blee and Creasap forthcoming). In short, it is problematic to sample on the dependent variable, and I believe it is folly to only research organizations and debates among groups that already agree that solutions to climate change are necessary. We also need to attend to those opposed (and indifferent) to climate change action to understand the landscape of the debate more completely, as there will likely be real financial consequences for firms that take different stances on the climate change issue.

An October 2010 report commissioned by the United Nations Principles for Responsible Investment (PRI) found that the top 3,000 publicly traded companies in the world produced over US\$ 2.15 trillion worth of environmental damage in 2008, the equivalent or one-third of all global environmental costs. The report argues that as governments adopt “polluter pays” principles carbon prices, “companies will have to meet the costs of reducing pollution and waste or pay compensation for the damage they cause” (UNPRI 2010). The strategies firms are adopting or not adopting to address climate change today will impact their future financial performance and potentially their survival in a carbon-constrained economy. As I discuss at the end of this article, however, some firms and their leadership remain resistant to addressing climate change. We need to focus equally as much – if not more – attention on these firms than on the “climate leaders” to understand both the cultural drivers and financial implications of their resistant stance.

THE CULTURE AND DISCOURSE OF CLIMATE SKEPTICISM

I recently began a study on the climate skeptic movement and climate skepticism more broadly to better understand the cultural and ideological issues at play by systematically analyzing the frames used to mobilize the counter-movement. As part of this study, several cultural themes have emerged as dominant among the skeptic movement (Hulme 2009). For skeptics, climate change is inextricably tied to a belief that climate science and climate policy is a covert way for liberal environmentalists and the government to interfere in the market and diminish citizens’ personal freedom. In the words of a conference speaker at a 2010 climate skeptic conference, skeptics believe “the issue isn’t the issue” and “the environmental agenda seeks to use the state to create scarcity as a means to exert their will, and the state’s authority, over your lives.” Many skeptic conference presenters invoked the idea that “climate change is just another attempt to diminish our freedom” and climate policies will decrease personal liberty. One went so far as to suggest that a binding international agreement on climate change would end with individuals being required to carry “carbon ration cards” on their person.

A second prominent theme among the skeptic movement is a strong faith in the free market. Members of the skeptic movement consistently argued that climate legislation will hinder economic progress and that renewable energy is not feasible without large government subsidies. Another skeptic suggested that “doing nothing about climate change is doing something [because] it enables people to keep their money and invest it in the future.”

Finally, one of the most intriguing themes that has emerged from the study is a strong distrust of the scientific peer review process. Skeptics argue that public funding of science in the post-WWII era through organizations like the National Science Foundation (NSF) corrupted the scientific process. In their view, “peer review” turned into “pal review,” and establishment scientist-editors only published work by their friends and those whose scientific research findings agreed with their own. This frame was particularly salient at the skeptic conference in the wake of the 2009 “Climategate” controversy, in which thousands of emails were leaked from the University of East Anglia’s Climate Research Unit. Skeptics argue that these emails support their claims that dissenting scientific papers have been suppressed, although multiple investigations have cleared the scientists.

The possibilities for research on these skeptic themes as well as the emergence, activation and resolution of such cultural debates among social scientists in the science and technology studies and performativity areas are endless. But research on skeptics should not be for academic consumption alone. Studies on climate skepticism must be practically relevant as well. For example, one of the primary questions in our study is whether climate change has become a “logic schism”; the equivalent of “abortion politics,” in which two sides take ideologically polarized positions (i.e. life versus choice) and “no amount of scientific information...can reconcile the different values” (Pielke 2007: 42). In these types of conflicts, debate breaks down and common ground becomes elusive.

Some may argue that the climate skeptic movement is small and thus irrelevant to the debate on what to do about climate change, but as social scientists, we cannot endorse such flippant dismissal. If, as we suspect, skeptics invoke climate frames that resemble abortion politics, this has serious policy implications. As long as members of the skeptic movement are included in the policy debate and sway the opinions of some lawmakers, their discourse is critically relevant. The social sciences can help us understand the form of this debate as well as the outcomes that result from it.

