

### Think tank networks and the knowledge-interest nexus: the case of climate change

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# 8 Think tank networks and the knowledge-interest nexus

The case of climate change<sup>1</sup>

*Dieter Plehwe*

## **Knowledge for particular needs and ends: the think tank public policy challenge**

“I know that I know nothing”, a famous Greek philosopher once said, tellingly splitting hairs. Knowledge has long been known to be limited; to be in need of questioning; and to be subject to change and improvement – or displacement. This is true for so-called “hard scientific knowledge”; and it is certainly true for social science and policy-related knowledge. Existing and available knowledge, on the other hand, does provide us with sufficient certainty to conduct our personal and political affairs. Yet such established and even highly reliable (in scientific terms) knowledge can become subject to strong controversy for different reasons, including ideological or interest-based preoccupations. If much is at stake, public controversies erupt, whether a policy-related knowledge base relies on strong evidence or not. Knowledge limitations, in fact, provide ample opportunities for a form of public lobbying that quite simply involves raising doubt about some aspects of a knowledge complex (e.g. about the specificities of the health impact of smoking) in spite of sufficient general knowledge (e.g. about the generally detrimental health impact of smoking) (Oreskes & Conway, 2010). The increasing use of science in policy making has paradoxically contributed to the politicization of science (Weingart, 1982).

In recent times no subject matter has provoked stronger *practical* science wars than the question of climate change, its human causes, and its policy implications. I will address this conflict constellation, as an extreme case, to highlight its particular relevance to policy-related think tanks and think tank networks. These are the core subject of this chapter, along with the rise of transnational expert, consulting, and lobby/advocacy agencies that appear increasingly to rely on a growing number (or “a new breed”) of partisan and contract think tanks employed strategically to achieve political ends. Since the political character of knowledge has to be considered a normal rather than an extraordinary feature of policy-related knowledge, the expertise-interest nexus and the expertise-lobbying feature are relevant way beyond the arguably extreme case of climate change. Yet think tank studies so far have not been sufficiently directed to meet the challenges posed by this new type of transnational political technocracy. Think tank network studies are introduced as a promising way to improve

understanding of the knowledge-interest nexus in transnational knowledge regimes and thus to help explain the changing “global knowledge power structure” (Strange, 1988).

### **Climate change knowledge – and related economic policy – battles**

Who has got the science right on climate change? This question should have been easy to answer ever since the Intergovernmental Panel on Climate Change (IPCC) was set up by the United Nations Environment Programme (UNEP) and the World Meteorological Organization (WMO) in 1988 to assess the state of research on climate change and its potential impact. The work is carried out by thousands of scientists in classic academic fashion. Three groups are assessing climate science, the impact of climate change, and methods of reducing emissions. Participating academic scientists are employed in universities with and without students. The latter organizations are also known as “academic research institutes” or think tanks. The 2013 report, *Climate Change 2013: The Physical Science Basis*, had 500 authors and was based on the work of 2,000 reviewers considering 9,200 academic publications to present the findings regarding ongoing global warming and its man-made causes. This publication, unfortunately, confirmed previous findings with even greater certainty (95 per cent). Hardly any academic expert on climate change remains doubtful about the prospect and gravity of global warming caused by the burning of fossil fuels and the release of other greenhouse gases due to human activity over the last century and a half (Cook et al., 2013; Anderegg, Prall, Harold, & Schneider, 2010).

But did the IPCC’s researchers really get the meteorological science right? Not so, declared a Nongovernmental International Panel on Climate Change (NIPCC), which countered the IPCC publication with its own 2013 report, *Climate Change Reconsidered II: Physical Science*. This publication mimics the IPCC report. It has been written by three lead authors and twelve chapter authors, who were supported by another thirty-eight chapter contributors and reviewers, as well as two editors at the Heartland Institute. Heartland of course has earned a dubious reputation as the center of corporate-backed climate change denial in the United States (Klein, 2011). Among the authors and other contributors of this NIPCC report are a number of scholars from a variety of fields including natural sciences and economics. A number of other contributors are listed as consultants. However, few if any of the authors have a track record in the academic field of meteorology or other climate related fields. Many of them work out of particular think tanks, like the climate change skeptical U.S. Center for the Study of Carbon Dioxide and Global Change, or the Australian free-market Institute of Public Affairs. As well as a strong U.S. contingent there are a number of European authors (Heartland Institute, n.d.).

The NIPCC report claims to present scientific results that contradict much if not all of the findings of the IPCC. What is more, the report argues that IPCC research works on the wrong premise (man-made climate change), ignoring the alternative hypothesis of natural climate change, which is held to be much

more consistently backed by available data. This statement is made time and again, despite solid academic evidence to the contrary and despite scientific refutation of the arguments typically made by skeptics (e.g. suggesting solar activity to explain natural changes). Regardless of the evidence of human causes of recent climate change, the NIPCC critics argue that the IPCC is working on the basis of directed conclusions to back up political interventionism, rather than asking climate-change-related questions and trying to answer them with an open mind.

The NIPCC report, like the many other documents produced by climate change deniers, has been heavily attacked by climate change scientists and environmental activists, some of whose arguments are, in turn, taken up and countered by NIPCC representatives (see *Replies to Critics* in Heartland Institute, n.d.). The resulting impression is one of an intense debate and a continuous exchange of arguments. But most academics would not hesitate to reject a notion of academic debate, and to point to the frequent repetition of denial arguments that have long been proved incorrect (see Hajer, 2013, on efforts to deal with this phenomenon through discursive involvement). Unsurprisingly, climatologists accuse climate change skeptics of working on the principle of directed conclusions. For more than twenty years, one of the main authors of the NIPCC report, Fred Singer, has consistently argued that climate change is natural in as far as it exists (Oreskes & Conway, 2010, p. 169f).

