

Environmental countermovements

Organised opposition to climate change action in the United States

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In June 1988, NASA scientist Dr James Hansen testified before Congress that “the greenhouse effect has been detected, and it is changing our climate now” (Hansen 1988: 40). Hansen’s testimony forced the issue of climate change into American public consciousness. It also marked the beginning of a long political struggle to deal with carbon emissions in the United States. Twenty-nine years later, in a surprisingly festive ceremony in the Rose Garden on 1 June 2017, US president Donald Trump announced that the United States was withdrawing from the Paris Climate Accord, an international agreement signed a year earlier by 195 countries to mitigate greenhouse gas emissions.

These two events bookend the ongoing political contention over US responses to climate change. During this time period, atmospheric scientists have provided increasingly clear and dire evidence of alterations in the earth’s climate system, including five United Nations Intergovernmental Panel on Climate Change (IPCC) Assessment Reports, and four US National Climate Assessments. There have been over 600 Congressional hearings on the topic, and hundreds of bills introduced to address this issue. Yet neither scientific evidence nor political mobilisation has resulted in meaningful action in the United States to curb the effects of climate change.

Instead, efforts to take action on climate change have encountered substantial social inertia as well as cultural, institutional, and individual resistance. There are multiple explanations for this failure to mobilise. One dominant explanation centres on institutionalised efforts to oppose action on climate change (Dunlap and McCright 2015). In this chapter, we provide an overview of research on institutional strategies to oppose limits on carbon emissions (for a discussion of institutional barriers to decarbonisation, see Lane in this volume). This research reveals that organised opposition to climate change action is a sophisticated system that operates at multiple institutional levels and within multiple time frames. It uses a wide variety of tactics to influence cultural perceptions of, and political action towards, climate change. Media institutions also play a role through the promulgation of climate misinformation, which has had a significant impact on public opinion and communication.

The US case is relevant to global sustainability efforts for a number of reasons. As one of the regions of the world most responsible for contributing to climate change, the United States is broadly deemed responsible for leadership in responding to its effects. Organised

opposition to climate change broadcasts American exceptionalism globally and threatens to weaken transnational agreements and organisations. Second, to the extent that the basis of US opposition to climate change is located in the promotion of scientific uncertainty (Freundenberg, Gramling, and Davidson 2008; Oreskes and Conway 2011) some have identified a psychological “seepage” of this uncertainty into the global arena, affecting international scientific and popular discourse on climate change mitigation that reinforces “human tendencies towards preference for preservation of the status quo” (Lewandowsky et al. 2015).

A third reason to consider how US opposition to climate change impacts global sustainability initiatives is the political influence of powerful business interests worldwide (e.g. Fuchs and Feldhoff 2016; Wright and Nyberg 2017). On the one hand, multinational corporate lobbies intervene in public policy and foreclose upon legislative initiatives to control industrial output, further restricting climate change action. On the other, the “new corporate environmentalism,” steeped in market-friendly and technological approaches to sustainability, regularly undervalue or reframe environmental concerns to fit shareholder obligations.

We start with a historical overview of social trends that have informed oppositional behaviours towards environmental sustainability. We then discuss how these elements have coalesced into institutional forms and practices that adopt short-term, medium-term, and long-term horizons to counter scientific evidence of global warming and undermine political support to address it. We conclude by highlighting some of the implications of this organised countermovement for ongoing efforts at political and cultural mobilisation to provoke meaningful action on climate change.

Historical development of climate change opposition

A number of organisations make up the organised opposition to environmental sustainability efforts in general and climate change action in particular, including corporations, trade associations, conservative think tanks, philanthropic foundations, advocacy groups, lobby groups, and public relations (PR) firms, promulgated by a network of blogs and media outlets (Dunlap and McCright 2015). These various organisations act in different political and cultural arenas and employ different time horizons to achieve a range of objectives. For these reasons, we cannot refer to the organised efforts to block or delay climate action in monolithic terms. Rather, these efforts form an amalgam of loosely coordinated groups that can be understood as a countermovement. Countermovements are

networks of individuals and organizations that share many of the same objects of concern as the social movements that they oppose. They make competing claims on the state on matters of policy and politics and vie for attention from the mass media and the broader public.

