

Communicating Climate Change to Religious and Conservative Audiences: The Case of Katharine Hayhoe and Andrew Farley

Doug Cloud,
Colorado State
University

Recent research suggests that climate change is a “tribal” issue. That is, some audiences deny the reality of anthropogenic climate change because of their group identities, not because they misunderstand the science. In this essay, I offer a case study of two Christian climate science communicators and their efforts to persuade religious and conservative audiences who are skeptical of the need to respond to climate change. I analyze three of their rhetorical moves that may be of interest to those who teach and practice public rhetoric. As I analyze these moves, I consider both their persuasive potential and tradeoffs.

THE CLIMATE CHANGE CONVERSATION AND ITS PROBLEMS

Climate change poses quintessential problems for public rhetoric scholars. It is a global-scale problem, but will require local action. Although sudden on a geological timescale, viewed from human time, it has crept up on us gradually, an unforeseen consequence of the actions of many individuals across long stretches of time. Responding to

it will also require the actions of many. And yet, as daunting as the problem may be to those who teach and practice public rhetoric, it poses familiar challenges: how does one constitute communities around a shared problem? What if they cannot agree on what to do about the problem? What if they cannot agree that there even *is* a problem?

Scholars outside of rhetoric and composition are exploring successes and failures in efforts to communicate the threat posed by anthropogenic climate change. A body of quantitative research has provided strong evidence that *group identities* (e.g. conservative or religious affiliations) present a formidable obstacle to convincing the public of the need to respond to climate change (Kahan “Climate Science Communication”; Kahan, “Ideology”; Kahan et. al, “Motivated Numeracy”; McCright and Dunlap; Whitmarsh). For example, Dan Kahan (“Climate Science Communication”) argues that public knowledge of science is not the problem; the problem is that arguments about climate change encourage us to think about *whose team we are on* rather than consider *what we know about climate science*. If group identities or “tribal” affiliations are indeed the problem, scholars of public rhetoric and community writing are uniquely positioned to help. Acting as rhetorical consultants, we may be able to help those in our academic and non-academic communities go beyond lamenting differences and consider how to talk across them, to recast diverse experiences and perspectives as resources rather than obstacles (Flower 64; Young 398-404).

Science communicators are already trying to bridge divides of group identity. This essay examines a years-long effort by two Evangelical Christians to convince religious audiences of the reality and threat of climate change. Katharine Hayhoe is a widely published atmospheric scientist and holds the title of associate professor of political science at Texas Tech University, where she directs a Climate Science Center. Her husband, Andrew Farley, is an associate professor of applied linguistics and second language studies, also at Texas Tech. Farley is a pastor of an Evangelical church. Although it is difficult to assess the success of any individual effort, theirs has received wide attention and accolades, including Hayhoe’s listing on *Time’s* 2014 list of the 100 most influential people (Cheadle). Both were featured

on Showtime's global warming documentary series, *Years of Living Dangerously*. Using Lexis-Nexis, I identified and analyzed over two hundred print articles in which they were quoted by name between the 2009 publication of their book on climate science (written for Christian audiences) and August 2015.

Hayhoe and Farley have been interviewed in broadcast and digital media as well as in Christian media, such as on the *Christian Broadcast Network* (Strand). When, in 2015, Jeb Bush suggested that it was "arrogant" to assert broad scientific consensus about climate change, the Citizens' Climate Lobby offered to pay for a meeting between Bush and Hayhoe, suggesting that, "...there is not an intellectually arrogant bone in her body, as anyone she has ever spoken with will attest... any conversation with her is both enlightening and delightful" (Reynolds). Although she has a national profile, Hayhoe regularly participates in local deliberation about how best to respond to climate change. Her role in local deliberation is not as well documented as her national outreach, but I have included below excerpts from a YouTube recording of her testimony before the Austin, TX city council (greenmanbucket).

This analysis traces Hayhoe and Farley's rhetorical strategies for talking about climate change with skeptical audiences, beginning with their non-academic book for religious audiences, *A Climate for Change*, then following their rhetoric through newspaper articles, interviews, and other media described above. The main goal of this essay is to ask, what can we learn from Hayhoe and Farley's efforts? What might rhetoric that bridges scientific and faith-based identities look like? Hayhoe and Farley model three rhetorical moves for talking about climate change with skeptical audiences: 1) they pivot toward shared values to minimize difference 2) they use local evidence to make climate change rhetorically present; and, 3) they disparage "tree-hugger" environmentalists. These moves offer a template for activists, science communicators and scholars hoping to act as rhetorical consultants for sustainability campaigns in their own communities. It is a cautious template, however. Although some of these moves show promise, they have tradeoffs. In three sections, I analyze each move, focusing not only on its advantages but also its limitations and ethical implications.