How does such a knowledge and policy battle constellation square with conceptions of scientific research? According to standard models of knowledge accumulation, paradigm competition, and turnover (Kuhn, 1962), some of the climate change skepticism and paradigm competition probably works to improve and further develop the core of climate change knowledge, unless it turns out that skeptical arguments have greater scientific merit and herald paradigm change, which is highly unlikely despite the remaining level of uncertainty. An alternative perspective of competing transdisciplinary thought collectives, longer range paradigms, and multiple epistemes (Fleck, 1935/1980) could instead be supported if at least some of the climate change skeptical forces are considered to produce respectable knowledge outside hierarchically relevant scientific communities – if for no other reasons than the fundamental limits of scientific knowledge in general and the acknowledged remaining margin of error in meteorology. But Fleck's ideas on thought collectives are even more relevant with regard to competing climate-change-related economic policy perspectives.

### **Precaution versus adaptation principles**

Based on insights into the human causes of climate change, many policy analysts propose a precautionary approach that requires a high degree of interventionism and planning to promote the transformation of the fossil economy age into a renewable energy age (WBGU, 2011). Even within the IPCC, however, the group (III) that assesses methods of reducing emissions tends to place a strong emphasis on cost efficiency rather than on substantive policy goals, reflecting

a prevailing dominance of neoliberal ideas in economic science (Tanuro, 2013, p. 19). While IPCC group III economists are nevertheless concerned about the impact of global warming and the search for market-based instruments to reduce emissions, another group of neoliberal economists rejects as counter-productive not only the precautionary approach in general, but also the employment of market-based instruments designed to prevent climate change (Lal, 1997, 1998). Instead, these economists argue in favor of adaptation (Neubacher, 2012). Neoliberal ideas in economics in general, and in environmental economics in particular, can thus be subdivided into pragmatic approaches that favor market-based interventionism to pursue political or social goals (while giving greater consideration to economic constraints than environmentalists would like) and approaches that reject the pursuit of political or social goals based on an uncompromising acceptance of the superiority of a free-market-oriented political economy. So-called “free-market environmentalism” in fact here translates into a new-resource economic approach in which environmental concerns are clearly subordinated to (micro-)economic concerns (Eckersley, 1993; Plehwe, 2012). No matter if climate change is real and caused by human activity, the adaptation paradigm thus objects to policies designed to prevent climate change. Arguments suggesting that climate change does not even exist or is not due to human economic activity (since industrialization) only supply additional support to an economic policy perspective that rejects interventionism and planning on fundamental paradigmatic grounds.

Within the academic discipline of meteorology and in the wider scientific community, the Kuhnian model certainly prevails in the field of climate change research. The ongoing attempt to establish a competing paradigm of natural climate change has not been very successful, and recently has even seemed to lose public support. Major earlier denial stakeholders like the U.S. oil corporations appear to acknowledge the reality of emission damage – in terms of projecting carbon pricing in the United States, for example. But the Koch industry empire and the Koch Foundation along with other right-wing foundations continue to vigorously oppose climate change policies (see Brulle, 2013), and still have enough clout to maintain a split within the Republican Party in this regard (Davenport, 2013). A global report demanding constructive and consistent climate-change-related public affairs activities from signatories of the global compact suggests that corporate lobbying still constitutes the major obstacle to climate change policy progress. Only about half the corporations disclose their contributions to civil society organizations, for example (Guide, 2013). A study of the funding of the climate change countermovement on the other hand reveals a trend towards obscuring corporate funding of skeptics. Business owners and managers increasingly rely on donor directed philanthropies to cover the tracks (Brulle, 2013). Due to the strong element of corporate lobbying, however, it is unlikely that the story line of natural climate change will gain credit within the academic community, though more-or-less respectable academic players will continue to deviate from the mainstream.

But the scientific analysis of climate change and its causes may in fact play less of a role in climate-change-related policy conflicts and debates than many

climate change scientists believe. Instead, the competing perspectives of economic science may turn out to be more relevant to the climate change debate than climate change science. Adaptation and precaution advocates are pitted against each other; neoliberal market perspectives fight economic policy strategies involving a certain amount of industrial planning.

The resulting alliances of climate change researchers and economists appear to combine a very strong academic contingent of precaution advocates in meteorology with a still rather weak contingent of economists available to consider the stronger reliance on planning necessary to achieve precaution objectives. Conversely, an academically very weak group of researchers who hold to a natural climate change perspective requiring adaption, if anything, is aligned with a group of anti-interventionist economists that appears to still be going surprisingly strong, despite the disrepute into which neoliberal ideas fell during the global financial and economic crisis.

With regard to climate change policy, time can be considered as running in favor of adaptation. Even if precaution sounds right to many ears, the recurring delays and repeated failures to meet goals previously agreed in global climate change policy-making work against precautionary policy coalitions. Hence adaptation advocates already win much by winning time. A twofold strategy developed to this end can be discerned: First, continue to raise doubts about the natural science base of climate change; second, step up efforts to raise doubts about the feasibility of precautionary climate change policies.

Recent advances in climate change skepticism in several countries, and the stagnation of global climate change negotiations, appear to be lending support to neoliberal perspectives. The opposition to a precautionary approach to climate change has indeed managed to fuel fears about a return to futile interventionism by raising doubts both about the scientific basis of climate change and about the economic competence of precaution advocates (Oreskes & Conway, 2010, pp. 169–170). The surprising advance of climate change policy contrarianism can arguably be much better explained by the strength of the normative economic and political perspectives advanced by adaptation advocates than by an academic constellation in the climate sciences. Paradigm competition thus does not really matter so much within the scientific domain of meteorology but can be regarded as having great importance in a battle of jurisdictions between the different policy-related scientific domains of meteorology and economics.

In any case, among the public at large, and certainly within the United States, a Fleck-inspired perspective of competing thought collectives appears to best capture the constellation of climate change discourse and *policy* coalitions, since the number of people believing in scientific conflict within climate science has increased during recent years despite the consolidation of climate-change-related scientific knowledge. Apart from the United States, this appears to have happened in Australia, for example, where the trend has been explained by a media concentration and climate science coverage one-third of which features articles that raise doubts about a human contribution to climate change (Bacon, 2013). But what are the media behind the media in Australia and other countries? What are the sources of journalists' representation of fact and opinion?