(Meyer and Staggenborg 1996: 1632)

As Gale (1986) notes, countermovements “typically represent economic interests directly challenged by the emergent social movement.” Countermovement organisations are often elite-driven efforts to mobilise economically impacted populations or populations that share similar interests or ideologies (207). Indeed, the climate countermovement is not simply made up of industries attempting to preserve their market position. There is also a strong component of ideologically motivated action that reflects its historical development. There are three main historical threads woven into the current climate countermovement.

The wise use movement and opposition to government regulation

An important set of efforts to oppose action on climate change originated in the western United States in response to government regulation of public lands. Stemming from the 19th-century belief in Manifest Destiny (Brulle 2000), territorial expansion and stewardship were seen as “man’s” divine right; any threat of control over the unbridled use of natural resources for economic development was an affront to this central tenet. As noted by Lo (1982: 119), countermovements generally arise to defend established societal myths. The myth of Manifest Destiny extends throughout a long history of western states’ opposition to any form of government regulation of public property.

Laws passed in the 1960s and 1970s were designed to restrict the use of federal lands. The Wilderness Act (1964) was aimed at preservation of the remaining natural areas in the national forests. The Endangered Species Act (1973) placed limits on land use, even by private property owners (Cawley 1993: 161). In response, a large-scale social protest emerged between 1979 and 1983, initially known as the “Sagebrush Rebellion” (Shabecoff 1993: 164). This movement, representing western economic interests (primarily ranchers and miners), attempted to return control of federal lands to local economic groups. The election of Ronald Reagan gave this movement access to power. Reagan appointed James Watt, a leader in the Sagebrush Rebellion, as Secretary of the Interior (he served between 1981 and 1983). This controversial Cabinet appointment signalled the Reagan administration’s intention to dismantle environmental regulations. Even in the face of several reports on the progression of environmental damage, including two major studies on climate change in 1983 (NRC 1983; Seidel and Keyes 1983), no federal action was taken.

By the late 1980s, the original Sagebrush Rebellion had been reorganised into a more comprehensive movement known as the Wise Use movement (Brulle 2000: 115–131). Helvarg (1994: 9) sees the Wise Use movement as a “counterrevolutionary movement, defining itself in response to the environmental revolution of the past thirty years.” The intellectual roots of this movement combine the idea of Manifest Destiny, states’ rights, and property rights to call for the reversal of environmental restrictions. Expanding on Milton Friedman’s (1962) injunction that the free market is best positioned to deal with environmental problems, the Wise Use movement argued that market mechanisms ought to dictate natural resource management. It is estimated that the movement comprised 200 member-groups in 1988, expanding to over 1,500 groups nationwide in 1995 (Brulle 2000). The Wise Use movement became a powerful lobby. It also developed a popular strategy known as Strategic Lawsuits Against Public Participation (SLAPPs). These lawsuits sought to limit the ability of environmental activists to voice their concerns by burdening them with the costs of legal defence (Canan and Pring 1988).

Many of the original Wise Use groups went on to oppose climate change action, and to form coalitions to increase their lobbying power. According to a recent study documenting opposition to the Kyoto Protocol (a 1997 international agreement to set binding emission reduction targets), several national Wise Use organisations joined forces with industry-sponsored coalitions to oppose this treaty, including the American Land Rights Association and the American Policy Center (Savitt et al. 1997).

In recent years, the Wise Use movement has become embedded in multipurpose American organisations such as the anti-government, populist Tea Party movement and the Koch-funded, right-wing political advocacy group Americans for Prosperity. While its distinct identity has become diffused as a result, this movement generated a nucleus of activists and organisations opposed to climate action who now staff a wide range of conservative organisations.

Neoliberalism and the rise of the conservative movement

The second historical development contributing to the growth of organised efforts in opposition to climate action, especially in the United States, was the rise of the conservative movement. While conservative organisations had campaigned in opposition to the New Deal in the 1930s and 1940s, it was the consolidation of a well-financed and coordinated conservative social movement starting in the 1950s that would become one of the core components of institutionalised efforts against climate action.

