# 7 Climate change countermovement organizations and media attention in the United States

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#### Introduction

How influential has the right-wing think tank Heartland Institute<sup>1</sup> been in shaping the United States (U.S.) Environmental Protection Agency (EPA) agenda under the Donald J. Trump administration? That was the main question that motivated a March 2018 lawsuit by the Environmental Defense Fund and the Southern Environmental Law Center. The legal suit claimed that the U.S. EPA failed to respond to a Freedom of Information Act request from six months earlier that demanded correspondence between the Heartland Institute and the EPA specifically about their red team-blue team proposal for evaluating scientific evidence of climate change (Reilly, 2018).

In its first year in power in the United States, the Trump administration proposed to form an adversarial red team to debate and debunk the science of climate change (seen as a blue team perspective) (Siciliano, 2017). In so doing, this approach effectively sought to restructure the peer review process and elevate outlier and contrarian views in the public arena. EPA Administrator Scott Pruitt introduced this military-strategy-style approach to evaluating climate research for policy applications, by proposing television debates to advance science in the public arena (Volcovici, 2017). Through this red team-blue team proposal (enlisting the help of the Heartland Institute), Pruitt began to identify potential contrarian scientists and economists as participants (Waldman, 2017). While a red team-blue team approach may be losing support both inside and outside the Trump administration, Pruitt has told the Heritage Foundation that there are ongoing plans to constrict climate science under the guise of reform (Waldman & Bravender, 2018).

Numerous events in recent years like these have re-calibrated contrarian considerations in the public arena. Developments like these have pointed to the reality that ideological polarization around climate change issues — particularly in the United States — has increased in the last thirty years (Dunlap, McCright, & Yarosh, 2016) and that media have also played a role in this trend (Carmichael, Brulle, & Huxster, 2017). These kinds of actions have also marked novel approaches to climate change countermovement or think tank strategies to oppose various forms of science and policy engagement from the local to national and international scales (Cann & Raymond, 2018).

This polarization emanating from strategies and tactics from U.S.-based climate change countermovement organizations or think tanks has led to fundamentally different interpretations of scientific evidence, highly varied public perceptions of uncertainty, and consequent policy confrontations and stalemates. In recent years, more attention has been paid to the structural, political, economic, and cultural roots of why, in the face of overwhelming scientific consensus, less than half of Americans believe that humans contribute to 21st century climate change.

In this chapter, we focus analyses on contrarian voices - often dubbed climate skentics, contrarians, dismissives, doubters, deniers, or denialists - that have gained prominence and traction in the U.S. public domain over time through a mix of internal workings such as journalistic norms, institutional values and practices, and external political, economic, cultural, and social factors. We connect these considerations to social networks of climate contrarianism and climate countermovement activities. We first outline the contemporary landscape of contrarians and contrarian countermovement organizations in the United States. Next, we share comprehensive text and network data to show how a patterned network of political and financial actors and elite corporate benefactors influence polarization effects. Then, we consider how and why these actors garner disproportionate visibility in the public sphere via mass media, and how media content producers grapple with ways to represent claims makers, as well as their claims, so that they clarify rather than confuse these critical issues. Last, in the U.S. context we discuss how contrarian actors are embedded in countermovement activities through ideological or evidentiary disagreement to the orthodox views of science, a drive to fulfill the perceived desires of special interests, and exhilaration from self-perceived notoriety. Through these dimensions, we explore how contrarians use celebrity as a way to exploit networked access to decision-making within the dynamic architectures of contemporary climate science, politics, and policy in the United States. We therefore interrogate the state of play of contrarian social networks and their effects - from individual attitudes to larger organizational and financial flows - in the U.S. context, commonly referred to as belly of the beast in terms of carbon-based industry power and political/societal/cultural polarization.

## Wither or thrive ye climate contrarian countermovement?

Questions taken up here involve considerations of how various *outlier* views – particularly those associated with movements from the ideological right – have influenced public discussions in the United States on climate change. How we identify outliers then as *contrarians* is worth some elaboration. We define climate contrarians as those who contest scientific views that the climate is changing and that humans contribute. By extension, we then define a climate change countermovement (CCM) organization (consistent with Brulle, 2014) as those that advocate against policies that seek action to mitigate climate change, especially mandatory restrictions and penalties on greenhouse gas emissions.<sup>2</sup> These

movements also advocate against substantive action to adapt to or mitigate climate change (McCright & Dunlap, 2000).