## Transnational and trans-professional coalitions against climate change policy activism

It matters not that NIPCC authors can hardly claim to represent even a small minority within the field of climate science: The website of the NIPCC presents climate change as a discourse characterized by a battle pitching NIPCC research forces against IPCC science. In order to understand how climate change skeptics have imposed this representation, we need to look beyond the capacity of an individual researcher or a group of researchers in the field of meteorology: We need to include the academic constellation in economics; and we need to look beyond the academic sphere, in order to address the question of the relevance to public policy of science, knowledge, and ideas. In order to do that, a sociological approach is needed that takes the social character and the different dimensions of knowledge production process seriously.

The present NIPCC activities grow out of a longer standing neoliberal and conservative strategy to fight the rise of environmental activism and climate justice related interventionism resulting from increasing ecological and related social concerns (Hadden, 2015). The Indian born economist Depaak Lal (1997) has termed the challenge “environmental imperialism”<sup>22</sup> in a booklet for the British Institute of Economic Affairs, which is one of the key neoliberal think tanks in the UK (Cockett, 1995), and which can be linked to climate change skeptical networks. Heartland in the United States is, in fact, only the tip of an iceberg of global networks of normative (neoliberal) and corporate agencies that seek to prevent climate change policies from being designed and becoming effective.

The fundamental narrative of a need for adaptation and market-based evolution may appear fatalistic to those who are concerned about climate change and its consequences. But for the radical opposition to planning and politically designed futures it is simply a superior solution based on fundamental insights into the character of social relations and the limits of political systems. Climate change policy skepticism has successfully globalized James Buchanan’s version of public choice theory, emphasizing government failure. A complementary version of explicit free-market environmentalism emerged in the 1970s led by John Baden and his Montana based think tank, the Property and Environment Research Center (PERC, founded in 1982), and the subsequently established Foundation for Research on Economics and the Environment (FREE). Baden’s efforts to establish a new wing of “resource economics” date back to his work at the Center for Political Economy and Natural Resources at Montana State University in 1978. A year before (1977), he had published a volume entitled *Managing the Commons*, in collaboration with Garrett Hardin, the Malthusian theorist who had started the “debate on the tragedy of the commons”. This volume marked the transition from the early “tragedy of the commons debate”, which focused on the perceived need to protect the commons through public action, to a perspective more consistent with an anti-interventionism of both neoliberal and communitarian origin.

Hardin and Baden’s (1977) volume includes writers like Tullock and Ostrom who – for different reasons – were concerned with the limits of state



intervention. Tullock was mostly concerned with the problem of the social cost of dealing with the commons problem, which anticipated a more general neo-liberal concern with economic calculations of policy efficiency (cost-benefit analysis, etc.). Ostrom was concerned with the recognition and relevance of community-based solutions to commons problems. While the former can be considered closer to climate change policy skeptics who subordinate environmental concerns to economic considerations, Ostrom clearly was primarily concerned with environmental problems and was searching for a wider range of solutions. Both authors share a basic rational-choice epistemology that clearly demonstrates the need to observe the links between epistemology, expertise, and other transfer and lobby/advocacy capacities, in order to assess the impact of knowledge in a sufficiently differentiated way (e.g. not to blame “neo-classical economics” or “rational choice” for all the problems in contemporary society).

In order to understand the impact of elements of the different scientific communities in turn, it is important to look at social knowledge networks beyond the scientific communities, which can show the ways in which academic experts are actively or passively tied into discourse coalitions (Fischer, 1993). Think tank and think tank network studies are of enormous help here, because activist experts of all political colors are drawn into their orbit (in advisory and supervisory boards, for example).

### **The many demands on think tank networks**

The publicly and politically effective generation and peddling of knowledge relies on the ability to successfully combine expert, consulting, and lobby/advocacy capacities. Although this does not necessarily involve skillful or strategic design, interested agencies can develop strategies to achieve such ends by employing appropriate organizations, such as consulting companies, foundations, or think tanks. If the relevant conflict constellation is transnational or global, the combined agency can, and indeed must, be studied as a transnational expert, consulting, and lobby/advocacy network (TECLAN). Such a network evolves and can be strategically developed to purposefully arrange and make publicly relevant academic expertise and orientation to advance, modify, or derail public policies in one or several areas.

Such a combined knowledge-interest agency does not require an exclusive understanding of the functionalism or instrumentality of ideas. Corporate lobbies can order tailor-made expertise, of course. However, the expertise needed can also simply be found in the reservoirs of academic and other research organizations: Expertise ready to be aligned without the directing capacity of interest groups. Instrumentality, on the other hand, can also work the opposite way, with experts seeking and finding corporate (or trade union or NGO) allies to advance their research agendas. While the realms of academic expertise (sociology of science) and interest or advocacy groups (interest group studies) are subject to dedicated sub-disciplines, the knowledge-interest nexus and the specific transfer capacities situated between these realms – think tanks and think

tank networks – have not yet been sufficiently studied. It is only recently that the notion of think tanks as an “interstitial field” between the academic, corporate, media, and political fields has been developed (Medvetz, 2012).

The expertise component has traditionally been found primarily in the academic world. However, the borders are shifting, not least due to the commercial transformation of the universities (Mirwoski, 2011) and the advance of private (civil-society-based) think tanks (Gibbons et al., 1994, p. 141; Pestre, 2003). Private think tanks encroach upon the territory of the traditional academic universe. Their advance has at the same time been a driver of the ongoing transformation of universities and academic think tanks, which can now frequently be found to share private think tank features like output tailored to specific audiences, a marketing orientation, and closer ties to corporate and other constituencies (Asher & Guillhot, 2010).

However, at the same time, think tanks are still more important in their own right, due to their multi-directional transfer capacity (consulting, formatting, and editing functions), which is needed to turn academic knowledge into media, policy, and other public and private formats (relevance-making). Correspondingly, think tank professionals are combining and crossing various traditional professions, particularly academic research, media journalism, public relations, policy consulting, public affairs, and campaign management.

Lobby and advocacy groups in turn are the classic interest group variable. The strength of interest groups can be measured by assessing their resources (funding, number of people, the moral and public legitimacy of their cause, etc.). Depending on the strength of each component – expertise, consulting/transfer, lobbying – on the one hand, and on the combined strength of the three components on the other hand, transnational expert, consulting, and lobby/advocacy networks can be more or less effective policy agents.

