

Working Paper

The Growing Climate Divide

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

Ross School of Business Working Paper
Working Paper No. 1351
June 2011
Nature Climate Change, 1(4)

This paper can be downloaded without charge from the
Social Sciences Research Network Electronic Paper Collection:
<http://ssrn.com/abstract=2940380>

The Growing Ideological Divide over Climate Change

Andrew J. Hoffman
University of Michigan
701 Tappan Street, R4472
Ann Arbor, MI 48109
734-763-9455
ajhoff@umich.edu

Published as: Hoffman, A. (2011) "The growing climate divide," *Nature Climate Change*, 1(4): 195-196.

Climate change has reached the level of a *scientific consensus*, but has not yet reached the level of a *social consensus*. The major obstacle towards achieving that end is the increasing partisan and ideological polarization between conservatives/Republicans and liberals/Democrats over interpretations of climate science.

One need only to watch the debates in Washington over regulation of greenhouse gases to see that climate change has become a politically charged and partisan issue. The most recent vote to ban the EPA from regulating CO₂ as a pollutant under the Clean Air Act (called “The Energy Tax Prevention Act of 2011” or H.R. 910) passed the House by a margin of 255 to 172, falling along strict party lines. Every Republican supported the measure while nearly every Democrat opposed it (19 Democrats voted for it). Does this partisan divide extend beyond our political leaders in the Nation’s capital to include the general public? Research in *The Sociological Quarterly*,¹ by Aaron McCright and Riley Dunlap answers this question with a definitive yes, and that the divide is getting wider;

This paper is part of a growing body of literature from the fields of psychology,^{2,3} sociology,⁴ anthropology⁵ and other social sciences that view climate change, not strictly as a scientific issue, but also as a psychological, cultural and political issue. This work leads to understanding why anthropogenic climate change has reached the level of a *scientific consensus*, but has not yet reached the level of a *social consensus*, one that emerges from individual and social values about what is true and what is not. While the physical sciences dominate the former process, they do not have the definitive final word in the latter process. The social debate over climate change involves a wider array of constituents than just physical scientists. More importantly, as this body of research points out, the processes by which these constituencies understand and assess the science of climate change are not always technical in nature. They invoke deeply held beliefs and values which are influenced highly by political ideology. In fact, once people have made up their minds regarding climate change, providing additional and contrary scientific evidence can actually make them more resolute in resisting conclusions that are at variance with their deeply held beliefs.⁶

When individuals analyze important issues like climate change, they employ *political* and *ideological filters* that are influenced by their identity and worldview. Critical to the formation of such belief systems are the referent groups to which people belong.⁷ Beliefs are greatly influenced by group values and people will generally endorse the position that most directly reinforces the connection they have with others in that referent group. In the contemporary social debate, climate change has become entrenched in the so-called “culture wars” with acceptance of global warming science being tied tightly with “liberal” views.⁸ In short, it has become strongly tied to the political partisanship of our day. Part of this effect can be explained by people’s tendency to openly consider evidence when it is accepted or, ideally, presented by a knowledgeable member of their cultural community. Conversely, they will dismiss information that is inconsistent with their cultural values when they perceive that it is being advocated by experts whose values they reject.^{9,10} So, when influential conservative speakers or media outlets promote the idea that climate change is a “hoax,” conservative members of the public will be more likely to accept that statement as being true. And when

influential liberal spokesmen or media outlets promote the idea that climate change is “an inconvenient truth,” liberal members of the public will be more likely to endorse that view. In order to move beyond this ideological divide, further attention must focus on the psychological, social and cultural processes by which people have become divided over the scientific consensus view.

The study presented by McCright and Dunlap is the most extensive examination (and first longitudinal study) to date of the political dynamics of climate change in the US general public. Utilizing a ten-year longitudinal data set drawn from Gallup’s annual environment poll, the two sociologists are able to show compelling evidence of the growth of both partisan and ideological polarization over climate change among the American public from 2001 to 2010. They show that the percentage of conservatives and Republicans who believe that the effects of global warming have already begun to happen declined from roughly 50% in 2001 to about 30% in 2010 while the corresponding percentage of liberals and Democrats increased from roughly 60% in 2001 to about 70% in 2010. They also provide the first examination of the independent and combined effects of both partisan and ideological identification on views of climate change, ranging from holding beliefs in accordance with the climate science (e.g., the effects of global warming have already begun) to expressing personal concern (e.g., worrying about global warming).

