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RESISTING MEANINGFUL ACTION ON CLIMATE CHANGE

Think tanks, 'merchants of doubt' and the 'corporate capture' of sustainable development

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The chapter examines various corporate and elite responses to climate change. In particular it notes the tensions within global elite networks between those who take a proactive response to climate issues and have aimed to provide leadership on climate by shaping (arguably dominating) the political and public discourse on this issue, and the defensive movement of climate change contrarianism and denial. These two tendencies have resulted in differing sorts of lobbying, public relations and corporate responses to climate issues.

It is important to understand that the role of think tanks and lobby groups is multidimensional. They aim to dominate the information environment in a number of distinct public and private arenas. Thus, it is important to examine the relative success of denial not simply in relation to media reporting or in relation to governmental decision making, but in relation also to a wider range of arenas. The economic, social and scientific networks within which decision makers are located is significant. However, it is clear that these networks span multiple levels of governance, so the intersection of the various think tanks and policy planning groups with the global, regional, national and sub-state levels is discussed. This holistic focus makes the empirical task of revealing the role of the think tanks and policy planning organisations more complex, but ultimately, makes understanding of the dynamics and drivers of the climate contrarian movement easier.

Introduction

There is a well-established scientific consensus that 'the warming of the Earth over the last half-century has been caused largely by human activity' (Royal Society 2010: 1). Yet meaningful political action on climate is painfully slow. Among the reasons for this are the activities of those corporations that stand to lose most from rational policy decisions. These corporations, from extractive and other industries with heavy environmental footprints, have in the main attempted to frustrate meaningful progress. As is well known, some corporations have attempted to foster doubt about the scientific consensus on climate (Michaels 2008; Oreskes and Conway 2010) – a strategy often referred to as climate change 'scepticism', 'denial' or 'contrarianism' (see O'Neill and Boykoff 2010).[1] One study concludes that contrarianism on climate, led by conservative think tanks 'is a tactic of an elite-driven counter-movement designed to combat environmentalism, and that the successful use of this tactic has contributed

to the weakening of US commitment to environmental protection' (Jacques *et al.* 2008: 365). Less well known has been the strategy of a range of other corporations in the oil and associated industries, which has not denied the evidence that climate change is largely caused by human activity, but has sought to manage responses to protect their interests. We refer to this strategy as the attempted corporate capture of environmental policy.

The climate contrarian strategy is perhaps better known; however, it would be a mistake to focus only on the former. This is because, empirically, the oil industry has pursued both strategies and in terms of outcomes both have been effective in delaying or stopping meaningful climate action.

This chapter will examine how contending factions of corporate and policy elites have organised, constructed and communicated climate issues. The chapter will look specifically at the role of elite policy-planning groups, think tanks and other lobbying organisations that have played a significant role in communicating climate change and practically frustrating progress. Taking an approach that recognises the crucial role of ideas and communication in power relations, this chapter grounds analysis in an understanding that ideas must be put into practice to be effective (powerful), and therefore addresses the role of key agents such as think tanks in mediating between social interests, the realms of ideas and concrete policy outcomes. Our analysis suggests the centrality of communication to how the environment is constructed, and contested. We advance a distinctive approach that sees communication in a wider context than just in terms of the mass media and the internet. Communication is fundamentally linked to social interests and, therefore, the material world. By this we mean, first, that 'environmental communication' is an irreducible component of environmental politics. This is not just a question of the centrality of mass media or the internet to environmental politics, but of communicative processes 'outside' of the media and 'inside' social institutions (such as the state/policy networks, corporations and civil society) and fields (national and international politics, environmental policy, the legal system, journalism etc.).

Second, we mean that ideas about the environment and their communication spring from social interests, or are related to them. We do not mean that this occurs automatically in a simple reflection of economic interests, since the human intellect and processes of judgement, strategy and assessment necessarily mediate how interests are conceived and are negotiated or contested within social institutions. Thus we do not adhere to the 'treadmill of production' approach in environmental sociology, which tends to reduce interests to a purely economic level (just like opposing approaches such as neoclassical economics and the rational actor and public choice models associated with it). Nor, however, do we agree with ecological modernisation approaches that are overly optimistic about the possibility of market solutions to environmental crises (Simionis 1989; Mol 2001). We are more sympathetic to the model advanced by Pulver (2007) which sees contest within and between economic and other actors as the context in which conceptualisation of, and decisions about, interests and therefore communicative strategies are made. The economic, social and scientific networks within which corporate decision makers are located is significant. We would extend this by noting the constitutive importance of ideas and their communication to processes of contestation in relation both to networks and outcomes. In this context inter-elite communication between different corporate factions (disembedded elites in some literatures) is too often underplayed.