MOVE #1: PIVOTING TOWARD SHARED VALUES TO MINIMIZE DIFFERENCE

Hayhoe and Farley self-consciously emphasize shared values when they talk sustainability with religious audiences. At the core of their strategy seems to be the assumption that religious people balk at climate science arguments not because of religion per se but rather because some faiths correlate with political conservatism. This is why they appeal to shared values that de-emphasize the liberal reputation of environmental politics. Sometimes they emphasize abstract values (e.g. justice) via reference to religious texts. For example, in their book, *A Climate for Change*, they draw on the Good Samaritan parable to emphasize the abstract values of charity and love for one's neighbor:

The New Testament tells us to care for the poor and to be kind of strangers. Today, the poor and people who are currently “strangers” to us are most vulnerable to harm from climate-related impacts. Loving these people involves decision making in the here and now. The only sensible response to climate change is to minister to the hurting, loving our global neighbors as ourselves, just as the Good Samaritan did to the man lying in the road. We shouldn't simply look the other way or, even worse, perpetuate the idea that it's *not* really happening. (127-128)

In other cases, Hayhoe and Farley appeal to more pragmatic, concrete values (e.g. water quality), which are not explicitly religious but are broad enough to cut across political affiliation, as in a 2013 *LA Times* article, in which Hayhoe argues that climate change “affects our food, our water, our health, our roads... [etc.]” (Barboza para. 10). This is a smart move and not just for religious audiences. Research has suggested that public audiences find the concrete value of public health (e.g. clean air and water) more persuasive than other frames (e.g. animal extinction) for talking about climate change (Maibach et. al 10).

An appeal to shared values is a basic rhetorical move—something one should try to do in any argument. What makes it worth mentioning here is the *pivot*. Hayhoe and Farley don't just emphasize shared values; they use these values to move away from climate change as a

conservative/liberal issue, to downplay difference. Another example from *A Climate for Change*:

...Christians are beginning to realize that climate change is really about physical changes that can have serious consequences on our lives. It's about temperature records and rainfall patterns, not liberals or conservatives. We've reached the point where we can no longer stand by, believing that climate change is the invention of some radical mastermind to push forward his or her political agenda. (xvii)

Note the presence of *really*. It suggests that Hayhoe and Farley are turning away from someone else's image of what climate change is all about. Here one sees the ultimate goal of the pivot: to acknowledge and de-emphasize group identities that interfere with action on climate change (in this case, liberal/conservative). Hayhoe makes this aim explicit in a *Daily Camera* article. She is describing a talk she was about to give in Boulder, Colorado:

"What I've found is often, we have to start by talking about values—the things we care about, that we share, and by building on a foundation of shared values," such as the future of today's children, or even the ability to enjoy hiking, skiing and the threat to those things posed by climate change. (Brennan)

Hayhoe and Farley's shared-values-pivot shows up elsewhere. Dan Kahan suggests we do something similar to steer the climate science conversation away from a "cultural status competition" ("Climate Science Communication" 2). He offers a case-in-point from his work on the Southeast Florida Regional Climate Change Compact (SFRCCC). The SFRCCC has been touted as an example of how local deliberation can move forward in spite of political gridlock at the national level (Struck). In Kahan's account, a town-hall moderator asks, what do "Republicans in Washington have against science?" One of the counties' mayors, a Democrat, responds:

"I think it's important to note," she said, gesturing to a banner adorned by a variety of corporate logos, "that one of the sponsors

of this Summit today is the Broward Workshop. The Broward Workshop represents 100 of the largest businesses in Broward County.” The owners of these businesses, she continued, were “not only sponsoring this Summit,” but actively participating in it and had organized their own working groups “addressing the impacts of water and climate change.” “They know what’s happening here,” she said to the moderator, who at this point was averting his gaze and fumbling with his notes. (Kahan “Climate Science Communication” 35)

There is something thrilling about the exchange as Kahan recounts it. Like Hayhoe and Farley, Kahan recommends we acknowledge and then turn away from political affiliations by emphasizing shared values, in this case the concrete value of strong infrastructure.