Founded by the Austrian economist Friedrich von Hayek, the Mont Pelerin Society first met in 1947. It was an intellectual society devoted to advancing a philosophy of market deregulation and low state intervention, partly in opposition to socialism. The society developed a robust neoliberal perspective that gained powers of expression in the highly regarded economics department of the University of Chicago, which advocated the application of free-market economics to public policy issues and the rollback of the welfare state. It was a philosophy that would come to define the modern conservative movement's approach. The neoliberal position equates democracy with "economic freedom" or "free enterprise" – property rights, contracts, and consumer choice. It rejects the notion of public goods and opposes regulation, taxation, and other state-led intrusions into the market.

This movement gained momentum when the corporate lawyer Lewis Powell wrote a now-infamous memo warning about the social and political threat to the American free enterprise system, arguing that corporations and industry must wrest control of the economy from leftist inclinations (Powell 1971).¹ "Conservatives must capture public opinion by exerting influence over the institutions that shape it: academia, media, church, courts," he wrote (Powell 1971; Mayer 2016: 75). Powell would go on to become a Supreme Court Justice with considerable influence over such institutions. Meanwhile, neoconservative and religious organisations joined business interests to campaign against social liberalism and the welfare state and promote free-market ideology. The emergence of a network of conservative think tanks and foundations lent material and symbolic support to calls for deregulation, privatisation, welfare reduction, and decreased taxation to revive corporate profits and economic growth (Stefancic and Delgado 1996). This network consolidated its access to political power via the elections of Ronald Reagan. In subsequent decades, this neoliberal network in the United States sought to weaken the environmental regulations and oversight agencies created in the 1970s and blunt the environmental movement's ongoing efforts to extend this discipline.

Perceived threats posed by climate change discourse intensified this opposition, mobilising energy companies and related industries as well as broader free-market forces. The discrediting of global climate change science began in earnest in 1989, when the George C. Marshall Institute issued the first report in its "Climate Change Policy" program, a program designed to promote uncertainty over mainstream scientific consensus (Oreskes and Conway 2011: 186). Other conservative think tanks followed the Marshall Institute's lead, aiming to delegitimise climate science and limit public and political action. As noted by Jacques, Dunlap, and Freeman (2008), conservative think tanks were at least partly responsible for 92% of all books published between 1972 and 2005 that expressed scepticism towards climate change science.

As the US conservative movement expanded, opposition to climate change action became a critical component of its political program. What emerged was a well-developed effort composed of a number of conservative foundations connected to nearly 100 conservative think tanks (Brulle 2014) that took on opposition to climate change action as part of their mission. For many conservatives, climate change is an issue that provides license for wholesale government intervention into the economy and is thus a major threat to economic

liberty. Coordinated by peak meetings of funders, such as the annual Koch brothers' summits or meetings at the Philanthropy Roundtable, the conservative network of institutions has become one of the core components of institutionalised opposition to climate action. Opposition to climate change action has now become the countermovement's pivotal issue in battles against environmental regulations.

Expansion of public relations activities into the political sphere

The final component that developed into an institutionalised component of opposition to climate change action was the refinement of promotional campaigns by industrial interests in an effort to influence public opinion and thereby combat political control. The development of this phenomenon was theorised by Habermas (1962) through his discussion of the "refeudalization of the public sphere." If the 17th and 18th centuries saw the expansion of civil society and a new notion of "publicness" as private persons came together in public spaces to debate critical issues of the day, this burgeoning public sphere was circumscribed in the early 20th century by the twin rise of the market and the state as intervening entities. As the state expanded in the latter half of the 19th and first half of the 20th century, it took on responsibilities to manage national economies, linking market organisation and outcomes to the vagaries of the state. This created an enormous incentive for private interests to attempt to mould public policy. Rather than the "rational-critical" discussion germane to democratic exchange in an ideal-typical setting, public discussions entered into compromise on the basis of negotiations among competing "interests" (Calhoun 1992: 22). And rather than enter into political debates to ascertain the common public good, institutions could use publicity techniques and intervene in civil society to secure a political and cultural advantage (e.g. Magan 2006: 32). The goal of these activities is to generate goodwill and prestige for a certain position, strengthening public support for a given position without ever making the position a matter of formal public inquiry. The consensus that results is elicited through persuasive appeals through the application of promotional publicity techniques (Sievers 2010: 136; Walker 2014). In this "promotional" public sphere, organisations with sufficient economic, political, or organisational capacities to generate publicity campaigns maintain a distinct advantage. By generating support for their positions, these organisations set the terms of the debate and disadvantage participation by community organisations or those with dissenting views (Greenberg et al. 2011: 69).