Over time, many terms have been invoked to describe a heterogeneous group of actors and organizations that counter many areas of convergent agreement in climate science and policy decision-making. In other words, they take up outlier perspectives. These include individuals and CCM organizations characterized as skeptics, contrarians, dismissives, doubters, deniers, and/or denialists. While many have pointed out that skepticism forms an integral and necessary element of scientific inquiry, its use when describing outlier views on climate change has been less positive. The term skeptic has been most commonly invoked to describe someone who (1) denies the seriousness of an environmental problem. (2) dismisses scientific evidence showing the problem, (3) questions the importance and wisdom of regulatory policies to address them, and (4) considers environmental protection and progress to be competing goals (Jacques, Dunlap, & Freeman, 2008).3 McCright (2007) defines contrarians as those who vocally challenge what they see as a false consensus of mainstream climate science through critical attacks on climate science and eminent climate scientists, often with substantial financial support from fossil fuels industry organizations and conservative think tanks.4 O'Neill and Boykoff (2010) further develop a definition of climate contrarianism by disaggregating claims-making to include ideological motives behind critiques of climate science, and exclude individuals who are thus far unconvinced by the science or individuals who are unconvinced by proposed solutions, as these latter two elements can be more usefully captured through different terminology.

It may be tempting to assemble a taxonomy of contrarianism, skepticism, or denialism, and by extension trace the amount of media coverage of certain claims makers in mass media. However, this approach risks under considering context and excessively focusing on individual personalities at the expense of political, economic, social, and cultural forces. Further complexity arises when drawing conclusions based solely on evident ties between carbon-based industry, contrarian lobbying, and climate policy. The important issue is not necessarily where the funding comes from, but whether these ties influenced the content of the claims made by funding recipients (Oreskes, 2004). Moreover, this approach cuts both ways, in that it risks dismissing legitimate and potentially useful critiques out of hand by way of dismissing the individual rather than the arguments put forward. Treatment of individuals through denigrating monikers does little to illuminate the contours of their arguments; it actually has the opposite obfuscating effect in the public sphere. In other words, placing blanket labels on claims makers overlooks the varied and context-dependent arguments they put forward.

In 2018, CCM organizations have enjoyed unparalleled access in the halls of U.S. Federal Government. Trump's nominations for key posts in the administration have sparked worry among those who care about climate and environmental protection, justice, and human well-being. These appointments include Secretary of State (former ExxonMobil CEO Rex Tillerson), EPA Administrator (Oklahoma Attorney General Scott Pruitt), Secretary of the Department of

Interior (Montana Congressman Ryan Zinke), and Secretary of the Department of Energy (former Texas Governor Rick Perry), all of whom maintain ties to carbon-based industry interests. In the United States, a patterned network of actors — individuals enmeshed in CCM organizations — bolstered by élite corporate benefactors has therefore demonstrably muddied the waters of discourse and action on climate change. They have also contributed to increasing political and social polarization on climate change.

## A climate cabal: patterned networks of political actors and corporate benefactors

The explosion of digitized data and archives have made possible a new approach to studying climate contrarianism that is much broader in focus, moving beyond small-scale studies or the over reliance on survey work. In two studies in 2016, Farrell used computational social science methods, including large-scale network science and machine learning (2016a, 2016b). We draw this into this article to consider the ways that a patterned network of political actors and corporate benefactors has come to exert influence over this issue.

New data, at much larger scales, provides new insight for uncovering the complex web of connections between industry, politicians, think tanks, and the shifting views of the American public. The data themselves include two interrelated parts:

- The full institutional and social network structure of climate change contrarianism
- A complete collection of written and verbal texts about climate change or global warming from 1993–2013 from every contrarian organization<sup>5</sup>

From these data a comprehensive social network was identified. This is made up of 4,556 individuals with ties to 164 organizations involved in promulgating contrarian views. The individuals in this bipartite network include interlocking board members, as well as many more informal and overlapping social, political, economic, and scientific ties.<sup>6</sup> This mapping of the structure of organizations, companies, and individuals involved in promulgating misinformation and disinformation about climate change has allowed us to examine the central messages, and in some cases, the extent to which the success of these messages is impacted by sources of funding. For historical reasons, research suggested that ExxonMobil and the Koch Family Foundation<sup>7</sup> have shown themselves to be particularly important backers of CCM groups.<sup>8</sup>

Figure 7.1 shows how climate countermovement organizations in the United States are connected to multiple people, and that not all CCM organizations are created equally. What is important about this figure is that there is a noticeable core of organizations, clustered together. In line with Farrell (2016a, 2016b), this shows that not all organizations are equally connected, but that there is a smaller clique of organizations that exert more influence in the CCM, and these organizations are the ones that received funding from the Koch Family

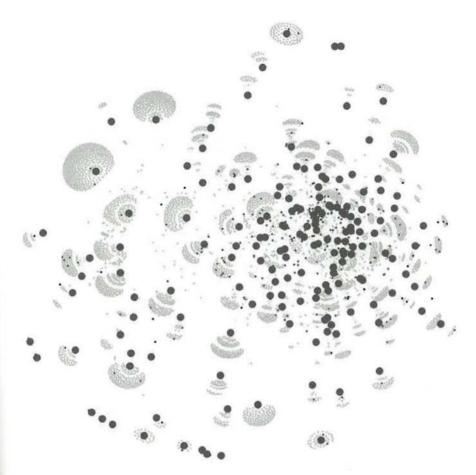


Figure 7.1 Network mapping of climate countermovement organizations and individuals in the United States. The larger black dots represent the 164 organizations involved in spreading misinformation and disinformation about climate change. The smaller grey dots are individuals connected to each organization. The thin grey lines signify each connection an individual has to each organization.