Understanding collective ideas

Our perspective insists that ideas emerge from social interests and their communication is part of the process by which people 'become conscious of conflict and fight it out', as Marx put it

(Miller 2002). But in the case of environmental communication more generally (as with most other areas of political struggle) it is necessary also to understand how ideas spread vertically and horizontally in society, and temporally and geographically. It is useful to consider theories that focus specifically on how ideas become popular and turn into collective phenomena. It is important to understand this process as one that can happen at many different levels in society, in relative divorce or conformity with other levels. In particular, because of the strong role of science in policy argument about climate change we need a concept that understands and explains how scientific theories emerge, are tested and either falsified or supported. In this respect, concepts such as the 'invisible college' (de Solla Price 1963; 1986) and 'epistemic communities' (Haas 1992) are useful in understanding how elite scientific ideas cohere. They are less able to explain how such ideas may spread more widely (i.e. in public debate or on policy) or conversely how ideas from elsewhere may influence science. The Polish microbiologist Ludwig Fleck (1979), argued that the development of scientific concepts is associated with the ideas and relative power of competing professional or ideological groups. A 'thought collective' is, says Fleck, 'even more stable and consistent than the so-called individual, who always consists of contradictory drives' (p. 44). German sociologist Karl Mannheim (1927) shared the sense of ideas having what he called an 'objective mental structure' that transcends the individual. 'In most of our intellectual responses', he wrote, 'we are not creative but repeat certain statements the content and form of which we have taken over from our cultural surroundings' (1927: 132).

But Mannheim's conception differs from that of Fleck, whose thought collectives are seen as hermetically sealed – not allowing for agreed information between contending perspectives – as if evidence not only might not make a difference, but could not. Fleck 'seems to preclude (productive) disagreement' within a thought collective (Plewhe 2009: 35). Manheim, by contrast, notes that 'if thought developed simply through a process of habit-making, the same pattern would be perpetuated for ever, and changes and new habits would necessarily be rare' (1927: 133). Changes in thought, Mannheim suggested, are 'produced' by 'social causes' (p. 137), they are 'socially determined' (1927: 142). The 'sudden breakdown of a style of thought … will generally be found to correspond to the sudden breakdown of the groups which carried it' (p. 135).

We draw attention, therefore, to the social interests that undergird ideas and their communication. These are condensed and crystallised in organisations such as think tanks, policy planning groups and lobby firms, all of which require financial and logistical support to enable their ideas to flourish in practice. This suggests the need to examine how ideas are produced and made effective in addition to engaging with the ideas themselves. In that sense we offer a materialist perspective on communicative power (Miller 2002).

The chapter reviews the existing literature on the mediation of climate issues, and argues that understanding the dynamics of climate change communication not only necessitates a critical examination of the sources the media rely on in their reporting, but also requires an analysis of the communication of climate outside of mass media. We note tensions within global elite networks between those that have aimed to provide leadership on climate by shaping and arguably dominating policy and public discourse and the defensive movement of climate change contrarianism. These two tendencies have resulted in differing sorts of lobbying, public relations and elite planning organisations and also some 'churn' in corporate responses to climate issues.

It is important to understand that the role of the think tanks and lobby groups is multidimensional. They aim to dominate the information environment in a number of distinct public and private arenas. Thus, it is important to examine the relative success of climate denial not

simply in relation to media reporting or governmental decision making, but in relation also to a wider range of arenas including: the production of scientific knowledge; mainstream media reporting; elite policy planning; and the level of government and executive decision making. However, it is clear that climate policy and deliberation spans multiple levels of governance, so the intersection of the various think tanks and policy planning groups with the global, regional, national and sub-state levels will be discussed, considering how each arena is interpenetrated by actors operating at multiple levels of governance.

The mediation and communication of climate science

According to Boykoff and Yulsman, 'research spanning the past three decades has consistently found that the general public gains understanding of science (and more specifically climate change) largely through mass media accounts' (2013: 2). They correctly place public reliance on media reporting in the context of the political economy of the mass media, pointing to disinvestment in news-gathering and a decline in specialist correspondents. This, it is argued, has a negative impact on the ability of the media to scrutinise science and evaluate scientific controversy, thus making news media more reliant on 'information subsidies' from PR and official sources, or 'churnalism' (Davies 2008; Lewis *et al.* 2008; Miller and Dinan 2008; Dinan and Miller 2009). It also means that there is less capacity to analyse strategic communication campaigns targeting the media. Thus, understanding climate communication requires a wider frame of reference than simply analysing media reporting. However, we will begin this analysis by establishing how findings in relation to media coverage of climate issues are consistent with our more holistic approach, which sees the media as one (albeit important) social arena for climate communication.

The literature on media coverage of climate change provides broad agreement on a number of issues. For example, that media coverage of climate has increased since the beginning of the century, and the global patterns of media coverage are similar in that they tend to map onto key events such as intergovernmental conferences, IPCC assessment reports, and controversies such as 'Climategate' (see Figure 18.1 in Chapter 18 by Boykoff, McNatt and Goodman).