Whether, and to what extent, academic think tanks involved supply expertise developed primarily for academic purposes, or become instruments of corporate and other interests in more straightforward ways, is turned into an empirical question rather than assumed. Think tanks do not have to be considered as instruments of corporate elites or monied interests in such a framework: They can be drawn on for general ideological and specific agenda-setting purposes. While rejecting a simplistic instrumentalism for expertise and think tanks, a critical approach to think tank networks requires us to take different intellectual, professional, and material resources or power seriously, and to make a serious study of their relationships and directive relational capacity. Experts can assist in the preference formation processes of corporate leaders; and corporate leaders can help direct research programs; but the diverse and frequently multiple roles of the new class of think tank transfer professional has yet to be fully appreciated. Although the notion of discourse coalitions goes beyond the empirical dimension of such a focus on transnational expert, consulting, and lobby/advocacy networks, the combined agent category can serve as an initial way to operationalize discourse coalition agency and improve the focus of discourse coalition research on rigorous actor constellation research (Plehwe, 2011).

Think tanks and think tank networks are, in any case, still the most arcane and least understood territory in the trinity of expert, policy-related consulting, and interest group studies, not least due to the rapid proliferation of think tanks (McGann & Weaver, 2005), the resulting transformation of the consulting landscape (Falk, Römmele, Rehfeld, & Thunert, 2006), and the dynamic formation of think tank networks (Stone, 2013; Plehwe, 2010).

### **A preliminary sketch of the NIPCC coalition of expert, consulting, and lobby groups**

The present configuration of the NIPCC versus the IPCC dates back to the year 2003. One of the leading U.S. climate science critics, atmospheric physicist Dr. S. Fred Singer, organized a meeting in Milan, Italy, as part of his Science and Environmental Policy Project (founded in 1990). The meeting was convened to evaluate the fourth IPCC report. In 2008, Singer and his think tank joined forces with the Heartland Institute. Together they produced an authoritative version of their counter argument against the IPCC: *Nature, Not Human Activity Rules the Climate*. In 2010, a website ([www.nipccreport.org](http://www.nipccreport.org)) was launched to document the research activities of the NIPCC. The translation of parts of the 2009 and 2011 NIPCC reports by the “Information Center for Global Change Studies” of the Chinese Academy of Social Sciences is counted as one of the organization’s greatest successes. NIPCC scholars were also invited to China for a workshop (see About the NIPCC in Heartland, n.d.). Whatever its academic credentials, the NIPCC has managed to establish an alternative story line.

The capacity to create story lines that encapsulate cause and effect arguments in a comprehensible form (e.g. trees dying due to acid rain) has been considered the key both to the formation of discourse coalitions (Hajer, 1993) and to think tank power (Saloma III, 1984). It is well known that many climate change denial efforts have been financed by ExxonMobile, due to a study of the Union of Concerned Scientists (2012) and subsequent tracking and tracing of the flow of Exxon money to climate change denial authors and think tanks by Greenpeace USA (Greenpeace, n.d.). It is also known that more than 90 per cent of the climate change skeptical or denial papers in the United States originate from right-wing (neoliberal, conservative) think tanks registered in a database of the U.S. Heritage Foundation, which was the flagship for the “Reagan Revolution”. Conversely, more than 90 per cent of the think tanks in this register have also been found to feature climate change denial perspectives (Jacques, Dunlap, & Freeman, 2008). In addition to the immediate influence of fossil fuel interests like Exxon, we thus have to consider the conservative and neoliberal ideological wing of the U.S. political spectrum (mostly linked to the Republican Party) represented by the Heritage Foundation at the federal level and by the related State Policy Network, which ties state-level organizations in the United States together (Fang, 2013).

The NIPCC coalition features academic outsiders in the climate sciences, a wider range of university and think-tank-based experts in fields related to the climate change debate, including economics, and a wide range of think tanks that feature neoliberal and neoconservative worldviews and frequently

have close links to corporate lobby groups like oil, coal, and gas interests, as well as energy-intensive businesses. The corporate interest group basis of the climate change skeptical TECLANs has probably narrowed over time, because the majority of corporate interests joined the World Business Council for Sustainable Development launched in 1992 by Swiss business man Stephan Schmidheiny. ExxonMobile, for example, has been reported to have withdrawn support from the Heartland Institute after strong and increasing criticism of its climate-change-related lobby activities (Revkin, 2009).

Due to the transparency requirements for both think tanks and corporate philanthropy in the United States, the composition of the U.S. elements of climate change skeptical TECLANs is fairly well known. The regulations of not-for-profit organizations covering most think tanks (U.S. tax code 501 (c)) and the regulations governing philanthropic spending by U.S. corporations allow researchers to track the corporate spending of organizations and to observe the funding of think tanks in considerable detail. Data are collected and made available by a charity (Guidestar, n.d.), and watchdog organizations like the National Committee for Responsive Philanthropy subject corporate spending to critical scrutiny. Although various options to conceal funding continue to exist in the United States (e.g. donor directed philanthropies; see Brulle, 2013; Union of Concerned Scientists, 2012), investigators in other parts of the world have to deal with a near complete lack of comparable regulatory requirements and, therefore, with much less of the financial data that can inform work on the knowledge-interest nexus.

Unsurprisingly, it is less well known that the now defunct Stockholm Network of more than 100 neoliberal think tanks and the global Atlas Foundation Network of neoliberal think tanks feature many think tanks that originate and distribute climate change skeptical pamphlets and sustain the alternative story line of natural causes of climate change in Europe and across the world. Among Stockholm Network members, the following twenty think tanks (compare Table 8.1) have published climate change skeptical papers of various kinds:

Close links exist between European networks and U.S. and Australian think tanks, for example; and in another example, the Committee for a Constructive Tomorrow (CFACT) was set up in the United States in 1985 and extended to Europe in 2004. The European section of the organization was set up by a German citizen, and it features strong ties to, among others, German and South African groups (CFACT, n.d.). Australian Joan Nenova's climate change "skeptical handbook" has been translated into sixteen languages, with the German translation, for example, featured by the Austrian Hayek Institute (Jonova, n.d.). Think tank researchers are beginning to address the communication strategies pursued in these circles (Miller & Dinan, 2015).