But can we really expect people to turn away from their political identities just because we mention shared values? A conversational bracketing¹ of political affiliation may not be so easy. If Kahan and his co-authors are correct, climate change “denial” among conservatives is not mere politicization; it is a manifestation of identity-protective cognition, an example of how our political decision making is often shaped by tribalism instead of evidence and reasoning (Kahan et. al “Motivated Numeracy”). We will not escape identity-protective cognition by swatting aside the conservative/liberal split like a buzzing insect. Instead we need to engage with these competing identities in a substantive way.

If we want to go deeper than a pivot to do more than just wave toward shared values, we might draw on a rhetoric of intercultural inquiry, in which “difference is not read as a problem but sought out as a resource for constructing more grounded and actionable understandings” (Flower 40). How can difference be a resource for addressing looming environmental catastrophes? During a heated public exchange with a city council representative in Austin, Hayhoe argued that conservatives reject climate change not because they do not understand the evidence but “because the solutions that have been presented are big government solutions...” And that is why, she argues, we should “give free market solutions a voice in this argument...” (greenmanbucket). Readers can likely name problems

with free market solutions to environmental degradation, but it is the move that matters here. Rather than merely negate difference via appeals to shared values, we can go further and engage difference as a resource—a chance to access bodies of knowledge from which may come other solutions.

MOVE #2: MAKING CLIMATE CHANGE RHETORICALLY PRESENT THROUGH LOCAL EVIDENCE

Hayhoe and Farley insist repeatedly that evidence of climate change is “in our own backyards.” They give climate change *presence* in the sense in which Chaïm Perelman and Lucie Olbrechts-Tyteca use the term. They select locally observable impacts to bring climate change out of the abstract and “make present, by verbal magic alone, what is actually absent but what [they consider] important to [their] argument...” (117). Their rhetoric encourages us to be direct observers of climate change, as in this example from their 2009 book:

In the United States, warmer temperatures have shifted the geographical ranges of many of our native plant and animal species, altering the timing of flowering and breeding. Ice on lakes and rivers is forming later in the year, and melting earlier. In the dry Western states, more winter precipitation is falling as rain, and less as snow. The snow they do get is now melting three weeks earlier in the spring. Warmer temperatures and earlier springs are increasing wildfire activity. (8)

As the years pass, Hayhoe and Farley’s rhetoric becomes more direct about the idea that people can literally see climate change around them. Here is an example from a 2014 article in *Sunday News* (Lancaster, PA):

“For so long, we perceived climate change as this distant issue that only matters to polar bears or some remote people in the Arctic,” adds Dr. Katharine Hayhoe, director of the Climate Science Center at Texas Tech University. “Now we can see the effects of climate change in our own backyards. Here in Texas, we never used to have fire ants.” (Crable 9)

During her 2015 exchange with Don Zimmerman, the Austin city council member who angrily questioned the reality and threat of anthropogenic climate change, Hayhoe repeats what I am calling “the backyard argument”:

And when we look around this world, it isn't about trusting what our 30 year satellites say; it's about looking at 26,500 indicators of a warming planet, many of them we can see in our own backyards. (greenmanbucket)

The backyard argument is a self-conscious strategy. In a 2014 *Christian Science Monitor* article about the 2014 National Climate Assessment (on which Hayhoe is listed as a lead author), she describes the thinking behind the backyard argument and similar moves. For her, it is about convincing audiences of the physical proximity of climate change:

“For the vast majority that feel that climate change may be an issue, but it's an issue that we're going to worry about later, or it doesn't matter to me, ... or it's not on my Top 10 priority list, for those this report really matters,” she says. “This report shows how climate is changing here and now and it matters to each one of us, no matter what part of the country we live in.” (Spotts)

Indeed, if one looks at the 2014 National Climate Assessment itself, one can infer Hayhoe's influence in passages that seem to take on her voice: “People are seeing changes in the length and severity of seasonal allergies, the plant varieties that thrive in their gardens, and the kinds of birds they see in any particular month in their neighborhoods” (Mellilo et al.1).