Foundation and ExxonMobil. Through these analyses we find that funding is an important predictor of who is in the core, and thus, who has more connections with more individuals, enabling them to organize the CCM around unified messages and strategies for disseminating those messages.

Influential contrarian actors have also moved from these CCM groups into posts in the U.S. Trump administration. For example, Myron Ebell has been the chair of the Cooler Heads Coalition as well as the Director of Global Warming and International Environmental Policy at the Competitive Enterprise Institute. In 2017 he was selected by U.S. President Donald J. Trump to lead the Environmental Protection Agency transition team. Ebell has been quoted 126

acknowledging that his advocacy from these positions "does bleed into political persuasion and lobbying" for particular policy outcomes but countered that these activities are both commonplace and legal (O'Harrow Jr, 2017).

When interrogating how funding from these groups impacts CCM messaging (and by extension the policy decision-makers they seek to influence), we find it useful to then trace a spread of misinformation through U.S. media to and through the political landscape into the minds of the collective public citizenry. It is important to confront the reality that, through this analysis, there is indeed a configuration of leading CCM organizations that can accurately be described as a *climate cabal*.

## U.S. media amplification of CCM organizations and climate contrarian perspectives

In this chapter we trace eleven influential and U.S.-based CCM organizations through media attention to their movements and activities over the past thirty years in eleven prominent television and newspaper outlets. The eleven CCM groups are the Cooler Heads Coalition, the Global Climate Coalition, the Science and Environmental Policy Project, Americans for Prosperity, the Cato Institute, the American Enterprise Institute, the Heartland Institute, the Heritage Foundation, Committee for a Constructive Tomorrow, the George C. Marshall Institute, and the Competitive Enterprise Institute. The eleven U.S. outlets are ABC News, CBS News, CNN News, Fox News, MSNBC, NBC News, Washington Post, Wall Street Journal, New York Times, USA Today, and Los Angeles Times.

Figure 7.2 depicts media attention for each of these CCM groups month to month over these three decades across U.S. television and U.S. newspapers. Figure 7.3 shows data year to year. In these figures we see CCM presence increased greatly after 2006. With the exception of a spike in CCM visibility in the media around the time of the 1997 Kyoto Protocol, coverage was considerably lower in the past. The average year-to-year coverage of these CCM organizations from 1997-2006 was about a third (33 per cent) of the average amount of their visibility in the U.S. media over the subsequent decade 2007–2016. 10 In particular, there was a significant increase in media presence of CCM organizations at the end of 2009 and through 2010, following the November 2009 so-named email hacking scandal emanating from the University of East Anglia (also known as Climategate). There was also a notable uptick in the Heartland Institute's media presence at the end of 2012, due in part to fallout from the release of its May 2012 billboard ad comparing climate believers with the notorious Ted Kaczynski (the Unabomber). In 2014, Americans for Prosperity (AFP)11 received a bump in media attention. In 2014, AFP's anti-climate legislation campaigns were given a boost through a tripling of funding form the Koch Family Foundation (Mayer, 2016). AFP President Tim Phillips, along with others from AFP, then effectively garnered attention in media to shape public discourse surrounding the 2014 mid-term elections in the United States, particularly stating how AFP was working to aggressively

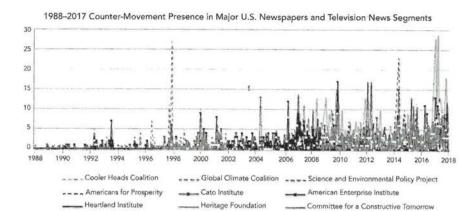


Figure 7.2 Monthly media coverage over thirty years (1988–2017) (ABC News, CBS News, CNN News, Fox News, MSNBC, NBC News, Washington Post, Wall Street Journal, New York Times, USA Today, and Los Angeles Times) of the Cooler Heads Coalition, the Global Climate Coalition, the Science and Environmental Policy Project, Americans for Prosperity, the Cato Institute, the American Enterprise Institute, the Heartland Institute, the Heritage Foundation, Committee for a Constructive Tomorrow, the George C. Marshall Institute, and the Competitive Enterprise Institute.