In order to establish the full range and scope of climate change skeptical TECLANs around the globe, a dedicated collaborative think tank network study is necessary to systematically establish or complement available information,<sup>3</sup> and to see if the various groups are operating independently of each other, or, alternatively, if there are close ties and coordination efforts between the different regional networks. Obvious candidates for the creation of such ties are normative groups (like the global neoliberal networks of the Mont Pèlerin

*Table 8.1* Stockholm Network member think tanks that have published climate change skeptical publications.

Hayek-Institut	<b>Austria</b>
Institut Economique Molinari, Institut Hayek (IEM), LIBERA!, Ludwig von Mises Institute Europe	<b>Belgium</b>
Center for Economic Policy (CEP)	<b>Czech Republic</b>
The Copenhagen Institute	<b>Denmark</b>
Civil Society Institute (iFRAP), Institut Euro 92	<b>France</b>
Committee for a Constructive Tomorrow (CFACT), Hayek- Gesellschaft, Institute for Free Enterprise	<b>Germany</b>
Istituto Bruno Leoni, Magna Carta Foundation	<b>Italy</b>
Institut Globalizacji	<b>Poland</b>
Conservative Institute of M. R. Stefanik	<b>Slovakia</b>
Fundacion para el analisis y los estudios sociales (FAES), Juan de Mariana Institute	<b>Spain</b>
Eudoxa	<b>Sweden</b>
Liberales Institut	<b>Switzerland</b>

Source: Think Tank Network Initiative (2012)

Society) and multinational corporations, business associations, and corporate foundations. Among the leading advocates of climate change policy skepticism are former Mont Pèlerin Society presidents like Deepak Lal and influential MPS members like the former Czech president Vaclav Klaus. Exxon and Koch money has been tracked and traced to European think tanks (CEO, 2010).

Since the leadership of individual corporations and business associations, much like the individual members of a normative group, can turn out to be politically divided over issues like climate change, it is impossible to fully equate climate change skepticism with, say, “oil interests” or “neoliberal worldviews”. Careful research into knowledge-interest relationships can yield insights with regard to important divisions within corporate, ideological, and political groupings (Fischer & Plehwe, 2013). The political dimension of the knowledge-interest nexus is, in any case, likely to turn out to be the critical dimension – relegating both science and interest categories and even general worldviews to secondary positions in many policy issue areas.

The battle over adequate ways to deal with ecological challenges recently led to a call by global environmental NGOs and think tanks on global compact signatory companies to step up their climate change public affairs effort, for example (Guide, 2013). Both climate change skeptical and promotion forces feature transnational expert, consulting, and lobby/advocacy networks that are pitted against each other in national, regional, and global policy arenas (Hadden, 2015; on corporate elite networks promoting climate capitalism see Sapinski, 2015).

### **Think tank studies: think tank network studies!**

Climate change is arguably an extreme case of politicized science and lobby efforts. The focus on climate change, or tobacco, acid rain, or ozone hole debates, all involving extraordinary efforts of science lobbies or “merchants of doubt”

(Oreskes & Conway, 2010), may create a misleading image of partly illegitimate post-normal science (von Storch, 2009) that is juxtaposed with the normal and academically focused practice of good science and expertise. Such a perspective ignores the fundamental political character of science and knowledge. Even the most perfectly controlled work of academic scientists would not suffice to cut the discursive links between knowledge, commitments, and interests that academic and other researchers simply cannot escape (Plehwe, 2018). As Medvetz (2012) has demonstrated by using the shift in U.S. welfare research funding from a “poverty as deprivation” paradigm to a “poverty as dependency paradigm”, the majority of academic and other researchers have only one choice: To constructively contribute to the mainstream, whether or not they are normatively committed to the hegemonic political orientation of science. The choice of remaining “clean” in terms of restricting oneself to good scientific practice or to engaging more actively in policy-related activities can certainly be considered important for the individual; but it is of minor importance with regard to the shifting relevance of research- and policy-related consulting as a whole.

It has been the great merit of monographs by Thomas Medvetz (2012) and Diane Stone (2013) that they reject the traditional typology of think tanks. “Categorizing different types of think tank . . . has become a scholarly fetish that has detracted attention from more sophisticated analysis of the sources of power of these organisations and how they garner and wield societal influence” (Stone, 2013, p. 64). Although criticisms can be made of the definition and categorization of think tanks in the work of McGann and Weaver (2005) and the ongoing global survey activities of McGann (2017), the fact is that nobody has done more than James McGann to reveal the global extent and scope of the think tank phenomenon. In terms of analytic capacity, Medvetz (2012) has done much to overcome the traditional limits of think tank studies by demonstrating think tanks’ common reliance on resources from relevant academic, corporate, media, and political fields, and the multiple identities think tanks have vis-à-vis their audiences and constituencies. While Medvetz looks only at the United States, Diane Stone’s book is the first significant effort to elevate to the transnational level the study of think tanks and knowledge networks in relation to policy communities. These works are milestones with regard to the improved charting of unknown think tank territory. The concluding section of this chapter concentrates on supplementing the focus on contemporary think tanks as a peculiar organizational category (Medvetz) and the focus on think tank networks as an important element in governance regimes and a mediator of the knowledge-power nexus (Stone) by suggesting a systematic approach to studying think tank network relations more explicitly, with an eye to the knowledge-interest nexus.

### **Instead of a conclusion: a new model to study think tank networks**

Think tanks have for a long time been represented as clearly defined organizations operating in the marketplace of ideas (Braml, 2004). Interconnections between organizations are consequently described as efforts to control uncertainty (Lang, 2006). However, competing think tank networks and many of

their members seem to run against such abstract market logic, since they display differing normative and thematic features. In climate change policy struggles, think tanks are strategically employed to exploit uncertainties, for example. Emphasizing defined boundaries of individual organizations at the same time obscures the extent to which ideological and material relations, interlocks, and political coalitions matter in order to understand think tanks. To better explain individual think tanks and their (transnational) networks, theoretical approaches and appropriate methods are needed to understand their constituencies and the other major influences on their work.