There appears to be strong support for agenda setting effects in relation to climate issues, with public concern strongly correlated with media attention (Brulle *et al.*, 2012). The journalistic norms of balance and conflict have created opportunities for climate contrarian voices to acquire a prominence in the media that is at odds with the marginalisation of their ideas in expert arenas (Oreskes 2004; Boykoff and Boykoff 2007). However, it is difficult to conclude that journalistic norms alone could account for the prominence and efficacy of climate contrarianism. We need in addition to examine how such opinion is organised and disseminated, which is consistent with research on public opinion on this topic that finds that 'science-based information is limited in shaping public concern about the climate change threat. Other, more directly political communications appear to be more important' (Brulle *et al.*, 2012: 185). This connects with another finding in the literature, which suggests an increased role for strategic communication (by think tanks, policy planning groups and non-governmental sources) in the direct publication of news, commentary and analysis on the internet (Boykoff and Yulsman 2013). Such material often has more detailed analysis of the networks and connections of organised climate contrarianism than in the mainstream media. However, once we acknowledge that non-mainstream media are part of this communications complex we also must notice the communicative infrastructure and propaganda capacity (lobbying and public relations) marshalled by corporate (and other) interests in this debate.

Once we move beyond the analytical privilege given to the mainstream media in much communication scholarship, we can refocus on the communicative activities and strategies of

social interests. In the case of climate, corporate interests have adopted two main diverging strategies with significant consequences for their communicative activities.

The merchants of doubt and the corporate capture of the climate debate

It was not until the late 1980s that transnational business responded significantly to the threat of climate change. There were different factions and interests within what has been called the corporate 'sustainable development historical bloc' (Sklair 2000) – that set of key corporations that take leadership, planning and influence on sustainable development policy as a mission for themselves, and on behalf of the wider business class. The extractive and automotive industries have interests in climate change policy, given their potential impact on business-as-usual practices and strategies. So do the insurance and reinsurance sectors, though their interests are obviously different. As Pulver puts it, 'competition between firms over conceptions of profitable firm action in the face of an environmental challenge, such as climate change, is a site through which the possibilities and limits of greening capitalism are constituted' (Pulver 2007: 50).

Though there were many initiatives, two are of note. The first was the creation of the contrarian Global Climate Coalition (GCC) in 1989. The GCC, though part of the attempt by business to exert environmental leadership, was a short-lived venture. GCC lobbying and PR strategy in the early to mid 1990s was undertaken in the full knowledge that the science

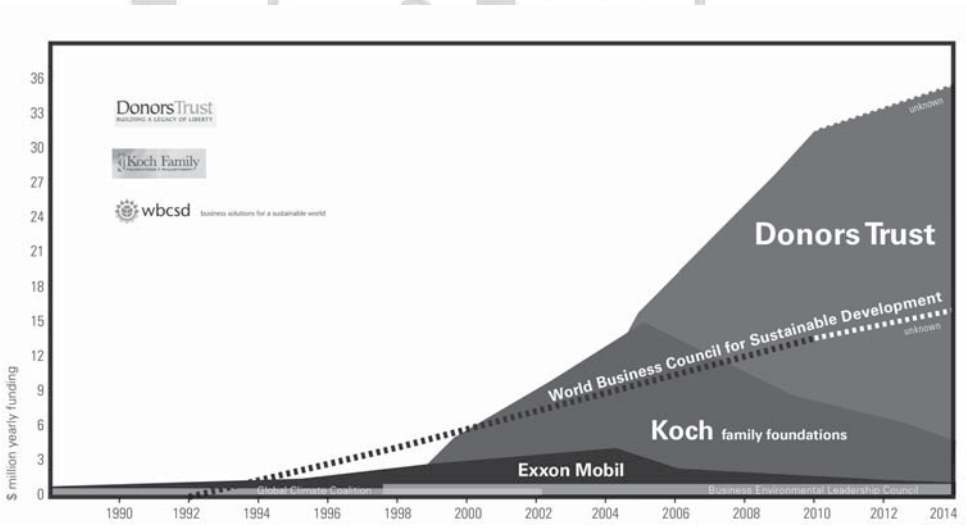

Figure 7.1 Corporate capture vs climate contrarians: timeline of funding

Credit: J. Boehnert, Ecolabs, 2014.