Habermas (1989: 193–194) traces the origins of PR and public opinion management to the application of publicity techniques by the press agent Ivy Lee before the First World War. Lee's most infamous work was for John D. Rockefeller's Colorado Fuel and Iron Company, the largest coalmine operator in the region. Lee was called in to manage public perception of the company and industry following the "Ludlow Massacre," a labour strike in 1913 that led to intense violence between company guards, the National Guard, and the mine workers. Lee saw in the tragedy an opportunity to promote cooperation. He created a "Colorado Fuel and Iron Company Bulletin," a newsletter publication advertising the multiple benefits labourers enjoyed as employees of the company. When, a year later, Rockefeller established a labour union for his workers, Lee promoted this as a natural extension of existing employee welfare programs. Lee then brought these innovations to Standard Oil and Socony-Vacuum Oil (also Rockefeller Properties) as well as the steel industry, working with Bethlehem Steel to develop an "employee representation plan" for the company. Following the war, Ivy Lee worked for a variety of clients to improve their public image (Cutlip 1994; Miller and Dinan 2008).²

Edward Bernays, the nephew of Sigmund Freud, further developed the use of PR to burnish the image of corporate entities, including General Electric and the American Tobacco Company. He also worked to drum up political support for political candidates and the National Association for the Advancement of Colored People (NAACP). The first professional political consulting firm was founded in 1933. Called Campaigns, Inc., the firm pioneered the use of indirect lobbying (also known as grassroots lobbying) as a political campaign tactic (Lepore 2012; Walker 2014: 53–55).

The large-scale application of corporate PR to combat environmental concerns began earlier than most studies allow. The monopoly companies of the early 20th century in environmentally compromising industries like rail, steel, and coal faced considerable anxiety among Americans over their size and power. Public opinion polling informed corporate leaders that campaigns to engage with communities and political influencers would help stem growing public outcry over the lack of regulation and government control over these industries. These efforts became more sophisticated after the Second World War, as many PR and ad men who had helped develop large-scale propaganda campaigns for the war effort returned to public life. The American Petroleum Institute (API) instituted a two-million-dollar PR campaign beginning in 1946 to promote goodwill among local residents. The campaign included the development of “field operations” (opening and staffing 13 units across the country), extensive magazine advertising, and a weeklong “Oil Progress Week” to educate communities about the benefits of oil to their lives (Potter 1990: chapter 6).

The development of a specialised industry of environmental PR would emerge in the 1970s, ten years after the public outcry following the publication of journalist Rachel Carson’s research on the toxic legacy of chemical pesticides. Serialised in the *New Yorker* magazine in June 1962, Carson’s book, *Silent Spring*, shocked and galvanised a public formerly unaware of the devastating impact of dichlorodiphenyltrichloroethane (DDT) and other pesticides on animal, plant, and human life. The chemical industry and its trade association, the Chemical Manufacturers Association (CMA), launched a massive PR campaign to sow doubt about Carson’s methods and findings (Murphy 2005). But the book’s findings were too well researched, and perhaps too damning, to be overturned. Attention to the issue by President John F. Kennedy as well as multiple scientific and political bodies grew. DDT was eventually banned; and a host of environmental regulations passed in the wake of focused attention on industrial overreach and its impacts on human and natural environments.