George C. Marshall Institute \_\_\_\_ Competitive Enterprise



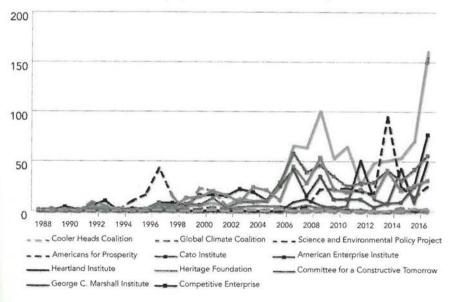


Figure 7.3 Media coverage year-to-year 1988–2017 of the Cooler Heads Coalition, the Global Climate Coalition, the Science and Environmental Policy Project, Americans for Prosperity, the Cato Institute, the American Enterprise Institute, the Heartland Institute, the Heritage Foundation, Committee for a Constructive Tomorrow, the George C. Marshall Institute, and the Competitive Enterprise Institute.

sink the election hopes of any candidate who supported a carbon tax or other climate regulations. Furthermore, there has been increased visibility of these eleven CCM groups in U.S. media since the election, inauguration, and establishment of the Trump administration. Total coverage in 2017 (403 stories/segments) was about double that of the average coverage over the previous decade of coverage of these groups (189 stories/year from 2007–2016). Specifically, the Heritage Foundation, Competitive Enterprise Institute, American Enterprise Institute, and Heartland Institute gained increased visibility in 2017. U.S. media accounts noted, for example, that the Trump administration embraced numerous Heritage Foundation policy recommendations articulated in its *Mandate for Leadership* series of publications. Among these recommendations was a strong stance on leaving the Paris climate change accord. By the Heritage Foundation's own boastful accounts, 64 per cent of its policy prescriptions from that series were then included in Trump budget proposals (Bedard, 2018).

Figure 7.4 shows CCM organizations' media presence in U.S. television news segments, while Figure 7.5 shows these CCM groups' presence in U.S. newspaper articles, both from 1988–2017.

Through these analyses of media influence by these CCM organizations in these eleven U.S. outlets, we find that influence in public discourse – indicated through media coverage – is shaped by founding and funding (e.g. the Global Climate Coalition was heavily supported in the 1990s).

#### 1988-2017 Counter-Movement Presence in Major Television News Segments

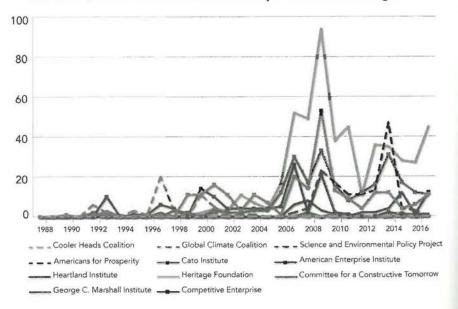


Figure 7.4 Media coverage year-to-year 1988–2017 of the eleven CCM organizations on ABC News, CBS News, CNN News, Fox News, MSNBC, and NBC News.

#### 1988-2017 Counter-Movement Presence in Major U.S. Newspapers

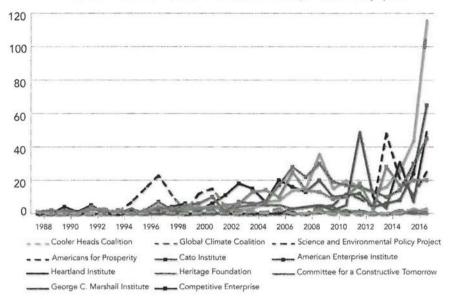


Figure 7.5 Media coverage year-to-year 1988–2017 of the eleven CCM organizations in the Washington Post, Wall Street Journal, New York Times, USA Today, and Los Angeles Times.

Figure 7.6 shows proportions of coverage from year to year in each outlet across these eleven organizations overall. Noting that Fox News and MSNBC began coverage in 1996, our research shows that the *Washington Post* and *New York Times* contribute most significantly to coverage of these prominent CCM organizations. In an era of *naming and shaming* of the Fox News Network by many from the left, these findings may run counter to common perceptions that attention paid to these CCM groups in U.S. media may be attributed to outlets with right-of-center ideologies, stances, and reputations. While Boykoff has referred to a "Rupert Murdoch effect" via Fox News (2011) in terms of how Fox shapes the content of climate change coverage in the U.S. press, these findings do not support the notion that Fox or the *Wall Street Journal* are primarily responsible for the amplification of these particular outlier perspectives in climate change stories.