There is a risk to emphasizing the here-and-now as evidence of climate change. Science communicators have noted that the public's tendency to conflate weather (what is happening outside right now) and climate (long-term, statistical trends) helps fuel a false debate about climate change (Schweitzer). If we focus too much on local evidence for climate change, we may be unintentionally inviting the public to conclude, on the basis of other local evidence, that climate

change is *not* happening. Consider, for example, the 2015 incident in which Senator Jim Inhofe (R-OK) brought a snowball onto the U.S. Senate floor to show that climate change is not real (Kluger). Unseasonable cold is also evidence that we can see “in our own backyards.”

There’s another problem with relying too much on local, “in your face” evidence to make climate change present: it may not communicate the moral exigency of climate change. In a study of environmental commonplaces, Derek Ross found that many people say that observing climate change in their own environments matters, that “seeing is believing” (16). That fire ants have spread to a new part of Texas is evidence we can see (if we live in Texas). But fire ants moving farther north seems cause for pesticide, not systemic changes to address carbon emissions. Arguments for sustainability should include physically distant changes, too, because those changes can have larger implications than changes in our backyards. Consider the effects of rising sea levels on the Marshall Islands (Sutter). Unlike fire ants or lake ice, the possible devastation of the Marshall Islands showcases the moral implications of climate change—it is hurting real people right now.² Hayhoe and Farley do use examples from around the globe to show that climate change has moral implications. In their 2015 *Christian Broadcast Network* interview, she draws on global impacts to show the dangers of climate change:

Reporter (narration): but Hayhoe says global warming is hurting—even killing—thousands of people now, like causing stronger, longer heat waves.

Hayhoe: in 2003, there was a heat wave in Europe that led to 70,000 pre-mature deaths. That’s seven-zero, 70,000 people... who would not have died otherwise because that heat wave was so extreme. (Strand)

Backyard examples of climate change, such as changes in animal behavior, have strong evidentiary value. More physically distant examples, like the 2003 European heat wave example above, better show the moral consequences of inaction on climate change. How can we reap the benefits of both? We have to give physically distant

impacts rhetorical presence in the same way that Hayhoe and Farley are able to give backyard impacts rhetorical presence. One way to do this is by creating “vicarious proximity” (Mando). In an examination of anti-fracking arguments, Justin Mando argues that rhetors made environmental impacts more present for audiences by including concrete place names, invoking visual detail, drawing on first-person reporting and inviting those with extended familiarity with a place to “bear witness” to its degradation (5-9). These techniques may help make the physically distant impacts of climate change—which can be more urgent than changes in our backyard gardens—rhetorically present for skeptical audiences.

MOVE #3: DISPARAGING TREE HUGGER ENVIRONMENTALISTS

From the first pages of their book, Hayhoe and Farley dissociate themselves from a caricatured version of “tree hugging” environmentalists:

Bike to work. Hug a tree. Eat granola. Live off the grid. Wear hemp. Bathe in a stream. And worship the earth. We often find ourselves labeled—just because we think global warming is a serious problem people should know about. But here’s who we really are. We’re Christians. We don’t worship the earth. We worship the creator of the Universe. (xi)

Following their rhetoric through the years, one can see this move become a go-to for convincing audiences that Hayhoe and Farley are not like those *other* environmentalists. Here is the move again in a 2011 *LA Times* article that was reprinted in West Virginia’s *Charleston Gazette*:

A Canadian, Hayhoe’s first attempts as a climate change evangelist focused on her skeptic husband: Like many American evangelicals, Farley grew up thinking that environmentalism was a leftist cause. “I saw climate change as the same as saving the whales, hugging trees and wearing hemp.” (Banerjee)

Here is a third example from their 2015 interview with *Christian Broadcast News*:

Reporter (narration): CBN News talked to Hayhoe and her husband, pastor Andrew Farley, in his home state of Virginia. Growing up there, he considered global warming an environmental fad.

Farley: whether it's, uh, save the whales or hug the trees or eat granola, you know, wear hemp. (Strand)

Farley is almost always the one who gives voice to the caricatured "greenie," though Hayhoe does it too:

...people think, "Oh, well, you can only care about climate change if you're a hardcore liberal, or if you're a green tree hugger, you know, or if you're this list of certain things, and if you're not any of those things, you can't care about climate change." (Democracy Now!)