THE IMPACT OF CLIMATE SKEPTICISM

While the cultural frames and ideological values employed by the climate skeptic movement are an important focus of research, this work must be accompanied by subsequent studies of the impact these frames have on critical populations beyond the government, including the general public and the corporate sector.

Climate Uncertainty and the General Public

Although a few sociologists have started examining the U.S. conservative movement’s success in promoting doubts about climate science (McCright and Dunlap 2003, 2010), we are not yet able to evaluate which frames invoked by climate skeptics resonate with the general public. Despite some level of uncertainty about climate science in the public domain, surveys of American’s views on climate find support among citizens for climate legislation at the local, state, and national levels (Pew Research Center 2009a; Rabe and Borick 2010). And while the U.S. is a critical domain for the climate debate – a country that has produced 30% of total cumulative emissions between 1900 and 2005 and is presently the second largest annual

emitter (at 16%) of global emissions (China currently emits 17%) – this phenomenon is not restricted to the U.S. We observed a wide range of nationalities represented at the most recent climate skeptics conference, with a large number of representatives from New Zealand and Australia (although almost none from emerging economies like China, Brazil, or India). The movement is certainly global with influences that reach into both national and international negotiations on the issue. While “abortion politics” may not be the best descriptor of climate change divisions, we as social scientists don’t yet know enough about how frames from both climate skeptics and climate action proponents get translated by the media and absorbed by citizens to know how to characterize the divide.

Further, climate change is a unique social problem because unlike debates over abortion, immigration, gay rights, and even the death penalty, it is nearly impossible to put a human face on a problem that will most drastically impact future rather than present generations. The plight of the polar bear is inevitably more abstract than one’s neighbor or co-worker being affected by one of the issues listed above. Further, unlike other environmental problems, there is no clear single villain. We can’t simply point to one smoke stack or waste dump and identify someone who should fix it. Whereas pollution reduction in the past targeted specific oil, chemical, and mining companies, the control of GHGs draws our attention to all sectors of the economy, including ourselves, the complicit consumers. We are all in this together.

Climate Positioning, the Corporate Sector and Strategic Organizations

Environmental and sustainability issues have been highly contested within the corporate sector since the early 1960s, and the climate change debate has expanded the complexity of that contest, resulting in shifting alliances and positioning. For example, the early position within the corporate community was in line with present day skeptics, opposing any action on climate. The Global Climate Coalition (GCC), founded in 1989, was a forceful spokesperson for business interests against climate science and regulation with membership that included large global firms such as Exxon, General Motors, Ford Motor Company, and Texaco.

The GCC was deactivated in 2002, however, and many of those same prominent members are now part of a business and environmental coalition called the United States Climate Action Partnership (USCAP) that has made repeated public calls for federal regulation to reduce GHG emissions. USCAP strongly influenced the American Clean Energy and Security Act of 2009 (Waxman-Markey climate bill) through their *Blueprint for Legislative Action* and placed a full-page ad in *The Washington Post* calling on federal lawmakers to pass bi-partisan energy and climate legislation in 2010.

This is no small issue for business and for business strategy researchers. As the UN study noted, controls on GHGs will alter the price of energy and in the process alter entire markets. As a result, not all organizations are unified in their climate positioning and have become battlegrounds themselves. The US Chamber of Commerce, for example, is a ripe domain for research on climate skepticism. With over three million members, the Chamber is the largest business association in the world and a powerful lobbying organization at multiple levels of government. The Chamber has opposed federal climate legislation, which ran counter to the

position of some of its members and resulted in several organizations (e.g. Nike, Apple, Exelon) resigning from the Board or the organization in protest.

Such phenomena raise intriguing questions about climate resistance at different levels of organizational governance and the intersection of corporate and public politics. In a conversation with a member of a local Chamber recently, one of the authors was told that the controversy had not been discussed at the local level, and their Chamber members continued to partner with the municipal government on GHG emission reduction efforts through voluntary programs and initiatives. That Chamber's website also lists a number of talks from high-profile sustainability speakers about the economic benefits of addressing climate change.