Specific think tanks are best considered as research and consulting organizations that need further explanation if we are to better understand the role of academic and other interests at play in them, frequently involved in movement and countermovement efforts (Meyer & Staggenborg, 1996). We suggest examining think tanks according to a model adapted from Schmitter and Streeck (1999), which was developed in order to systematically study interest groups. In these academics' account, interest groups are shown as needing to be explained by the bottom-up logic of membership and the top-down (or side-ways) logic of influence, in order to account for a range of activities and formal structures that is frequently at odds with simple definitions. Unlike associations, however, think tanks rarely result from the organization of members, though membership can play a role.<sup>4</sup> The adapted model proposed here combines the systematic study of the *logic of constituencies* and the *logic of influence*. Think tanks can have various constituencies, the weights of which are likely to have a strong impact on organizational characteristics, tasks, output, and performance.<sup>5</sup>

Consequently, the key constituencies of particular think tanks (including donors, and academic, corporate or normative, and political supporters) have to be identified as a first step, for example, by analyzing interconnectedness. The resulting empirical evidence of related and unrelated constituencies of think tank network members across countries will go a long way to making visible and to better explaining the overall constituencies of a network. In the case of climate change, think tanks involved in climate change (policy) skepticism may be driven by fossil fuel interest groups in one country, but find partners driven by more general ideological concerns in another country that may not cater to specific energy corporations or interest groups. While network composition and constituencies are likely to differ considerably between networks, institutional logics are likely to be shared (for example, the increasing importance of supranational arenas of decision-making, the relevance of new media, international requirements for academic research project funding, etc.).

Think tank network analysis conceived of in this way is likely not only to shed new light on the composition of organizational networks and their members (see Schlögl, 2010), but also to help identify transnational expert, consulting, and lobby/advocacy networks like those involved in climate change (policy) skepticism. Such concrete networks of organizations and individuals in turn can be used to better identify discourse coalition agencies relying on shared story lines (like natural climate change and/or futility of policy planning). Think tanks usually display ties to academic, economic, media, and other groups. They can therefore be considered ideally suited to the study of the



relationships between academic, consulting, and interest groups that appear to use think tank networks as a key organizational backbone. This clearly is the case in the climate change debate. Think tanks are thus considered to be an attempt to create solutions in response to knowledge, ideas, and interest problems: A kind of *dispositif* in Foucault's sense (Bühmann & Schneider, 2008). They consist of different elements, such as discursive and nondiscursive practices, actors, and objects (such as buildings and other physical resources). Think tank networks viewed in this way offer a wealth of empirical clues about individuals and social relations between individuals who are, in various ways, involved in knowledge and orientation struggles.

The actor-centered study of the policy power and influence of interest groups has been considered elusive, due to, inter alia, the complexity of interaction in the policy process and the difficulties in defining and measuring influence. The knowledge effect is likewise considered hard to measure, due to the difficulty of attributing causal weight to specific ideas and specific knowledge actors. But quantitative and qualitative studies directed towards assessing the profile and influence of individual think tanks and networks can be accomplished by looking at think tank outputs as the input of, for example, elite and popular newspapers, radio and TV, academic journals, and policy documents. Policy transfer can be observed along vertical and horizontal network channels. Social network analysis can indicate the position of think-tank-related individuals in policy, scientific, and business communities. Historical studies can be used to track and trace the role of certain coalitions in driving or derailing policy processes ("knowledge-shaping"; see Bonds, 2011).

Even if climate skeptical think tanks cannot be blamed – either on their own or to a specific extent – for the lack of progress in climate change politics, they can certainly be used to better identify and more fully recognize the transnational expert, consulting, and lobby/advocacy forces at play. Climate change policy skeptics have been able to delay, if not derail, a precautionary climate change policy regime. One thing is certain: If an international research team suitably qualified for the global study task is able to collaboratively establish the relevant information with regard to climate change policy skeptical think tank networks, the resulting picture of climate-change-related social agencies is going to be much larger and much more detailed than what can be achieved simply by pitching IPCC scientists against NIPCC think tank researchers.

## Notes

- 1 This chapter was first published in *Critical Policy Studies* (2014, volume 8, issue 1, pp 101–115). The author thanks the publisher for granting permission of publication.
- 2 On a more fundamental level, Depaak Lal (1998) has equated ecological thinking with Marxism. Both are Augustinian fallacies attempting to create heaven on Earth. Lal, much like Friedrich August von Hayek, re-interprets Alber O. Hirschman's reflections on unintended consequences in a way that is very distant from Hirschman's ideas. While Hayek and Lal suggest that planning for the future is futile and counter-productive, due to unintended consequences, Hirschman suggests a dynamic evolution of goals that can be achieved despite unintended consequences, with the latter even considered to be providing the opportunity for the pursuit of additional or new goals. Hirschman's realism and optimism have thus been turned into a cynical and fatalistic perspective that is inherently

status quo oriented (Hirschman, 2001). I am grateful to Leonard Dobusch for pointing me towards this Hirschman interview.

- 3 A research tool has been created ready to use for such global collaborative research efforts: [http://thinktanknetworkresearch.net/wiki\\_ttni\\_en/index.php?title=Category:Think\\_Tank\\_Network](http://thinktanknetworkresearch.net/wiki_ttni_en/index.php?title=Category:Think_Tank_Network).
- 4 The funding of the Heritage Foundation includes the dues paid by 200,000 subscribers to the Heritage newsletter. The recently founded Institut für eine solidarische Moderne in Germany gained 1,600 members within a few weeks.
- 5 Medvetz (2012) provides a good example in his study of proto think tanks, but unfortunately refrains from a similar look at constituencies in his later discussion of contemporary think tanks. Stone (2013) includes many hints about constituencies, but refrains from a more thorough discussion of the knowledge-interest relationships in her case studies.