Both Farley and Hayhoe list behaviors that supposedly mark out those who care about climate change (hugging trees, wearing hemp, bathing in streams, etc.). These behaviors do not cohere well as descriptors of a worldview. What, after all, has saving the whales or wearing hemp to do with limiting carbon emissions? But these lists *do* make sense as a caricature of the bad kind of environmentalist, a "foil" (D.L. Cloud 458) against which Hayhoe and Farley can articulate their identity as serious advocates of reasonable measures to address climate change. Given the apparent tendency of the public to see climate change as a tribal issue (Kahan "Ideology"), it is tempting to try to identify with skeptical religious audiences by disparaging lefty environmentalists. However, there are two drawbacks to this move.

First, the move reinforces an all-too-familiar image of environmentalists as irrational. In their study of ecological discourse, Killingsworth and Palmer critique media narratives in which environmentalists are cast as mere "spoilers" who resist progress of any kind (26, 31). At face value, Hayhoe and Farley's rhetoric would seem to do the opposite, by broadening environmentalism to include religious folks who do not "worship the earth" or hug trees. They seem to be saying, "we care about the earth, but do not wear hemp,

and neither must you.” Fair enough. However, there are already a diverse set of perspectives on nature and ecology from which to object to environmental degradation (Killingsworth and Palmer 11-12). The idea that only wacko lefty enviros care about climate change was *always* an illusion. The stereotypes they are appealing to are out of date and leave out important voices—such as Native American groups—that have been speaking out about environmental degradation for decades.

The second problem with this move is an ethical one. Casting tree-huggers as undesirables implies that there is something wrong with a more spiritual brand of environmentalism. Why would environmentalism based on worshipping the Earth be any less legitimate than one based on worshipping Yahweh? Disparaging other environmentalists’ motives to redeem your own smacks of what sociologist Erving Goffman called “deminstrelization,” a process by which stigmatized individuals argue that “they are very sane, very generous, very sober, very masculine, very capable of hard physical labor and taxing sports, in short, that they are gentlemen deviants, nice persons like ourselves in spite of the reputation of their kind” (110-111). For skeptical audiences, it may help to know that people like them (e.g. religious, conservative) care about climate change. But this statement can be made *without* disparaging others who also care. Mocking Prius drivers or whale huggers feels more like a cheap shot than anything else. It may well get a laugh, but in the long term it is divisive. It reinforces the idea that we should not care about a public problem unless it is the exclusive province of those who look and sound like we do.

CONCLUSION: HOW TO WIN

At the end of 2015, I spent a sunny December afternoon sitting in a room full of PhD students from atmospheric sciences and other STEM fields. I was co-facilitating a workshop for the School of Global Environmental Sustainability at Colorado State University. The topic was how to talk to skeptical and hostile audiences about climate change, and I presented several of the findings from this study. I am always eager to put this kind of research in front of people for whom it has practical implications. I showed video footage of Hayhoe’s back-and-forth with Austin city council “climate denier”

Don Zimmerman joked that Hayhoe's ability to meet hostility with calm reasonableness does not seem human. I do not know how she can manage this, I told the audience, but she does and maybe you can too. Audience members seemed excited to talk rhetorical strategy, and they liked that my recommendations were drawn from the in-situ rhetoric of climate science communicators. Everyday people can use these moves too (or perhaps transform them, given knowledge of their drawbacks). One doesn't need to be a scientist or policymaker to craft a good public argument that can persuade skeptical audiences.

It's encouraging to see efforts by humanities scholars to help science communicators and the public face climate change. For example, at my institution, literature professors SueEllen Campbell and John Calderazzo run a project called *Changing Climates @ CSU*, which culls and annotates resources on climate change communication, offering tips for being persuasive, ways to better understand climate science, and strategies for individual action. Science historians Naomi Oreskes and Erik Conway have drawn much needed attention to the rhetorical dimensions of climate communication through their book and documentary, *Merchants of Doubt*. (Oreskes and Conway profile Bob Inglis, a former Republican Congressman who works to persuade conservative audiences in much the same vein as Hayhoe and Farley.)