Though ultimately unsuccessful in stemming the tide of change in public and political attitudes evoked by *Silent Spring*, this PR campaign taught industrialists that managing public perception and political decision-making around environmental issues was not only a worthwhile but also a necessary investment. In 1973, a “boutique” environmental PR firm, E. Bruce Harrison Co., opened its doors in Washington, DC. Harrison, who had helped to manage the CMA’s response to *Silent Spring*, founded his eponymous firm by assembling an industry-labour coalition he called the National Environmental Development Association (NEDA), a group of contractors, corporations, labour unions, and other interests that was collectively “opposed to some types of environmental control” (*Publicist* 1982: 1). Harrison drafted a “declaration of principles” (*Publicist* 1982: 2) which helped to recruit additional members, and hosted regional and national conferences “as part of a continuous research and education program” (NEDA 1979) to diffuse these principles. Over the next 30 years NEDA became the umbrella structure for a series of issue coalitions organised around “softening” specific federal legislative initiatives. By the late 1980s, the firm was highly successful, consistently ranked by *O’Dwyers* (the leading trade publication) among the top ten environmental

PR firms in terms of billings. In 1992 the firm claimed to represent, “through coalitions and direct service...more than eighty of the Fortune 500” (Harrison 1992).

Over time, the US corporate community has integrated PR and lobbying into its business strategy. Between the 1970s and the 1990s, corporate PR agents and firms built advocacy structures to anticipate and manage public policy issues. These advocacy structures are more sophisticated, and more socially embedded, than classic movement structures such as constituencies, coalitions, and networks. They include public–private sector partnerships, events and sponsorships; industry benchmarking and reporting; awards/certification programs; media training seminars; and international technology transfer systems (Aronczyk 2018). These advocacy structures work in an integrative manner to actively shape public policy decisions in ways favourable to overall corporate interests (Barley 2010).

One key tactic developed by corporate leaders during this time was to emulate the grassroots advocacy that led to the citizens’ and environmental movement’s successes in the 1960s. Helped by corporate communicators such as PR counsel, companies developed an approach of “corporate political activism,” adopting not only the title but also the techniques of public interest groups. Corporations and trade associations developed the capacities to simulate and mimic grassroots mobilisation activities through the creation of front groups.

Corporations also engaged law firms to facilitate legal activism (such as the SLAPP libel lawsuits discussed earlier) and created corporate foundations, which, in turn, funded ideologically motivated think tanks. Trade associations were strengthened and enabled as major political actors, and corporate political activities were facilitated through the rise of political action committees. This effort has evolved into a complex organisational field that focuses on the development and promulgation of a uniform ideological message. This organisational strategy simulates a unified front, as there appear to be multiple diverse voices simultaneously advocating for a uniform position. This perception is enforced through the use of different communication channels, including academic journals, policy papers, briefings, media coverage, and advertising to reach targeted audiences. Manheim (2011) details how these campaign efforts have developed into a common practice that corporations, government, and advocacy organisations regularly employ to realise their political objectives. Manheim calls these Information and Influence Campaigns (IICs): “systemic, sequential and multifaceted effort[s]” (2011: 18) to promote information that orients the political decision-making process towards desired outcomes either through direct persuasion, or by persuading other parties to bring pressure on decision makers. IICs involve comprehensive and coordinated actions to identify and segment target audiences, incorporate diverse messaging schemes, and vary timing and distribution channels to achieve their political goals.

The institutional structure of climate politics in the United States

The historical origins of opposition to environmental action have yielded a complex network of institutional actors. These organisations’ efforts span multiple time frames, with different objectives, strategies, and institutions involved at each level. Since climate change activities are an integral focus of the conservative movement, it is not helpful to try to separate climate change from other topics and themes relevant to the conservative movement. Opposition to environmental action should be seen as a large scale, multi-decade institutionalised effort that spans the entire range of cultural and political institutions over multiple time scales.

Driven primarily by strategic investments by conservative foundations, the conservative movement was animated by a focus on three distinct time periods: long term, intermediate term, and short term (Covington 1997). This strategy has a long genesis, starting with the

writings of Frederick Hayek in 1949, and has developed incrementally over the last 70 years. It is a directed and coherent approach that informs the funding activities of conservative philanthropies.

