The Cultural Schism of Climate Change: How science takes a back seat to identity politics in the U.S.

03/08/15 | CEF Spotlight

by Andrew Hoffman, Director, Erb Institute at the University of Michigan

This post originally appeared in the Stanford University Press blog.

In January 2014, the Eastern and Southern United States were plunged into extraordinarily frigid temperatures that stranded air travelers, stressed power grids, closed schools, and killed more than 20 people. In all, the lives of more than 187 million people (roughly 60% of Americans) were affected by the record-breaking cold. Meteorologists identified the “Polar Vortex” as the culprit; a large cyclone, first studied in 1853, that circles at the poles of the Earth. And, much to their dismay, they watched it become yet another flash point in the rhetorical war over climate change.

On the one side, Rush Limbaugh called the Polar Vortex an invention of the liberal left to further promote the “global warming agenda.” Fox News referred to it as the “so-called” Polar Vortex and aired multiple pundits claiming that global warming cannot be true because it was so cold. Under a regular blog called “Planet Gore” (named for former Vice President Al Gore), the National Review mocked “alarmists” for a tendency to believe that “There is absolutely nothing that ‘global warming’ can’t be linked to if you try hard enough.” Adding fodder for the war, a Russian research vessel became stranded in the Arctic while studying, among other things, global warming. That led Donald Trump to enter the fray:

This very expensive GLOBAL WARMING bullshit has got to stop. Our planet is freezing, record low temps,and our GW scientists are stuck in ice

7:39 PM - 1 Jan 2014

1,960 RETWEETS 1,120 FAVORITES

On the other side, a headline in Climate Central pronounced that the “Polar Vortex in U.S. May be Example of Global Warming.” A Time magazine headline concurred that “Climate Change Might Just Be Driving the Historic Cold Snap,” adding that, “melting Arctic ice is making sudden cold snaps more likely—not less.” Common Dreams went even further to argue that, “Every weather event in the modern world is attributable to climate change.” Many also directed their attention towards attacking the contrarian viewpoint. The Weather Channel, for example, ran a story “Polar Vortex and Climate Change: Why Rush Limbaugh and Others Are Wrong.”

This is what stands for public debate today. Climate change has been transformed into a rhetorical contest more akin to the spectacle of a sports match, pitting one side against the other with the goal of victory through the cynical use of politics, fear, distrust and intolerance. No wonder the public is confused. But why did an
issue like climate change become so toxic, so caught up in what we call “the culture wars”? Why has it joined sex, religion, and politics as an issue that people try not to discuss in polite conversation? Indeed, according to a survey by the Yale Project on Climate Change Communication (Yale PCCC), two-thirds of Americans rarely if ever discuss global warming with family or friends. Physical scientists are mystified and frustrated by this state of affairs. But to social scientists from disciplines like psychology, sociology, anthropology, political science, ethics, and philosophy this makes sense, and they offer valuable tools for both understanding why people take such polarized views on controversial issues and moving beyond the rancor.

Social scientists view the issue of public understanding of climate change, not as a lack of adequate information, but as the intentional and unintentional avoidance of that information. That avoidance is rooted in our culture and psychology and can be summarized in four central points.

We all use cognitive filters.

As physical scientists explore the mechanics and implications of a changing climate, social scientists explore the cultural and cognitive reasons why people support or reject their conclusions. What they find is that physical scientists do not hold the final word in public debate. Instead, we interpret and validate conclusions from the scientific community by filtering their statements through our own worldviews. Through what is called “motivated reasoning,” we relate to climate change through our prior ideological preferences, personal experiences, and knowledge. We search for information and reach conclusions about highly complex and politically contested issues in a way that will lead us to find supportive evidence of our pre-existing beliefs.

Our cognitive filters reflect our cultural identity.

We tend to develop worldviews that are consistent with the values held by others within the referent groups with which we self-identify. In what Yale University Law and Psychology Professor Dan Kahan calls “cultural cognition,” we are influenced by group values and will generally endorse the position that most directly reinforces the connections we have with others in our social groups. It is not necessarily that we reject scientific conclusions in this process, but that they are weighted and valued differently depending on how our friends, colleagues, trusted sources or respected leaders value and frame these issues. We are the product of our surroundings (both chosen and unchosen) and tend to gravitate towards opinions that fit with those we identify. As such, positions on topical and controversial issues like climate change become part of our cultural identity.

Cultural identity can overpower scientific reasoning.

When belief or disbelief in climate change becomes connected to our cultural identity, research has found that providing contrary scientific evidence can actually make us more resolute in resisting conclusions that are at variance with our cultural beliefs. Research by sociologists Aaron McCright from Michigan State University and Riley Dunlap from Oklahoma State University found that increased education and self-reported understanding of climate science corresponds with greater concern among those who already believe in climate change but less concern among those who do not. Kahan and colleagues have found that “members of the public with the highest degrees of science literacy and technical reasoning capacity ... were the ones among whom cultural polarization was greatest.” In short, increased knowledge tends to strengthen our position on climate change, regardless of what that position is. This conclusion challenges the common assumption that more scientific information will help convince Americans of the need to deal with climate change. Instead, the key to engaging the debate is addressing the deeper ideological, cultural, and social filters that are triggered by this issue.

Our political economy creates inertia for change.

We cannot discuss the social processes that guide our thinking without also considering the economic, political and technological reality that is both the enactment of our values and a source of inertia to changing them. First, there is a vast physical infrastructure around fossil fuels and the lifestyle they create that cannot be replaced easily. Second, there are strong economic and political interests that are threatened by the issue of climate change (many of them controlling the infrastructure just mentioned). As a result, they have adopted strategies to confuse and polarize the debate to protect their interests. Efforts to change our cultural views on climate change must include efforts to change the vast institutions and infrastructure of our economy and be prepared to deal with resistance from those who benefit from it.

In the United States at the present time, those opposing cultural worldviews map onto our partisan political system—the majority of Democrats believe in climate change, the majority of Republicans do not. With the battles lines drawn, the social debate around climate change is now devolving into a “cultural schism” where opposing sides debate different issues, seek only information that supports their position and disconfirms the other’s, and begin to demonize those that disagree with them. With time, our positions will become relatively rigid and exclusive, thickening boundaries among cultural communities. In essence, we begin to identify members of our group (or tribe), and therefore, those whom we trust, based on their position on specific issues, like climate change [...] Extreme positions dominate the conversation, the potential for discussion or resolution disintegrates, and the issue becomes intractable.

This article has been adapted from Andrew Hoffman’s forthcoming book, How Culture Shapes the Climate Debate.
Andrew J. Hoffman is the Holcim (US) Professor of Sustainable Enterprise at the University of Michigan. He serves as Director of the Frederick A. and Barbara M. Erb Institute for Global Sustainable Enterprise. He has written and edited numerous books on business and environmentalism, including most recently How Culture Shapes the Climate Change Debate and Flourishing: A Frank Conversation About Sustainability.