In fact, in 2017 half of the coverage of these eleven groups was in the Washington Post, and 26 per cent of coverage appeared in the New York Times. Meanwhile, 7 per cent was in Fox News, and no stories in the Wall Street Journal covered these groups along with climate change issues. Expanding out across the twenty-two-year period from the founding of Fox News and MSNBC (1996–2017), over half the coverage (51 per cent) of these CCM organizations was carried through the Washington Post and New York Times. Meanwhile, just

## 1988–2017 Counter-Movement Presence in Major U.S. Newspapers and Television News Segments

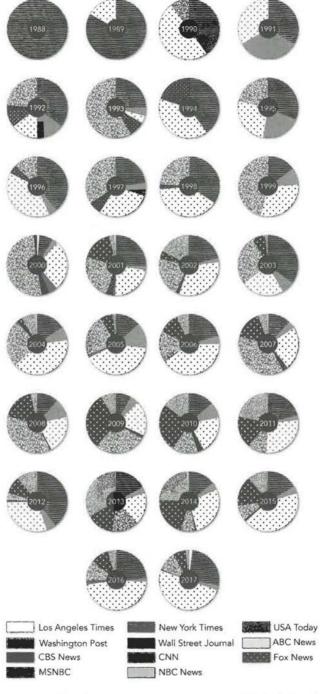


Figure 7.6 Proportions of media coverage year-to-year 1988–2017 of the eleven CCM organizations across ABC News, CBS News, CNN News, Fox News, MSNBC, NBC News, the Washington Post, Wall Street Journal, New York Times, USA Today, and Los Angeles Times.

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15 per cent of the volume of coverage of these CCM organizations appeared on Fox News and in the *Wall Street Journal*, seen typically as bastions of right-of-center voices on climate change and other issues. <sup>12</sup> Over this same time period 19 per cent of coverage was on CNN, with 9 per cent on MSNBC, 5 per cent in the *USA Today*, and about 1 per cent each on ABC News, CBS News, NBC News, and in *Los Angeles Times*. Therefore, our findings show that naming and shaming of right-wing outlets for amplifying the volume of CCM organizations and their associated contrarians is misplaced.

Moving from the amount of coverage of CCM groups to the impact of this coverage, we can explore considerations regarding how CCM voices work through the media to stymy efforts seeking to enlarge rather than constrict the spectrum of possibility for mobilizing the public to appropriately address ongoing climate challenges. Twists and turns in the high profile, highly contentious science, policy, and politics around climate change in the United States have enabled contrarians to gain increased footholds in battles for public understanding and engagement regarding the causes and consequences of climate change. The relationship between CCM organizations and climate contrarians has been studied extensively in the U.S. context (e.g. Dunlap & McCright, 2011). Boykoff and Olson have posited that climate contrarians may effectively act as contemporary climate courtesans to CCM organization interests (fueled by their corporate backers) (2013). To get at reasons how and why CCM organizations and climate contrarians influence U.S. climate change discourse through media, here we trace their traction utilizing a combination of quantitative and qualitative approaches.

Partial explanations to these considerations reside in examinations of institutional features of media representational practices, particularly in the United States. Through computational social science approaches, Farrell has found that funding of CCM groups influenced the actual language and thematic content of media stories, and the polarization of discourse in particular (2016b). Farrell found that well-funded CCM organizations were more likely to have written and disseminated contrarian texts through the media. Boykoff has argued that in the name of efficiency, reporters increasingly cover a vast range of beats, making it ever more difficult to satisfactorily portray the complexities of climate change (2011). Meanwhile, media institutions and practices have produced content by seeking refuge in journalistic tendencies of personalization and drama, privileging conflicts and contentions among messengers over treatment of arguments and assertions (Weingart, Engels, & Pansesgrau, 2000). Boykoff and Boykoff (2007) have outlined and examined the journalistic norms of personalization, dramatization, novelty, authority-order bias, and balance, as they shape both what become media representations and news. 13 Our findings here further support this previous research where greater funding for the Cato Institute, Heartland Institute, and Heritage Foundation over the last decade appears to translate to media visibility (see Figures 7.2, 7.3, 7.4, and 7.5). These most powerful organizations at the center of this cabal have received high levels of funding from powerful donors like ExxonMobil and the Koch Family Foundation.

Along with these computational social science approaches, we gain further insights through qualitative discourse analysis approaches through a lens of

cultural politics. These routes help consider ways that claims and claims makers influence media representational practices, and how these portravals then influence public discourse. Cultural politics refers to dynamic and contested processes behind how meaning is constructed and negotiated, and involves not only the portrayals that gain traction in discourses, but also those that are absent from them or silenced. Moreover, discourses tether to material realities and social practices (Hall, 1997). In these spaces, when media call on CCM organizations and climate contrarians for alternative interpretations of climate science and policy information, public discussions are altered. Logically, actors (e.g. journalists and editors) within mass media constantly must make swift decisions regarding how to articulate climate concerns by who they select as experts or authorized definers to frame the issues (Carvalho, 2007). Media coverage of climate change shows that the boundaries between who constitute authorized speakers (and who do not), and who are legitimate claims makers are consistently being interrogated, and challenged (Gieryn, 1999). Essentially, media often connect formal science-policy and informal spaces of the everyday together. Media representations then become powerful conduits of climate science and policy (mis)information. There are many factors that shape how members of the public citizenry consider possible responses to and engagements with climate change. Qualitative analyses of media representations then help to see how decisions about portrayals (quantity and quality) shape how public citizens consider possible responses (Brulle, Carmichael, & Jenkins, 2012) and how they play into climate governance at multiple scales in the United States (Fisher, 2013).