It would be illuminating to study how different levels of activity within corporate groups like the Chamber are affected by (or affect) the broader climate skeptic movement. For example, how is the Chamber's public disapproval of the Waxman-Markey bill, resistance to the EPA's CO₂ endangerment finding or lobbying in the 2009 UN Copenhagen meetings undermined by prominent members who have protested the Chamber's position? What is the effect of the climate debate among member organizations on the Chamber's lobbying influence (both national and international) and how does this fracturing manifest itself at the local, national and international levels? With almost 96 percent of the Chamber's members being small businesses with less than 100 employees, does business support for federal climate legislation vary across firm size (as well as other demographic factors such as geographic location and type of business)? Answering these questions would create a more nuanced picture of private sector support or opposition for climate policy. It would also help organizers of private and public climate initiatives determine the greatest barriers to changing corporate behavior.

CONCLUSION

Researchers in the organizational field are making strong calls for more problem-based research (Biggart and Lutzenhiser 2007; Davis and Marquis 2005), and I am an adamant supporter of this type of inquiry. In my view, few contemporary problems warrant social and cultural analysis by academics more than climate change. I believe social scientists can achieve greater "rigor and relevance" (Tushman and O'Reilly 2007) by studying the cultural dimensions of the climate debate with results for both academic and practitioner audiences. In short, social scientists have a duty to bring this type of research into the public sphere to help resolve such a pressing debate.

This endeavor is not without research challenges and difficulties. In the study of the climate skeptic movement, I and my colleagues faced several interesting dilemmas. For example, how do we as scholars engage a community that openly dismisses the scientific method upon which our work is based? Disdain for our scholarly work is a central element of the skeptics' framing of the problem. There is an inherent mistrust of social scientists and academics writ large within the skeptic community when the question of studying climate change and their stance arises. We encountered this mistrust firsthand when a climate skeptic initially offered to fund our research project. He later withdrew the offer due to concerns about the sustainability focus of our research institute. This withdrawal prevented us from having to decide whether accepting

research money and endorsement from an avowed skeptic would call into question our research findings, but the real or perceived influences from funding sources is a valid issue for those entering this or any research domain.

This underlying mistrust may also alter the availability of research sites. For example, corporations that reject climate change as a pressing issue may also be less willing to provide access to decision-making processes than organizations that view themselves as proactive “climate leaders.” Or they may want to control the outcome of research on their climate stance.

Finally, engagement with climate skeptics may also bring resentment or hostility from within the ranks of academia as well. The climate change issue has become so contentious that any attempts at bridging between the climate convinced and climate skeptical communities has, at times, been met with extreme criticism (see, for example, the experiences of Professor Judith Curry who infuriated her scientific colleagues for engaging climate skeptics (Lemonick, 2010)).

I believe these kinds of challenges should encourage rather than discourage strategy and organizational researchers, though. The research opportunities waiting to be uncovered in this rich space are vast, and if mistrust can be managed (if not eliminated), I believe that a cultural lens has much to offer in understanding the phenomenon of climate skepticism and its impact on individual and organizational outcomes.

Unfortunately, the influence of academia in the climate change debate is dominated by the fields of economics, engineering and law. If social scientists who focus on cultural and social phenomenon want a seat at the table as well, we must bring our academic tools to bear on the persisting climate conflict. It is not enough to say the science is undecided if the skepticism counter-movement remains active and public uncertainty increases. Organizational researchers and social theorists have unique theories and methods at their disposal to explain why climate change is a polarizing issue in some settings and not others and why some organizations support or resist efforts to mitigate GHG emissions. By answering these questions, we may be able to uncover solutions to this seemingly intractable problem.