Original source: Climate contrarian funding data from Goldenberg (2013) and Greenpeace (2013). On the WBCSD, Najam (1999) estimates that minus in-kind and other forms of support, membership fees alone amounted to US$3.78 million in 1998. According to data in Corporate Europe Observatory 2010, BASF (€47,539) and E.On (70,000 Swiss francs) paid on average US$70,000 for membership of the WBCSD. By assuming that all members pay the same and multiplying by the number of members (198 in 2010 according to the WBCSD), we estimate tentatively that membership income may have risen to almost US$14 million by 2010.

and forecasting underpinning climate policy was sound. The GCC's own internal scientific assessment had concluded the threat was real (Revkin 2009) and that 'contrarian theories … do not offer convincing arguments against the conventional model of greenhouse gas emission-induced climate change' (Bernstein, cited in Powell, 2012: 96).

Nevertheless, the GCC helped to stymie progress on climate issues in the early 1990s. But it was not long before cracks began to appear in the coalition. A key moment came when BP, Shell, Ford and DuPont withdrew in 1997, just as the IPCC was issuing its second report warning of increased concerns over the role of humanity in causing climate change.

The GCC disbanded in 2002, but its demise did not mark the end of contrarianism. Corporates (such as ExxonMobil and Koch Industries) continued to pursue them, but not always too publicly.

The cause of the split is argued by some to mirror the fundamental economic interests of the firms concerned. However, Pulver shows that economically the interests of ExxonMobil, Shell and BP and the balance of their investments (in extraction versus refining for example) were similar. The difference was that European headquartered corporations (BP, Shell) came to a different calculation of what might work politically than did the US headquartered Exxon. As Pulver notes:

> ExxonMobil executives were confident that regulation was unlikely and that opposition to regulation was a viable political strategy. In contrast, for BP and Shell managers, regulation was considered a foregone conclusion, and the strategy choice centered on the extent to which the companies would participate in shaping the regulation. (Pulver 2007: 63)

This analysis strongly supports our argument of the importance of ideas and communication in the assessment and identification of corporate interests and the planning of strategies. We can note that Exxon Mobil was never a member of the World Business Council on Sustainable Development (WBCSD), while Shell and BP were involved from the early days.

Shell and BP (and others) did not vacate the policy field when they left the GCC. They repositioned themselves as responsible and enlightened corporate citizens, joining the Business Environmental Leadership Council (BELC) in 1998. Shortly afterwards the elite global policy planning group, the World Economic Forum, identified climate change as the 'most important issue facing business *and the issue where business could most effectively play a leadership role*' (Levy 2005: 78, emphasis added).

More far reaching was the WBCSD. This emerged as a response to the UN initiated Brundtland Report *Our Common Future* (1987). Among a variety of responses the Business Council for Sustainable Development (BCSD) was created in 1990 (Timberlake 2006). It represented corporate interests at the Rio Summit in 1992, securing important industry friendly outcomes. The World Industry Council for the Environment was created by the International Chamber of Commerce in 1993 and then merged with the BCSD in 1995 to form the WBCSD (Najam 1999).

We suggest that the specific outcomes at Rio pale beside the most significant victory which was the corporate capture of the term 'Sustainable Development', altering how it was understood and used in elite debate and practice (Sklair 2000). The environmental movement had posed a challenge: in essence, that the emerging global ecological crisis was caused by global capitalism and that any solution had to confront the capitalist system. In response, leaders of globalising corporations fashioned the idea of sustainable development with the accent not on sustaining the planet and the human species – 'conservation' – but on sustaining development,

which came to mean specifically sustaining capitalism with an environmental tinge. As Sklair (2000: 85) describes it: 'From this powerful conceptual base big business successfully recruited much of the global environmental movement in the 1990s to the cause of sustainable global consumerist capitalism.'

It is important to understand this capture of 'discourse' and the realm of ideas is not divorced from practice. The new definition of 'sustainable development' was henceforth the operating assumption of international policy and action. This illustrates the argument we made earlier that ideas and practice are intimately related.

It is difficult to tell how much the corporate capture strategy has cost. There is very little information in the public domain on the budget and spending of the WBCSD (Najam 1999: 76). Capturing sustainable development for the corporate interest requires planning, and active agents who implement strategy. The WBCSD played exactly that leadership and organisational role. Najam estimates that, minus in-kind and other forms of support, membership fees alone amounted to US$3.78 million in 1998. Our calculations suggest this had risen to almost US$14 million by 2010[2] almost half of the known total spent on contrarianism by the opposing corporations (Goldenberg 2013).

Manufacture of doubt

It is important to understand that the role of think tanks, policy planning and lobby groups is multidimensional. They aim to dominate the information environment in a number of distinct public and private arenas and to capture policy. Thus, it is important not simply to examine the relative success of contrarianism in relation to media reporting (for example) but in relation also to a wider range of arenas such as the production of scientific knowledge; civil society and the legal system (Miller 1998; Miller and Harkins 2010). In the case of climate change contrarianism, rather than attempt to capture policy, the aim has been to manufacture doubt in order to dissipate pressure for progress and delay meaningful policy decisions (McCright and Dunlap 2010). As one study concludes: 'scepticism is a tactic of an elite-driven counter-movement designed to combat environmentalism … [T]he successful use of this tactic has contributed to the weakening of US commitment to environmental protection' (Jacques *et al.* 2008: 365).