There are many cases where CCM organizations have targeted the power of media to amplify certain views, and where media have exposed initiatives to manipulate public perception of climate change (Boykoff, 2013). For instance, emboldened by the inauguration of U.S. President Trump, the Heartland Institute held its twelfth nearly annual conference on climate change in Washington, DC.14 Attended by prominent political figures such as Congressional Representative Lamar Smith (Republican from Texas), the conference was geared to amplify these outlier views at the science-policy interface (Mervis, 2017). Yet these are by no means recent dynamics. To illustrate by way of another example a decade earlier, in 2006 ABC News revealed that the Intermountain Rural Electric Association paid \$100,000 to climate contrarian Patrick Michaels (a frequent representative of the Cato Institute) to reach out to media outlets and downplay humans' role in climate change as well as confuse public understanding of anthropogenic climate change (Sandell & Blakemore, 2006).

Two key challenges continue to persist in mass media that are relevant to the ways in which CCM organizations and contrarians have been covered: First, media representations have often collapsed messenger viewpoints, interventions, and perspectives into overly homogenized terms of climate skepticism, contrarianism, denialism, and so on; and second, media have often overlooked the texture within climate change issues, instead providing broad-brushed treatments of discussions and debates therein.

There are many reasons why media accounts have failed to provide greater nuance regarding these heterogeneous CCM groups and associated contrarian

views. Among them, processes behind the challenging of dominant discourses take place simultaneously at multiple scales. Large-scale social, political, and economic factors influence everyday individual journalistic decisions, such as how to focus or contextualize a story with short time to deadline. These issues intersect with processes such as journalistic norms and values to further shape news content. 15 Moreover, media reports have a tendency to conflate the vast and varied terrain as unified issues: From climate science to governance and from consensus to debate. To the extent that mass media fuse all these issues into one, they enhance bewilderment rather than understanding. Media coverage of disagreement and dissension - stripped of needed context - significantly then (re)shapes understanding for the public citizenry. While there are facets of climate science and policy where agreement is strong and convergent agreement dominates, and others where contentious disagreement garners worthwhile debate and discussion in the media, conflation of these distinctions into one sweeping issue contributes to confusion and sets up a breeding ground for manipulation from outlier viewpoints. CCM organizations and contrarian actors can thrive in these spaces where muddying the waters of productive climate change discourse becomes quite easy and feasible through media channels. Consequently, opportunities to effectively help the public engage in the nuance involved in dealing with complex contemporary climate challenges are then squandered.

For example, over the past decade the aforementioned Heartland Institute has emerged as a leading contrarian countermovement organization that questions both diagnoses that humans contribute to climate change, and a range of prognoses for mitigation policy action. As was mentioned earlier, the Heartland Institute promotes free-market policy approaches to a number of critical public issues such as climate change, healthcare, education, taxation, and tobacco regulation. In recent years, the Heartland Institute has achieved celebrity status as a "primary American organization pushing climate change scepticism" (Gillis, 2012).

Together, these analyses help provide more textured understandings of how and why outlier views in climate science and governance gratuity are provided media visibility. Ultimately, disproportionate coverage of CCM group claims – communicated through mass media – has challenged efforts that seek to expand rather than constrict the spectrum of possibility for varied forms of U.S. climate action. To more effectively inform and engage – rather than confuse and bewilder – the public, journalists, and editors, as well as researchers, scientists, policy actors, and other non-nation state actors, need to account for the nature of the disproportionate influence of these CCM organizations in U.S. media.

# How CCM organizations and contrarian actors embed in U.S. society

In the case of climate change, one can consider the overwhelming convergent agreement within relevant expert communities in science that humans play a significant role in today's changing climate (amidst an ongoing background of natural climate forcing). However, movements from this diagnosis to prognoses

for action are contentious. In other words, the path from appraising the way things are to the way it is thought they ought to be is fraught with discussions, debates, and disagreements. It is within these spaces that one finds clashes as well as confluences of culture, politics, economics, and society over time (Hoffman, 2015). In this chapter we have focused on a heterogeneous, yet loosely configured, set of actors dubbed climate contrarians, who at times have achieved outsized notoriety in contemporary discussions of climate science, politics, and policy in the 21st century public sphere.