## References

- Anderegg, W. R. L., Prall, J. W., Harold, J., & Schneider, S. H. (2010). Expert credibility and climate change. *Proceedings of the National Academy of Sciences of the United States of America*. Retrieved from <http://dx.doi.org/10.1073/pnas.1003187107>.
- Asher, T., & Guilhot, N. (2010). The collapsing space between universities and think-tanks. In *UNESCO: World social science report* (pp. 338–344). Paris: UNESCO.
- Bacon, W. (2013, November 1). Big Australian media reject climate science. *The Conversation*. Retrieved from <http://theconversation.com/big-australian-media-reject-climate-science-19727>.
- Bonds, E. (2011). The knowledge-shaping process: Elite mobilization and environmental policy. *Critical Sociology*, 37(4), 429–446.
- Braml, J. (2004). *Think Tanks versus denkfabriken? U.S. and German policy research institutes' coping with and influencing their environment*. Baden-Baden: Nomos Verlagsgesellschaft.
- Brulle, R. J. (2013). Institutionalizing delay: Foundation funding and the creation of U.S. climate change counter-movement organizations. *Climate Change*, 122(4), 681–694.
- Bühmann, A. D., & Schneider, W. (2008). *Vom Diskurs zum Dispositiv*. Bielefeld: Transcript Verlag.
- CEO. (2010). *Concealing their sources – who funds Europe's climate change deniers?* Brussels: Corporate Europe Observatory. Retrieved from [http://corporateeurope.org/sites/default/files/sites/default/files/article/funding\\_climate\\_deniers.pdf](http://corporateeurope.org/sites/default/files/sites/default/files/article/funding_climate_deniers.pdf).
- CFACT. (n.d.). Retrieved from [www.cfact.org/category/cfact-europe/](http://www.cfact.org/category/cfact-europe/).
- Cockett, R. (1995). *Thinking the unthinkable: Think-tanks and the economic counter-revolution, 1931–83*. London: Fontana Press.
- Cook, J., Nuccitelli, D., Green, S. A., Richardson, M., Winkler, B., Painting, R., . . . Skuce, A. (2013). Quantifying the consensus on anthropogenic global warming in the scientific literature. *Environmental Research Letters*, 8(2). Retrieved from <http://iopscience.iop.org/article/10.1088/1748-9326/8/2/024024>.
- Davenport, C. (2013, December 5). Large companies prepared to pay price on carbon. *New York Times*. Retrieved from [www.nytimes.com/2013/12/05/business/energy-environment/large-companies-prepared-to-pay-price-on-carbon.html](http://www.nytimes.com/2013/12/05/business/energy-environment/large-companies-prepared-to-pay-price-on-carbon.html).
- Eckersley, R. (1993). Free market environmentalism: Friend or foe? *Environmental Politics*, 2(1), 1–19.
- Falk, S., Römmele, A., Rehfeld, D., & Thunert, M. (2006). Einführung: Politikberatung – Themen, Fragestellungen, Begriffsdimensionen, Konzepte, Akteure, Institutionen, und Politikfelder. In S. Falk, A. Römmele, D. Rehfeld, & M. Thunert (Eds.), *Handbuch Politikberatung* (pp. 11–22). Wiesbaden: VS Verlag.
- Fang, L. (2013, April 15). The right leans in. *The Nation*. Retrieved from [www.thenation.com/article/173528/right-leans#](http://www.thenation.com/article/173528/right-leans#).

- Fischer, F. (1993). Policy discourse and the politics of Washington think tanks. In F. Fischer & J. Forrester (Eds.), *The argumentative turn in policy analysis and planning* (pp. 21–42). Durham: Duke University Press.
- Fischer, K., & Plehwe, D. (2013). The 'Pink Tide' and neoliberal civil society formation. Think tank networks in Latin America. *State of Nature – An Online Journal of Radical Ideas*. Retrieved from [www.stateofnature.org/?p=6601](http://www.stateofnature.org/?p=6601).
- Fleck, L. (1935/1980). *Entstehung und Entwicklung einer wissenschaftlichen Tatsache*. Frankfurt: Einführung in die Lehre vom Denkstil und Denkkollektiv.
- Gibbons, M., Limoges, C., Nowotny, H., Schwartzman, S., Scott, P., & Trow, M. (1994). *The new production of knowledge: The dynamics of science and research in contemporary societies*. London: Sage.
- Greenpeace. (n.d.). *Exxonsecrets.org*. Retrieved from [www.exxonsecrets.org](http://www.exxonsecrets.org).
- Guide. (2013). Guide for responsible corporate engagement in climate policy. *UN Global Compact*. Retrieved from [www.unglobalcompact.org/docs/issues\\_doc/Environment/climate/Guide\\_Responsible\\_Corporate\\_Engagement\\_Climate\\_Policy.pdf](http://www.unglobalcompact.org/docs/issues_doc/Environment/climate/Guide_Responsible_Corporate_Engagement_Climate_Policy.pdf).
- Guidestar. (n.d.). Retrieved from [www.guidestar.org](http://www.guidestar.org).
- Hadden, J. (2015). *Networks in contention: The divisive politics of climate change*. Cambridge, MA: Cambridge University Press.
- Hajer, M. (2013). A media storm in the world risk society: Enacting scientific authority in the IPCC controversy (2009–10). *Critical Policy Studies*, 6(4), 452–464.
- Hardin, G., & Baden, J. (Eds.). (1977). *Managing the commons*. San Francisco: W. H. Freeman and Company.
- Heartland Institute. (n.d.). *Nongovernmental International Panel on Climate Change (NIPCC)*. Retrieved from <http://climatechangereconsidered.org/nipcc-scientists/>.
- Hirschman, A. O. (2001). *Crossing boundaries: Selected writings*. New York, NY: Zone Books.
- Jacques, P. J., Dunlap, R. E., & Freeman, M. (2008). The organisation of denial: Conservative think tanks and environmental scepticism. *Environmental Politics*, 17(3), 349–385.
- Jonova. (n.d.). Retrieved from <http://joannenova.com.au/2009/05/das-skeptiker-handbuch-has-arrived/>.
- Klein, N. (2011, November 28). Capitalism vs. the climate. *The Nation*. Retrieved from [www.thenation.com/article/164497/capitalism-vs-climate#](http://www.thenation.com/article/164497/capitalism-vs-climate#).
- Kuhn, T. S. (1962). *The structure of scientific revolutions*. Chicago, IL: University of Chicago Press.
- Lal, D. (1997). Ecological imperialism. In J. Morris (Ed.), *Climate change – Challenging the conventional wisdom*. London: Institute of Economic Affairs. Retrieved from [www.policy-network.net/uploaded/pdf/climate\\_change\\_book.pdf](http://www.policy-network.net/uploaded/pdf/climate_change_book.pdf).
- Lal, D. (1998). *Unintended consequences*. Cambridge, MA: MIT Press.
- Lang, B. M. A. (2006). *Think tanks in Deutschland. Eine Netzwerkanalyse der deutschen Think-Tank Landschaft*. Konstanz: Universität Konstanz (Diplomarbeit).
- McGann, J. G. (2017). *2017 global go to think tank index report*. Philadelphia: University of Pennsylvania. Retrieved from [https://repository.upenn.edu/cgi/viewcontent.cgi?article=1012&context=think\\_tanks](https://repository.upenn.edu/cgi/viewcontent.cgi?article=1012&context=think_tanks).
- McGann, J. G., & Weaver, R. K. (Eds.). (2005). *Think tanks & civil society. Catalysts for ideas and action*. New Brunswick: Transaction Publishers.
- Medvetz, T. (2012). *Think tanks in America*. Chicago, IL: University of Chicago Press.
- Meyer, D. S., & Staggenborg, S. (1996). Movements, countermovements, and the structure of political opportunity. *American Journal of Sociology*, 101(6), 1628–1660.
- Miller, D., & Dinan, W. (2015). Resisting meaningful action on climate change: Think tanks, 'merchants of doubt' and the 'corporate capture' of sustainable development. In A. Hansen & R. Cox (Eds.), *The Routledge handbook of environment and communication* (pp. 86–99). London: Routledge.