The conservative movement's institutional goal was to build an intellectual and ideological infrastructure over the long term that can facilitate political action in the short term and inform policy proposals in the medium term. This philosophy was stated succinctly in 1996 by Richard H. Fink, onetime president of the Charles Koch Foundation and former executive vice-president of Koch Industries, one of the largest privately held companies in the United States. In a 1996 article in *Philanthropy Magazine* titled "From Ideas to Action," Fink elaborated the strategic underpinnings of the foundation's philanthropy, a model he called the "Structure of Social Change" (Fink 1996). Inspired by Hayek's model of production, which articulated three stages of production to transform raw materials into value-added products for consumers, Fink saw a metaphorical link with the transformation of ideas into social and political action:

When we apply [Hayek's] model to the realm of ideas and social change, at the higher stages we have the investment in the intellectual raw materials, that is, the exploration and production of abstract concepts and theories. In the public policy arena, these still come primarily (though not exclusively) from the research done by scholars at our universities. At the higher stages in the Structure of Social Change model, ideas are often unintelligible to the layperson and seemingly unrelated to real-world problems. To have consequences, ideas need to be transformed into a more practical or useable form.

In the middle stages, ideas are applied to a relevant context and molded into needed solutions for real-world problems. This is the work of the think tanks and policy institutions. Without these organizations, theory or abstract thought would have less value and less impact on our society.

But while the think tanks excel at developing new policy and articulating its benefits, they are less able to implement change. Citizen activist or implementation groups are needed in the final stage to take the policy ideas from the think tanks and translate them into proposals that citizens can understand and act upon. These groups are also able to build diverse coalitions of individual citizens and special interest groups needed to press for the implementation of policy change.³

A number of authors (Covington 1997; Barley 2010; Dunlap and McCright 2011, 2015, Farrell 2016) have examined the organisational structure of the conservative movement. Despite different intellectual perspectives, there is a strong consensus regarding the focus and nature of the organisations involved in the climate change countermovement.

Long-term activities: actions and institutions

The first set of institutions focuses on long-term efforts that range from five years to decades in duration. The goal is to build and maintain a cultural and intellectual infrastructure of organisations that supports the development of ideas and policies favourable to conservative or industry viewpoints. This includes efforts to create and maintain academic programs in institutions of higher education, endow academic chairs, and provide educational support for students in these programs (Mayer 2016). We can see the outcome of some of these efforts in the proliferation of programs in economics and law that advocate Chicago School styles of neoliberal economics (Teles 2008). Efforts to promulgate conservative ideas have also

been documented in elementary and secondary schools (Goozner and Gable 2008; Washburn 2010). A second, longstanding set of efforts includes the corporate manipulation of scientific research to develop and promote results favourable to industrial interests. In the 1950s, for example, the American Petroleum Institute's Smoke and Fumes Committee sponsored ongoing research into air pollution in the wake of growing public alarm. At that time smog in the city of Los Angeles had reached dramatic levels; pending regulation or legislation by the state of California would be costly for the petroleum industry in terms of both production and reputation. The API drew on industry-friendly findings by the Stanford Research Institute that questioned the link between oil refineries and air pollution, calling for

the need for thorough investigation and development of complete and accurate information on a given pollution situation before legislation designed to cover it is enacted...a law designed to improve air pollution might have a reverse effect if not properly and wisely drawn.

(Jenkins 1954)

According to Conley (2006), by the mid-1950s “the Smoke and Fumes Committee was sponsoring ten ongoing projects” to study industrial pollutants in order to cast doubt on the connection between air pollution and oil products (23). Such practices to “institutionaliz[e] delay” (Brulle 2014) – selectively interpreting research or commissioning studies to develop more industry-positive findings – are an important part of the cultural arsenal of the conservative anti-environmental movement.

Another set of activities that allowed industry to make major inroads into popular legitimacy was their sponsorship of cultural events and forms. One the best known examples is Mobil Oil's decades-long sponsorship of Masterpiece Theatre, the dramatic television series on Public Broadcasting Service. From 1970 to 2004, Mobil funded Masterpiece Theatre (along with *Upstairs, Downstairs*, another popular drama) (Kerr 2005). Although Mobil was technically not allowed to advertise directly on PBS, the station did offer Mobil air-time through its infamous announcer-read tagline: “Made possible by a grant from Mobil Corporation, which invites you to join with them in supporting public television.” But Mobil saw its relationship with PBS as fruitful in other ways. Mobil had sway over the choice of host, Alastair Cooke, and all advertising of the show (in TV guides, on posters, etc.). Mobil announced its sponsorship of Masterpiece Theatre and *Upstairs, Downstairs* in press releases and ad campaigns (referring to the show as “Mobil Masterpiece Theatre”). Mobil also ran publicity stunts like inviting (and paying for) TV critics to come to New York to preview the series (Ledbetter 1997).⁴ David H. Koch has also been a supporter of public television (e.g. the science show, *Nova*). This approach was characterised as “affinity of purpose” advertising, which seeks to improve the corporate public image by association with scientific and cultural achievements (Schmertz 1986).