It is important to recognise that climate contrarians are not a collection of disgruntled or alienated individuals who have come together to support each other and engaged in debate about climate science. Instead what we see is a 'movement' of myriad organisations and groups that has been bankrolled by corporations with direct material interests in frustrating climate action, together with a range of conservative foundations funded by individuals, connected to those corporations.

The strategy of fostering doubt is of course familiar from other science related public policy issues, most obviously the debate over the health effects of smoking tobacco (Oreskes and Conway 2010). David Michaels (2008: xii) argues:

> Product defense consultants … have increasingly skewed the scientific literature, manufactured and magnified scientific uncertainty, and influenced policy decisions to the advantage of polluters and the manufacturers of dangerous products. To keep the public confused about the hazards posed by global warming, second-hand smoke, asbestos, lead, plastics, and many other toxic materials, industry executives have hired unscrupulous scientists and lobbyists to dispute scientific evidence about health risks.

Since the split in the corporate community over climate change, around the turn of the century, the contrarian strategy has been developed. It has, however, grown significantly more intense since around 2006 as can be seen in the sheer volume of output from conservative think tanks, which are the overwhelming producers of contrarian books.

It is clear that significant sums of money have been ploughed into the contrarian movement. It is difficult to tell how much, because the funding relations are not transparent. However, the increase in book publication does mirror the increase in known spending.

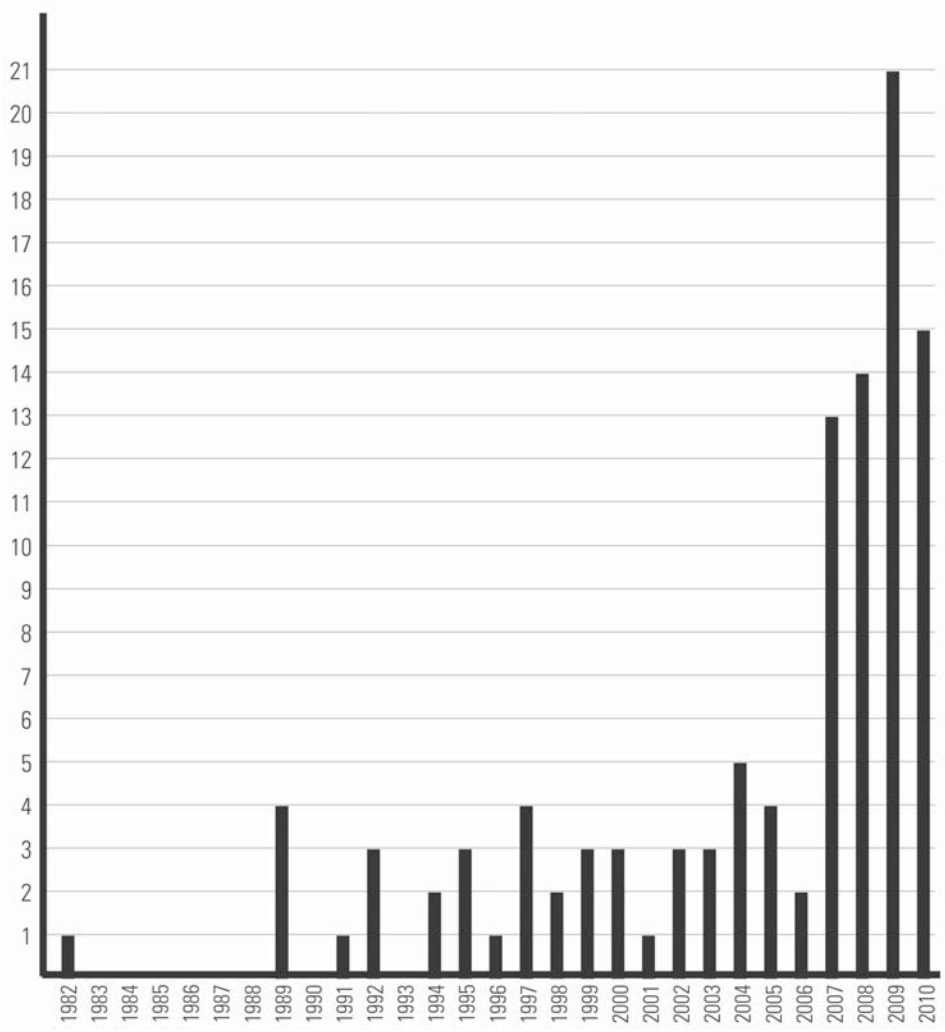

Figure 7.2 Climate change contrarian books by year

Credit: J. Boehnert, Ecolabs, 2014.