In 2018, CCM organizations and associated climate courtesans have achieved veritable *celebrity status*. Beyond the quantitative evidence in this chapter that supports this claim, we can also consider the actions of Donald J. Trump, who currently occupies the Oval Office as President of the United States. Many climate researchers have expressed fears of *McCarthyist attacks* in the wake of the election of U.S. President Donald J. Trump. For example, Kerry Emmanuel from the Massachusetts Institute for Technology (MIT) has commented, "I think we're in a mild state of shock after the election. Politics has [sic] been turned upside down and all of these dark forces have erupted" (Milman, 2017).

In 2013, Boykoff and Olson explored what they called "wise contrarians", those who have gained distinction primarily by way of activities associated with anti-regulatory, anti-environmental, skeptical, and neoliberal environmental movements aligned with those on the ideological right. In addition, wrapped up in these stances are the dismissal, denigration, and demonization of evidentiary statements that are contrary to these views. The wise here does not emanate from wisdom. Rather, Boykoff and Olson argue that claims, motivations, drives, and desires within U.S. climate contrarian movements map usefully onto the U.S.-based historical Wise Use movement (McCarthy, 2002). 16 Wise Use proponents made use of common sense appeals to the conservative middle-class, speaking to the ideology of freedom and liberty, above all, which connects dually with the individual-centric doctrine as well as that of neoliberalism and the free market. Both Wise Use and CCM groups self-label ambiguously (e.g. the Cooler Heads Coalition) and in ways that invoke environment-economy and regulation-freedom dichotomies (e.g. Americans for Prosperity, the Competitive Enterprise Institute). The slogan of the Cooler Heads Coalition in fact is "May Cooler Heads Prevail", and this rhetoric of common sense is prevalent among both the Wise Use and climate contrarian movements.

There are dangers that can be associated with a focus on contrarians themselves. Among them, analysis (and potential scrutiny of the individual) may come at the expense of attention paid to connections between their interventions and macro-level political, economic, and societal dimensions. In other words, when focused on the movements of individual contrarians, such attention could displace deeper structures and architectures that give rise to the effectiveness of their claims in the public arena. Scholars have identified a range of motivations that drive CCM organizations, and many also animating Wise Use efforts. Jacques theorized that an "organized deflection of accountability" is also inspired by the drive to defend the notion of an *American* ideology (2012). Protecting corporate freedom and, thus, profits is another motivator.

Some – largely from within the movement itself – argue that contrarian stances have staked out part of a contemporary Copernican revolution in climate science and policy, helping the general public to overcome collective delusion that humans play a role in modern climate change and that migration and adaptation actions need to be taken to address associated challenges.

Perceived academic martyrdom, exclusion from the institution, and the unraveling of the scientific method are also complaints leveled against climate science and activism. They can also be elements that appear to generate exhilaration within climate contrarian communities, particularly within the celebrity members themselves. Motivations are part cultural and part psychological: Research by Lahsen (2013) has found that many contrarian scientists who cut their teeth in the 1960s and 1970s have tended to view climate modeling and other developments in climate science that followed in the 1980s and beyond as inaccurate, variable, and ungrounded. Meanwhile, these articulations are part politics and part economics. For instance, at the time of the release of the United Nations (UN) Intergovernmental Panel on Climate Change (IPCC) Fourth Assessment Report, it was revealed that the American Enterprise Institute (AEI) - a group receiving funding from ExxonMobil Corporation - was soliciting contrarian voices. At that time AEI was reportedly offering \$10,000 "for articles that emphasized the shortcomings of [the Fourth Assessment] report from the UN IPCC" (Sample, 2007, p. 1). In this way, the group was calling out for particular and dissenting inputs and therefore undermining the integrity of the scientific process. As such, it has often been the case that funding-driven influences cohere with ideologically driven motivations by way of contrarian arguments questioning a range of relevant expert views across the climate science and policy spectrum (Barringer, 2012).

Amidst these highly contested, highly politicized, and high-profile cases of climate science and policy, answers to questions of commitments, motivations, and actions are complex, dynamic, and varied across claims makers and the claims they make. Yet, the amplification of these arguments in the public sphere through U.S. media accounts influences public understanding and engagement as these anti-regulatory, anti-environmental, and neoliberal environmental arguments coalesce in these CCM epistemic communities. Aforementioned celebrity public intellectuals such as Myron Ebell (the Competitive Enterprise Institute) and Tim Phillips (Americans for Prosperity) have shown themselves to thrive on recognition gained from these stances in the public arena.

### Conclusion: the fossils among us

Moving between climate science, politics, and policy, scholars such as Schneider (2009) and Dunlap (2013) have pointed out differences between contrarianism derived from ideology and contrarianism derived from scientific evidence. Over the past thirty years, anti-regulatory, anti-environmental, and neoliberal contrarian CCM groups have been influential in the U.S. public arena. These amplified views are a reflection of contemporary cultural politics, and they will not disappear anytime soon (Lewandowsky, Ecker, Seifert, Schwarz, & Cook,

2012). The influence of climate contrarianism is also a function of cultural, journalistic, political, and social norms.