REFERENCES

- BBC. 2010. *BBC Climate Change Poll*. British Broadcasting Channel
http://news.bbc.co.uk/1/hi/shared/bsp/hi/pdfs/05_02_10climatechange.pdf (Accessed May 25, 2010).
- Biggart, N.W., and L. Lutzenhiser. 2007. “Economic Sociology and the Social Problem of Energy Efficiency.” *American Behavioral Scientist* 50:1070-1086.
- Blee, K., and K. Creasap. “Conservative and Right-Wing Movements.” *Annual Review of Sociology*.
- Davis, G.F., and C. Marquis. 2005. “Prospects for Organization Theory in the Early Twenty-first Century: Institutional Fields and Mechanisms.” *Organization Science* 16:332-344.

- Goodall, A. 2008. "Why Have the Leading Journals in Management (and Other Social Sciences) Failed to Respond to Climate Change?" *Journal of Management Inquiry*, 17(4): 408-420.
- Gray, B. and J. Stites (forthcoming, this issue), "Apocalypse Now or Later: Why We Are Failing to Forestall Climate Change," *Strategic Organization*.
- Harris, D., and C. Brouwer. 2010. "Climate Scientists Claim 'McCarthy-like Threats,' Say They Face Intimidation, Ominous E-mails." *ABC News*. www.abcnews.go.com (Accessed May 25, 2010).
- Hulme, M. 2009. *Why we disagree about climate change: Understanding controversy, inaction and opportunity*. Cambridge: Cambridge University Press.
- Krugman, P. 2009. "Betraying the Planet." *New York Times*, June 29, 21.
- Leiserowitz, A., E. Maibach, and C. Roser-Renouf. 2010. *Global Warming's Six Americas*. Yale University and George Mason University. New Haven, CT: Yale Project on Climate Change <http://environment.yale.edu/uploads/SixAmericasJan2010.pdf> (Accessed May 6, 2010).
- Lemonick, M. (2010) "Climate Heretic: Judith Curry Turns on Her Colleagues," *Scientific American*, October 25. <http://www.scientificamerican.com/article.cfm?id=climate-heretic>, viewed 11/17/10
- McCright, A.M., and R.E. Dunlap. 2010. "Anti-Reflexivity: The American Conservative Movement's Success in Undermining Climate Change Science and Policy." *Theory, Culture, and Society* 27.
- McCright, A.M., and R.E. Dunlap. 2003. "Defeating Kyoto: The Conservative Movement's Impact on U.S. Climate Change Policy." *Social Problems*, 50:348-373.
- McCright, A.M. and R.E. Dunlap. 2000. "Challenging Global Warming as a Social Problem: An Analysis of the Conservative Movement's Counter-Claims," *Social Problems*, 47:499-522
- Norgaard, K.M. 2006. "We Don't Really Want to Know: Environmental Justice and Socially Organized Denial of Global Warming in Norway." *Organization and Environment* 19:347-370.
- Pew Research Center. 2009a. *Americans Favor Carbon Cap, Gays in the Military and Renewing U.S.-Cuba Ties*. <http://people-press.org/report/501/carbon-cap-gays-in-military-us-cuba> (Accessed June 2, 2009).
- Pew Research Center. 2009b. *Fewer Americans See Solid Evidence of Global Warming: Modest*

Support for "Cap and Trade" Policy. Washington, D.C.: Pew Research Center for the People and the Press <http://pewresearch.org/pubs/1386/cap-and-trade-global-warming-opinion> (Accessed June 2, 1009)

Pielke, R. 2007. *The Honest Broker: Making Sense of Science in Policy and Politics.* Cambridge: Cambridge University Press.

Rabe, B.G., and C.P. Borick. 2010. "The Climate of Belief: American Public Opinion on Climate Change." *Issues in Governance Studies* 31:1-15.

Tushman, M., and C. O'Reilly. 2007. "Research and Relevance: Implications of Pasteur's Quadrant for Doctoral Programs and Faculty Development." *Academy of Management Journal* 50:769-774.

UNPRI. 2010. "Universal Ownership: Why environmental externalities matter to institutional investors" http://www.unpri.org/files/6728_ES_report_environmental_externalities.pdf (Accessed October 5, 2010)