Medium-term activities: actions and institutions

The second set of activities focuses on the intermediate time horizon of three to five years. This stage involves the translation and promulgation of academic ideas into concrete policy proposals. A wide range of distribution channels are employed, from mass media to published books and testimony provided in congressional hearings. The major institutional actors in this time frame are think tanks, advocacy organisations and PR firms, which serve as credible third-party spokespersons to boost the legitimacy of these policy arguments (on the

importance of legitimacy in reinforcing policy, see Bexell in this volume). PR firms play a further role during this stage by developing and promulgating materials that support policy objectives and by securing media contacts.

Short-term activities: actions and institutions

The third component focuses on short-term political outcomes such as elections or pending issue legislation. Considerable effort is put into influencing public opinion around climate change. One style of public opinion management is to promote positive perceptions of fossil fuel corporations through the extensive use of advertising campaigns. A second tactic, as mentioned earlier, involves citizen mobilisation and/or the creation of front groups to demonstrate popular support for a political position. A third approach involves lobbying activities, either directly by corporations or trade associations, or indirectly through the employ of public affairs firms to influence legislative outcomes.

Conclusion

Opposition to climate action in particular, and environmental protection in general, is maintained by a comprehensive set of institutional mechanisms that work integrally to develop, promulgate, and advocate for a series of conservative policies across political and cultural arenas. Clearly, the work to counter climate misinformation campaigns requires a new strategy. It has been nearly three decades since Dr Hansen's dramatic 1988 testimony placed the issue of climate change squarely in the public arena. Despite nearly three decades of activism, however, meaningful action on climate change remains elusive.

There are a few bright spots in both the US context and internationally. Some have pointed to strong urban governance (e.g. at the state and municipal level) as a means to address United Nations Sustainable Development Goals, among other ambitions, which can offer at least a partial solution to federal opposition (Aust and du Plessis 2018). The Global Covenant of Mayors for Climate and Energy is an international coalition of urban mayors, including several from US cities, that support climate change action and have committed to promoting sustainability initiatives (globalcovenantofmayors.org).

Still, these initiatives cannot match the extent of institutionalised activities and financial resources that have been employed to either advance or delay US government actions to address climate change. While considerable sums have been spent by all actors in this political arena, the comparative spending priorities and levels remain poorly understood. This has important consequences for different approaches required to address climate change. Responding to climate change is an inherently political process. To be successful, actors must have a firm and well-grounded understanding of the different organised interests engaged in this process. This understanding can form the basis for the formulation of efficacious strategies and approaches that can inform both funding priorities and the actions of engaged organisations.

While there are many avenues for climate action in the United States, the political and cultural arena is a critical component. Without success in this area, other actions will be partial and limited. After decades of action, it is clear that the political barriers to climate action have not been overcome. Further targeted research as discussed earlier can help provide the basis for the discussion and development of more efficacious strategies and approaches that can inform both funding priorities by foundations and the actions of engaged organisations.

Notes

- 1 Powell was a board member of several major American corporations, including Phillip Morris.
- 2 It is rumored that Lee crafted PR campaigns for the API in its early years (1910s). However, the fledgling API did not develop a dedicated PR program until the Second World War. More likely is the version put forward by Potter (1990: 4), which describes Lee's status on retainer for API in its first decade. Because of one of the association founder's general distrust of PR, however, it appears Lee's services were not put to use at API.
- 3 See page 4 of online version of Structure of Social Action, available at https://archive.org/stream/TheStructureOfSocialChangeLibertyGuideRichardFinkKoch/The+Structure+of+Social+Change+Liberty+Guide+_+Richard+Fink+_+Koch_djvu.txt.
- 4 The positive image associated with PBS benefited Mobil in other ways. During the 1991 Gulf crisis, when Mobil was being attacked for gouging, the company leveraged its relationship with PBS to soften the attacks.

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