Their finding of ideological and partisan polarization on climate change beliefs and concern is consistent with party sorting theory, the predominant political science and sociological explanation of political polarization in the general public. Briefly, party sorting is a top-down process wherein the more visible and active members of a party sort first and provide cues to citizens that party positions are evolving. The increasing divide between the two parties and between ideological elites on the Left and the Right on climate change in the 1990s and early 2000s made it easier for American citizens to sort themselves along ideological and partisan lines vis-à-vis climate change.

Finally, McCright and Dunlap use some sophisticated statistical tests to show that party and ideology moderate the effects of education and self-identified understanding on views of global warming; where higher levels of education and understanding lead to more stronger agreement with climate science and personal concern among Democrats and liberals, but little and often an opposite effect for Republicans and conservatives. They suggest that these findings are consistent with information processing theory and the elite cues hypothesis drawn from political science. Briefly, it appears that Americans process information about climate change through a political filter, and they rely selectively on information from ideological and partisan leaders whom they trust. This leads them to challenge the common assumption that “more information or education will help to convince Americans of the need to deal with climate change. Particularly for those on the Right, this seems unlikely to prove effective.”

This article was the subject of a symposium in *The Sociological Quarterly* with three commentaries providing additional insights into the implications of their findings. In the end, the work of McCright and Dunlap highlights an important tension with regards to resolving a social consensus on climate change. On the one hand, is the ideological divide primarily based on framing and issue categories (i.e. trust of the scientific process, faith in the market, the proper role of government or differing conceptions of the economic and environmental risks of taking (or not taking) action),¹¹

such that an adjustment in the debate can yield common ground and ways to bridge the opposing sides? Or on the other hand, is this issue destined to reach a state of political divide on a level with other issues in the “culture wars,” like abortion, gun control and health care, as McCright and Dunlap suggest is the case? If this is our present reality, then social consensus is less likely to be a viable option and the debate has devolved into a power contest among politically and economically powerful actors in generating the ideological formation of climate denial and belief.

*Andrew J. Hoffman is the Holcim (US) Professor of Sustainable Enterprise at the University of Michigan, with joint appointments in the Stephen M. Ross School of Business and the School of Natural Resources & Environment
e-mail: ajhoff@umich.edu*

References

1. McCright, A. and R. Dunlap. (2011). “The politicization of climate change and polarization in the American public’s views of global warming, 2001-2010,” *The Sociological Quarterly*, 52: 155-194.
2. Swim, J., P. Stern, T. Doherty, S. Clayton, J. Reser, E. Weber, R. Gifford, and G. Howard, (2011) “Psychology's contributions to understanding and addressing global climate change,” *American Psychologist*, 66(4): 241-250.
3. Pidgeon, N. and B. Fischhoff (2011) “The role of social and decision sciences in communicating uncertain climate risks,” *Nature Climate Change*, March.
4. Nagel, J., Dietz, T. and J. Broadbent. (2008). *Sociological Perspectives on Global Climate Change*.
http://ireswb.cc.ku.edu/~crgc/NSFWorkshop/Readings/NSF_WkspReport_09.pdf, viewed 5/16/11
5. Sanford, V. (2009) *Letter from the American Anthropological Association to the House Committee on Energy Commerce regarding Climate Change*, <http://www.aaanet.org/cmtes/cfhr/upload/CfHR-Global-Warming-Letter-050409.pdf>, viewed 5/16/11.
6. Feinberg, M. and R. Willer, (2011) “Apocalypse soon? Dire messages reduce belief in global warming by contradicting just world beliefs,” *Psychological Science*, 22 (1): 34-38.
7. Kahan, D (2010) “Fixing the communications failure,” *Nature*, 463, 296-297.
8. Hamilton, C (2011) “Education, politics and opinions about climate change evidence for interaction effects,” *Climatic Change*, 104: 231-242.
9. Kahan, D., H. Jenkins-Smith and D. Braman. (2010) “Cultural cognition of scientific consensus,” *Journal of Risk Research*, 1-28.
10. Malka, A., J. Krosnick and G. Langer (2009) “The association of knowledge with concern about global warming: Trusted information sources shape public thinking,” *Risk Analysis*, 29(5): 633-647.
11. Hulme, M (2009) *Why We Disagree About Climate Change: Understanding Controversy, Inaction and Opportunity* (Cambridge: Cambridge University Press).