Source: Riley E. Dunlap and Peter J. Jacques (2013) Climate Change Contrarian Books and Conservative Think Tanks : Exploring the Connection. *American Behavioral Scientist* June 2013; 57(6) 699–731. Link to original image: www.ncbi.nlm.nih.gov/pmc/articles/PMC3787818/figure/fig1-0002764213477096/

One of the most significant early funders of climate sceptic think tanks was Exxon Mobil, which published the names of organisations it supported and the amounts it gave them over the years on its website. It was on the receiving end of a barrage of negative publicity and as a result in 2008 stated 'we will discontinue contributions to several public policy research groups whose position on climate change could divert attention from' discussion on how to 'secure the energy required for economic growth in an environmentally responsible manner' (Adam 2008). Exxon did cut some funding streams as a result, though not all (Adam 2009). However, recent data suggests that the decline in Exxon funding has been made up many times over by the oil executives the Koch Brothers and by the hitherto little known Donors Trust, a secretive organisation that seems to exist to attempt to disguise the sources of funding going into climate contrarian causes (and other conservative preoccupations).

Since its creation in 1999, Donors Trust (and the affiliated Donors Capital Fund) has given nearly $400 million to support climate contrarianism. The donors use the Trust as a 'pass-through', according to Marcus Owens, the former director of the IRS Exempt Organizations Division, now in private legal practice. 'It obscures the source of the money', he notes. 'It becomes a grant from Donors Trust, not a grant from the Koch brothers' (Abowd 2013). According to the Centre for Public Integrity, 'donors can open an account and protect their identity from the public and even the recipient of their grants' (ibid.). All these funding connections feed through into a very large-scale effort to foster doubt on the science of climate.

There are a myriad think tanks and other organisations all of which appear to be separate from each other but which are singing from the same hymn sheet. The web of contrarianism is most developed in the US where large and well-known think tanks such as the American Enterprise Institute, the Heritage Foundation and the CATO Institute work alongside a whole host of lesser known bodies including the Heartland Institute and the Committee for a Constructive Tomorrow. The reach of climate contrarianism is, however, worldwide, with think tanks receiving funding in Australia and all across the EU. The organisations involved try and present themselves as basing their arguments on science. For instance, the UK based Global Warming Policy Foundation claimed that it had found 900+ peer reviewed papers supporting scepticism on climate change and refuting 'concern relating to a negative environmental or socio-economic effect' of climate change 'usually exaggerated as catastrophic' (Global Warming Policy Foundation 2011). However, analysis by the blog *Carbon Brief* showed that 'nine of the ten most prolific authors cited have links to organisations funded by ExxonMobil, and the tenth has co-authored several papers with Exxon-linked contributors'.[3]

Effectiveness and outcomes

To be successful the strategy of climate contrarianism does not need to convince scientists, policy makers or even a majority of the public. It needs only to foster the conditions under which meaningful action on climate are seen as too difficult or too politically costly. In other words, the strategy is largely elite focused, rather than mainly aiming to influence public opinion. Nevertheless, it does involve relentless advocacy that seeks to influence the news media, public opinion, the scientific debate and most obviously the decision-making process. It is notoriously difficult to pin down specific policy effects, but the case of climate contrarianism is unusually clear because of the clarity of the scientific consensus. This is emphasised by the fact that the climate contrarian movement is almost entirely the product of funding from corporations and conservative foundations. We can see this in the finding that some 92 percent of climate contrarian books surveyed between 1982 and 2010 were published by or through conservative think tanks (Dunlap and Jacques 2013).

As a result when we turn to measures of media coverage or public opinion we can be reasonably sure that climate sceptic views in the US and UK (where the movement is the most active) are in part the product of contrarian communications. Thus Painter and Ashe (2012) found in their examination of coverage in five countries that the USA and UK are 'particularly