As climate change becomes more urgent, so too should our efforts to convince citizens and policymakers to act. However, the urgency of climate change may tempt us to be overly strategic, to focus on *winning* arguments, and getting people to act by any rhetorical means necessary. But, as I have argued elsewhere, rhetorical moves have social consequences (D. Cloud 166). As rhetorical consultants in our communities, we must keep the ethical concerns of community literacy well in sight. We should try to "win" the climate change debate by seeking mutual understanding, not rhetorical domination. If we choose to crib from communicators like Hayhoe and Farley, we should strive to treat difference as a resource, focus on the moral implications of climate change (even if they are distant), and, lastly, refrain from stereotyping environmentalists, even if such stereotypes might create a fleeting identification with skeptical audiences.

NOTES

1. By “bracketing” I mean proceeding *as if* political divisions did not exist or were not relevant to the climate change debate. Nancy Fraser (118-121) argues that it is neither possible nor wise to try to bracket social inequalities in public discourse. By borrowing her term, I am suggesting that the same may be said of political affiliations.
2. Statistical research has shown that American Evangelicals do not yet see climate change as a moral issue. According to a study of religious attitudes toward climate change (Leiserowitz et. al), only around 16% of American Evangelicals consider global warming a major moral issue (6). The American public in general fairs little better, with only 21% identifying global warming as a major moral issue (23).

WORKS CITED

- Banerjee, Neela. "Spreading the Global Warming Gospel." *Los Angeles Times*, 7 Dec. 2011, <http://articles.latimes.com/2011/dec/07/nation/la-na-evangelical-warming-20111207>.
- Barboza, Tony. "Report on Climate Change Depicts a Planet in Peril." *Los Angeles Times*, 11 Nov. 2013, <http://articles.latimes.com/2013/nov/11/local/la-me-climate-change-20131112>.
- Brennan, Charlie. "Boulder to Host a Climate Change Expert Grounded in Science, Faith." *Daily Camera*, 31 Aug. 2014.
- Campbell, SueEllen, and John Calderazzo. "100 Views of Climate Change." *Changing Climates @ CSU*, <http://changingclimates.colostate.edu/about.html>.
- Cheadle, Don. "Katharine Hayhoe." *Time*, Apr. 2014, <http://time.com/70881/>.
- Cloud, Dana L. "Foiling the Intellectuals: Gender, Identity Framing, and the Rhetoric of the Kill in Conservative Hate Mail." *Communication, Culture & Critique*, vol. 2, no. 4, 2009, pp. 457–479.
- Cloud, Doug. "The Social Consequences of Dissociation: Lessons from the Same-Sex Marriage Debate." *Argumentation and Advocacy*, vol. 50, no. 3, 2014, pp. 157–167.
- Crabbe, Ad. "Ticked Off Report Says Climate Change Bugging Lovers of Outdoors." *Sunday News*, 24 Aug. 2014, p. 9.
- Democracy Now! "As GOP Candidates Question Climate Change, Texas & Oklahoma Hit by Devastating Floods Killing 23." *Democracy Now!*, 29 May 2015, http://www.democracynow.org/2015/5/29/as_gop_candidates_question_climate_change.
- Flower, Linda. "Talking Across Difference: Intercultural Rhetoric and the Search for Situated Knowledge." *College Composition and Communication*, vol. 55, no. 1, 2003, pp. 38–68.
- Fraser, Nancy. "Rethinking the Public Sphere: A Contribution to the Critique of Actually Existing Democracy." *Habermas and the Public Sphere*, edited by Craig J Calhoun, MIT Press, 1993, pp. 109–142.
- Goffman, Erving. *Stigma: Notes on the Management of Spoiled Identity*. Simon & Schuster, 1963.