- Mirowski, P. (2011). *Science-mart: Privatizing American science*. Cambridge: Harvard University Press.
- Neubacher, A. (2012, December 3). Deiche statt Windräder. *Der Spiegel*. Retrieved from [www.spiegel.de/spiegel/print/d-89932592.html](http://www.spiegel.de/spiegel/print/d-89932592.html).
- Oreskes, N., & Conway, E. M. (2010). *Merchants of doubt*. London: Bloomsbury.
- Pestre, D. (2003). Regimes of knowledge production in society: Towards a more political and social reading. *Minerva*, 41(3), 245–261.
- Plehwe, D. (2010). Who cares about excellence? Commercialization, competition, and the transnational promotion of neoliberal expertise. In T. Halvorsen & A. Nyhagen (Eds.), *Academic identities -academic challenges? American and European experiences of the transformation of higher education and research* (pp. 159–193). Cambridge, MA: Cambridge University Press.
- Plehwe, D. (2011). Transnational discourse coalitions and monetary policy: Argentina and the limited powers of the ‘Washington Consensus’. *Critical Policy Studies*, 5(2), 127–148.
- Plehwe, D. (2012). Attack and roll back. The constructive and destructive potential of think tank networks. *Global Responsibility – Newsletter of the International Network of Engineers and Scientists for Global Responsibility* (64), 10–12. Retrieved from [www.inesglobal.com/download.php?f=b560c4aaa46f728d1db4a60126235da1](http://www.inesglobal.com/download.php?f=b560c4aaa46f728d1db4a60126235da1).
- Plehwe, D. (2018). Neoliberal thought collectives: Integrating social science and intellectual history. In D. Cahill, M. Cooper, M. Konings, & D. Primrose (Eds.), *The Sage handbook of neoliberalism* (pp. 85–97). London: Sage.
- Revkin, A. (2009, March 8). Skeptics dispute climate worries and each other. *New York Times*. Retrieved from [http://en.wikipedia.org/wiki/The\\_Heartland\\_Institute#cite\\_note-nyt-skeptics-51](http://en.wikipedia.org/wiki/The_Heartland_Institute#cite_note-nyt-skeptics-51).
- Saloma, J. S., III. (1984). *Ominous politics. The new conservative labyrinth*. New York, NY: Hill and Wang.
- Sapinski, J. P. (2015). Climate capitalism and the global corporate elite networks. *Environmental Sociology*, 1(4), 268–279.
- Schlögl, M. (2010). Das Global Development Network (GDN): Ein globales Entwicklungszusammenhangsnetzwerk? Eine quantitative Annäherung. *Journal für Entwicklungspolitik*, 26(2), 38–62.
- Schmitter, P. C., & Streeck, W. (1999). *The organization of business interests: Studying the associative action of business in advanced industrial societies*. Köln: Max Planck Institut für Gesellschaftswissenschaften, MPIfG Discussion Paper 99/1.
- Stone, D. (2013). *Knowledge actors and transnational governance: The private-public policy nexus in the global agora*. Houndmills, UK: Palgrave Macmillan.
- Strange, S. (1988). *States and markets. An introduction to international political economy*. London: Pinter Publishers.
- Tanurao, D. (2013). *Green capitalism. Why it can't work*. London: Merlin Books.
- Think Tank Network Initiative. (2012). *Research conducted in 2012 by Werner Krämer*. Retrieved from [http://thinktanknetworkresearch.net/wiki\\_ttni\\_en/index.php/Main\\_Page](http://thinktanknetworkresearch.net/wiki_ttni_en/index.php/Main_Page).
- Union of Concerned Scientists. (2012). *A climate of corporate control. How Corporations Have Influenced the U.S. Dialogue on Climate Science and Policy*. Washington, DC: UCS.
- von Storch, H. (2009). Klimaforschung und Politikberatung – zwischen Bringschuld und Postnormalität. *Leviathan*, 37, 305–317.
- WBGU. (2011). *Hauptgutachten. Welt im Wandel. Gesellschaftsvertrag für eine große Transformation*. Berlin: Wissenschaftlicher Beirat der Bundesregierung Globale Umweltveränderungen.
- Weingart, P. (1982). The scientific power elite – a Chimera: The de-institutionalization and politicization of science. In N. Elias, H. Martins, & R. Whitley (Eds.), *Scientific establishments and hierarchies* (pp. 71–89). *Sociology of the Sciences, Yearbook*, Dordrecht and Boston: D. Reidel Pub.