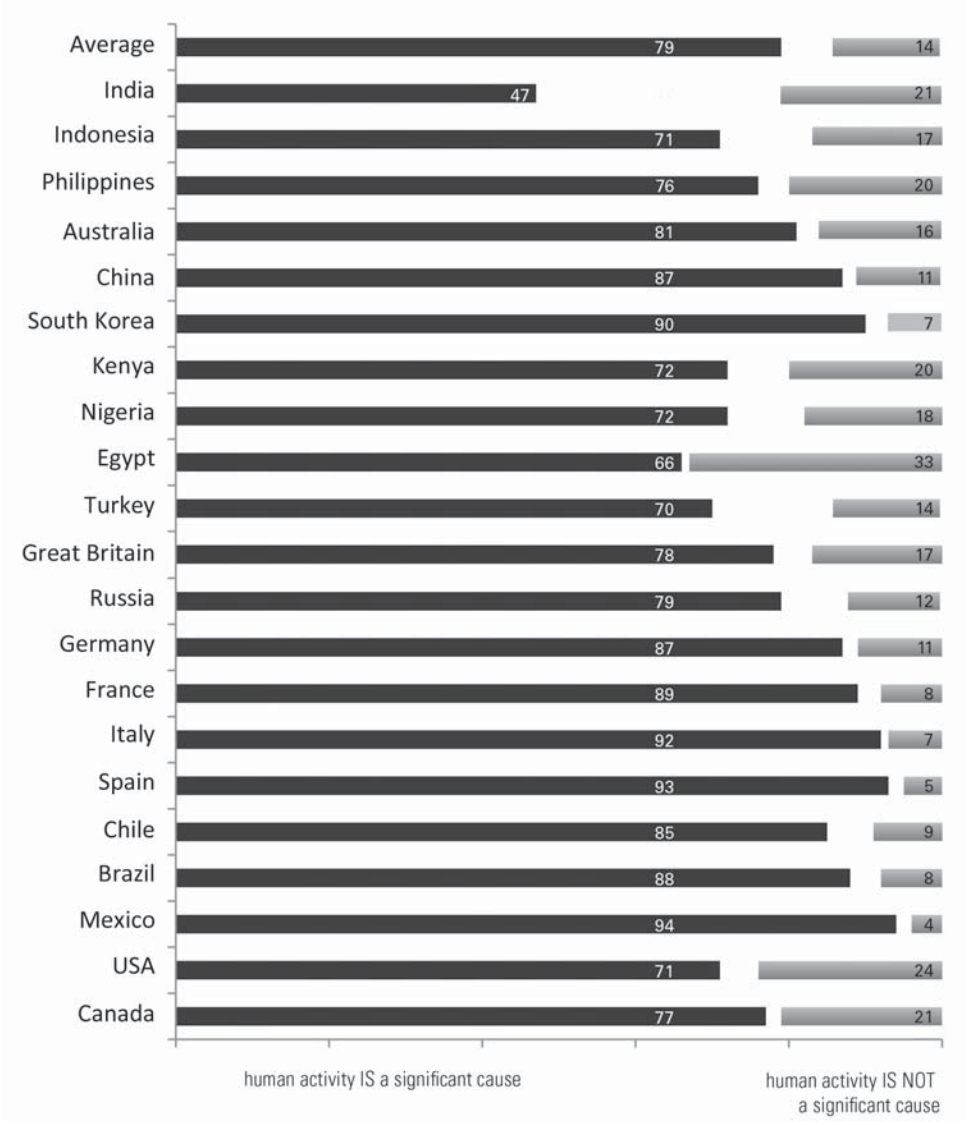

Figure 7.3 Global opinion on human causation of climate change

Credit: J. Boehnert, Ecolabs, 2014.

Source: Developed and Developing Countries Agree: Action Needed on Global Warming, *World Public Opinion.org*, September 24, 2007, www.worldpublicopinion.org/pipa/articles/btenvironmentra/412.php?lb=bte

notable for the presence of sceptics who question the need for strong climate change policy proposals', representing 'more than 80% of [sceptic] voices' in the sample.

We can reasonably conclude that contrarian campaigns in the UK and US have had some effect on popular opinion. It is important to note that this is by no means a majority and polls show that climate scientists are the most credible sources for a significant majority of the population in the US and the UK (as they are in other countries). It needs to be additionally emphasised that there is no clear relationship between public opinion and national, far less international decision making (Miller 1998, 1999).

Turning to policy questions, we can see that the general drift of international policy making is undergirded by the scientific consensus. Whether and to what extent the slow pace of progress is attributable at least in part to contrarian campaigns requires careful analysis as there are a variety of other factors including inertia, geopolitical interests and corporate decision making. However, we can note that some scholars claim that 'the overall activities of the conservative think tanks appear to have played a central role in generating congressional opposition to the Kyoto protocol' (Dunlap and McCright, 2010: 247).

But, considering the impact of contrarian strategies on climate is only to consider one of the two main corporate/conservative strategies we identify. What of the other major approach adopted by corporate actors, namely the corporate capture of environmental policy? Sklair (2000) charts how environmental activism by leading TNCs, dating back to the early 1970s, intensified throughout the 1980s and 1990s, resulting in an important ideological and practical victory wherein the radical 'limits to growth' thesis was first reformulated as sustainable development (1987), then partnered with sustainable consumption, fusing into the common sense, and highly business friendly, notion of sustainability. This discourse is now thoroughly emptied of its original charge (that there are limits to growth and capitalist led development, that growth trumps all other policy, moral and ecological considerations, etc.). Sustainability is now understood as continued growth, but with some optional environmental extras. Establishing this understanding in policy circles is the outcome of enormous communicative effort by corporations and their peak business associations, targeted at key decision-making and policy-planning fora (such as the World Summit on Sustainable Development and COP conferences), and transmitted via policy planning networks and think tanks.