- greenmanbucket. *Katharine Hayhoe Assailed by Angry Climate Denier in Austin. YouTube*, 28 Apr. 2015, <https://www.youtube.com/watch?v=swJTAAAs0ZsU>.
- Hayhoe, Katharine, and Andrew Farley. *A Climate for Change: Global Warming Facts for Faith-Based Decisions*. FaithWords, 2009.
- Kahan, Dan M. "Climate-Science Communication and the Measurement Problem." *Political Psychology*, vol. 36, Feb. 2015, pp. 1–43.
- . "Ideology, Motivated Reasoning, and Cognitive Reflection: an Experimental Study." *Judgment and Decision Making*, vol. 8, no. 4, 2012, pp. 407–424.
- Kahan, Dan M., et al. "Motivated Numeracy and Enlightened Self-Government." *The Cultural Cognition Project Working Paper No. 116*, 2013, http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2319992.
- Killingsworth, M. Jimmie, and Jacqueline S. Palmer. *Ecospeak: Rhetoric and Environmental Politics in America*. Southern Illinois UP, 1992.
- Kluger, Jeffrey. "Senator Throws Snowball! Climate Change Disproven!" *Time*, Feb. 2015, <http://time.com/3725994/inhofe-snowball-climate/>.
- Leiserowitz, Anthony, et al. *Climate Change in the American Christian Mind*. Yale Project on Climate Communication, 2015.
- Maibach, Edward W., et al. "Reframing Climate Change as a Public Health Issue: An Exploratory Study of Public Reactions." *BMC Public Health*, vol. 10, 2010, pp. 1–11.
- Mando, Justin. "Constructing the Vicarious Experience of Proximity in a Marcellus Shale Public Hearing." *Environmental Communication*, Feb. 2016, pp. 1–13.
- McCright, Aaron M., and Riley E. Dunlap. "Cool Dudes: The Denial of Climate Change Among Conservative White Males in the United States." *Global Environmental Change*, vol. 21, no. 4, Oct. 2011, pp. 1163–1172.
- Mellilo, Jerry M., et al., editors. *Climate Change Impacts in the United States: U.S. National Climate Assessment*. U.S. Global Change Research Program, 2014, doi:10.7930/JOZ31WJ2.
- Oreskes, Naomi, and Erik M. Conway. *Merchants of Doubt: How a Handful of Scientists Obscured the Truth on Issues from Tobacco Smoke to Global Warming*. Bloomsbury Press, 2010.

- Perelman, Chaïm, and Lucie Olbrechts-Tyteca. *The New Rhetoric: A Treatise on Argumentation*. Translated by John Wilkinson and Purcell Weaver, University of Notre Dame Press, 1969.
- Reynolds, Mark. "Mr. Bush, We Have Some Folks You Can Talk to About Climate Change." *Citizens' Climate Lobby*, May 2015, <https://citizensclimatelobby.org/mr-bush-we-have-some-folks-you-can-talk-to-about-climate-change/>.
- Ross, Derek G. "Common Topics and Commonplaces of Environmental Rhetoric." *Written Communication*, vol. 30, no. 1, Jan. 2013, pp. 91–131.
- Schweitzer, Jeff. "Confusing Weather and Climate: The False Debate about Global Warming." *The Huffington Post*, 18 Mar. 2010, http://www.huffingtonpost.com/jeff-schweitzer/confusing-weather-and-cli_b_417879.html.
- Spotts, Pete. "No Region of US Untouched by Climate Change, but Effects Vary, Report Finds." *The Christian Science Monitor*, 6 May 2014, <http://www.csmonitor.com/Environment/2014/0506/No-region-of-US-untouched-by-climate-change-but-effects-vary-report-finds-video>.
- Strand, Paul. "Christians Who Believe in Climate Change." *Christian Broadcast News*, Christian Broadcast Network, 19 July 2015, <http://www1.cbn.com/cbnnews/healthscience/2015/July/Christians-Who-Believe-in-Climate-Change>.
- Struck, Doug. "Climate Change Crusade Goes Local." *The Christian Science Monitor*, 9 Aug. 2015, <http://www.csmonitor.com/Environment/2015/0809/Climate-change-crusade-goes-local>.
- Sutter, John D. "You're Making This Island Disappear." *CNN.com*, June 2015, <http://www.cnn.com/interactive/2015/06/opinions/sutter-two-degrees-marshall-islands/>.
- Whitmarsh, Lorraine. "Scepticism and Uncertainty about Climate Change: Dimensions, Determinants and Change over Time." *Global Environmental Change*, vol. 21, no. 2, May 2011, pp. 690–700.
- Young, Iris Marion. "Difference as a Resource for Democratic Communication." *Deliberative democracy: Essays on Reason and Politics*, edited by James Bohman and William Rehg, MIT Press, 1997, pp. 383–406.

Doug Cloud is an Assistant Professor of Rhetoric and Composition in the Department of English at Colorado State University. He teaches courses in rhetorical theory, style, public writing, argument, and research methods. His scholarship focuses on the connections between rhetoric, social change and identity in several areas, including: LGBTQ rhetorics, atheism and environmental discourse.