Yet, there is the enduring notion (or hope) that events may unfold where these CCM groups that are seen to comprise this *climate cabal* will eventually be pushed to the fringes and become irrelevant along with their outlier views. However, ongoing research in the social sciences suggests otherwise. In this chapter, we have sought to further map CCM organization and contrarian voices and perspectives in U.S. discourse, by way of analyses of U.S. media over the past thirty years. We therefore have endeavored to help unravel how contrarian CCM organizations in the United States demonstrate themselves to be (at times deliberately) detrimental to efforts seeking to enlarge rather than constrict the spectrum of possibility for varied forms of climate action in this high-stakes, high-profile, and highly charged public arena.

While some point to the climate cabal as the fossils of climate science, politics, and policy, the fossils among us are those who fail to recognize the importance of trying to understand their actions as contemporary and influential right-of-center social movements. Thus, the interest to better understand how these interventions have contributed to (mis)perceptions and (mis)understandings that shape the spectrum of possibility for responses to contemporary climate challenges motivates us.

#### Notes

- 1 The Illinois-based Heartland Institute was founded in 1984 and is motivated by free-market policy approaches to issues including climate change.
- 2 We use climate change countermovement organizations, contrarian countermovement organizations, climate change countermovement groups, contrarian countermovement groups, and think tanks here interchangeably.
- 3 These authors discuss environmental skepticism, but the characterization holds for climate skepticism as well.
- 4 Those attacks have given rise to the Climate Science Legal Defense Fund, set up in 2011, to provide legal support to counter the impacts of contrarian attacks (Schwartz, 2017).
- 5 This amounted to 40,785 documents containing over thirty-nine million words.
- 6 In this Farrell dataset, the organizations include a complex network of think tanks, foundations, public relations firms, trade associations, and ad hoc groups.
- 7 The Koch Family Foundation and its connected organizations have provided funding for the creation of a number of conservative organizations, including the Cato Institute and Americans for Prosperity. This Family Foundation has generated funds from the success of Koch Industries, which is the largest privately owned U.S.-based energy company. Koch Industries generates energy from fossil fuels and has a large stake in oil refining processes (Fifeld, 2009; Mayer, 2010).
- 8 These have not been the only corporate and foundational actors in the climate change countermovement, but they have at times been the most active, based on Internal Revenue Service 990 Form data.
- 9 We used a Boolean string to search for the organization's name and "climate change" or "global warming". In other words, we gathered TV segments and newspaper articles whenever the organization was explicitly named along with a mention about global warming or climate change. This was irrespective of whether these articles/segments may have covered them in a positive, neutral, or negative manner.
- 10 The years 1997–2006 saw an average of 63.1 stories or segments per year, while 2007–2016 saw an average of 189 stories/segments per year.

12 Coverage was found here to be 32 per cent in the Washington Post, and 19 per cent was in the New York Times, while 14 per cent was on Fox News and less than 1 per cent appeared in the Wall Street Journal.

13 Contrarian claims feed journalistic pressures to serve up attention-getting, dramatic personal conflicts, thereby drawing attention towards decontextualized individual claims-making, and away from critical institutional and societal challenges regarding carbon consumption that calls collective behaviors, actions, and decisions to account.

14 Since 2008, the Heartland Institute has organized nearly annual meetings and called

them "International Conferences on Climate Change".

15 Objectivity, fairness, and accuracy are prominent here (Cunningham, 2003).

16 The Wise Use movement arose in the American West in the late 1980s, later spreading across the country as a national anti-environmental effort. Wise Use fought for private property rights, decreased environmental regulation, and unrestricted access to public land for mining, logging, grazing, drilling, and motorized recreation. It was a coalition of individuals, movement leaders, NGOs, and corporations that aligned behind an environment or economy dichotomy. The birth of Wise Use marked the rise of the modern neoliberal, anti-regulatory, anti-environmental movement prevalent today in which individual rights, private property, and free enterprise are prioritized over environmental protection. Wise Use postured as advocating for rural residents' and resource laborers' rights, conceiving of environmentalists as distant, urban elites who remained out of touch with the needs of those who were on the ground and engaged in the production of natural resources. On the other hand, Wise Use had many corporate ties and simultaneously served the interests of extractive corporations whose profits could be affected by implementation of environmental regulations. Wise Use has been understood to be an expansion of the earlier Sagebrush Rebellion land revolts that spanned the 1960s and 1970s, which were a reaction to the advent of the new, vigorous environmentalism of the 1960s and 1970s.

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