The corporate response to climate change is shaped by a number of interrelated factors:

> [S]trategy was decided based on socially generated assessments of the state of climate science, the likelihood of greenhouse gas regulation, and the level of public interest in the climate issue. Moreover, these assessments reflect the embedded-ness of oil company executives in company-specific scientific networks and national policy fields and not a global outlook commensurate with the companies' operational reach.
>
> (Pulver 2007: 64)

What the major oil companies hold in common is the pursuit of the most profitable policy on climate – their different strategies reflect their differentiated assessments of how policy, legislation and stakeholder sentiment are likely to move on this issue in the medium term. Levy's (2007: 74–75) research on the oil and automotive industries supports this reading, suggesting that the post 2000 corporate accommodation of climate policy represents the ongoing assembly of an historical bloc involving key corporations, government agencies, NGOs and other intellectuals and experts to establish the norms and policies of a new (and clearly neoliberal) climate regime. The emerging worldview is one where climate mitigation is understood in terms of ecological modernisation, allowing for 'win–win' scenarios for those businesses best able to adapt.

Conclusions

Our examination of the communication of corporate climate strategy has focused on the communicative strategies adopted by the oil industry in particular over the question of climate change and renewable energy. We have not discussed how the activities of the industry have been modulated by other factors including pressures from government and international decision-making fora, or from civil society and popular opinion. We do not dismiss these as irrelevant but our brief to examine corporate communication activities meant we focused on the two major strategies adopted by the oil industry following the split in the industry in the 1990s. What we see is the determined attempt by one faction (represented by ExxonMobil and the Koch Brothers in particular) to deny the science on climate, presumably making the calculation that this has a chance of political success in the US where they are headquartered. By contrast, the other industry faction notably associated with Shell and BP (and many others) has adopted a strategy of some investment in renewables and an acceptance that climate change is happening. They have devoted their attention to inflecting environmentalism so that it does not threaten profit making. This is evident in the corporate capture of the practical meaning of the term sustainable development and the widespread adoption of market based 'solutions' to climate by governments. The heightened role for corporate social responsibility among these companies is not an aberration but strongly related to their strategic attempt to avoid regulatory impacts on their business model.

Our key conclusion is that it is important to examine communication throughout environmental economics, politics and culture and not just in relation to the mass media or the field of journalism. For us, communication power is about both process and outcomes that are not independent of each other but intimately related precisely by circuits of communicative power (Philo *et al.* 2014).

Notes

1 In this paper, following O'Neill and Boykoff (2010), the term 'contrarian' will be used since it more adequately and specifically refers to those 'who critically and vocally attack climate science' as opposed to those who are misinformed, unconvinced or properly 'sceptical' about matters of public debate.
2 Based on averaging disclosures of their membership payments by two member companies for the year 2010 and multiplying by the number of members in that year (198) (Corporate Europe Observatory 2010).
3 Note that this analysis has been 'rebutted' by the compilers of the list. They conclude that 'The scientists unjustly attacked in the Carbon Brief article are not "linked to" [funded by] ExxonMobil. The Carbon Brief and any other website perpetuating this smear should issue a retraction' (Are Skeptical Scientists Funded by ExxonMobil?, *Popular Technology*, 10 May, 2011, www.populartechnology.net/2011/05/are-skeptical-scientists-funded-by.html). It can be noted that in the cases cited in this article, there is no reason to doubt that both Idso and Michaels have been funded by ExxonMobil since they have both admitted it and the evidence for this was included via links in the original Carbon Brief report.

Further reading

Jacques, P. J., Dunlap, R. E. and Freeman, M. (2008) 'The organisation of denial: Conservative think tanks and environmental scepticism', *Environmental Politics*, 17(3): 349–385.

This article examines of the role of think tanks in promoting climate scepticism in the United States, highlighting the role of conservative think tank networks in fostering doubt and denial of climate science.

Miller, D. and Dinan, W. (2008) *A Century of Spin*, London: Pluto Press.
This book offers an original analysis of the growth of corporate public relations and examines the role of policy planning elites and corporate propagandists in promoting and advancing neoliberal ideas.

Pulver, S. (2007) Making sense of corporate environmentalism', *Organization and Environment*, 20(1): 44–83.
This article compares the different strategies adopted by key transnational corporations in response to climate issues, and argues persuasively for a nuanced reading of corporate policy that considers the professional, political and regulatory cultures that corporate decisions makers operate in.

Sklair, L. (2001) *The Transnational Capitalist Class*. Oxford: Blackwell.
This book develops a conceptual model for understanding corporate led globalisation and offers a penetrating analysis of the corporate capture of sustainability discourse.

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