

## **Beyond the ABC: climate change policy and theories of social change**

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### Abstract

In this short and deliberately provocative paper I reflect on what seems to me to be a yawning gulf between the potential contribution of the social sciences and the typically restricted models and concepts of social change embedded in contemporary environmental policy in the UK and in other countries too. As well as making a strong case for going beyond what I refer to as the dominant paradigm of “ABC” - attitude, behaviour and choice - I discuss the attractions of this model, the blind spots it creates, and the forms of governance it sustains. This exercise provides some insight into why so much relevant social theory remains so marginalised and helps identify opportunities for making better use of existing intellectual resources.

### Introduction

“Climate change is probably the greatest long-term challenge facing the human race” (Blair 2006: 4).

It is now widely agreed that the challenges of climate change are such that many familiar ways of life and many of the patterns of consumption associated with them are fundamentally unsustainable. If there is to be any effective response, new forms of living, working and playing will have to take hold across all sectors of society. Since social change constitutes core business for the social sciences one might expect these disciplines to be taking centre stage – generating lively popular and policy debate about what such transformation might entail and how it might come about.

Over the last twenty years or so, academic social scientists of varied theoretical persuasions and diverse disciplinary backgrounds have been busy with at least parts of this agenda. During this period, “the environment”, or more recently “climate change” has generated recognisable strands of enquiry some of which have become institutionalised through journals, research funding, PhD student projects and research networks of every description. In short there has been quite a lot of action since Howard Newby’s (1991) “One world two cultures” address to the British Sociological Association in which he challenged the social sciences and sociology in particular to engage with what had until then been a topic defined and dominated by the natural sciences.

For reasons that are themselves interesting, much of this subsequent action has been coloured by prior disciplinary preoccupations. The resulting canvas of explicitly environmental or climate-change related research in geography and sociology is consequently patchy, intellectual energy having been invested in some issues and strands of social thought at the expense of others. Whatever we think of these endeavours, or of the much more extensive bodies of social thought on which they draw it is clear that they have had limited impact on important areas of contemporary climate change policy, much of which revolves around a strikingly limited understanding of the social world and how it changes.

In this paper I comment on the gulf not between natural and social science but this time between climate change policy and the potentially useful and influential resources of a vast range of social theory that lies beyond the dominant paradigms of economics and psychology. I begin by briefly reviewing a range of current policy-related reports and the models of change they embody and reproduce. I suggest that framing the problem of climate change as a problem of human behaviour

marginalises and in many ways excludes serious engagement with other possible analyses including those grounded in social theories of practice and transition. This prompts further discussion of the relationship between theories of change and modes of governance, resulting in the proposition that policy – as currently configured – is incapable of moving beyond the ABC – this being an account of social change in which “A” stands for attitude, “B” for behaviour and “C” for choice. The popularity of the ABC framework is an indication of the extent to which responsibility for responding to climate change is thought to lie with individuals whose behavioural choices will make the difference. It is true that policy is in any case not of a piece; that policy discourses evolve and circulate, and that the research community is itself implicated in the reproduction and persistence of competing models of social change. However, it also clear that the ABC is a political and not just a theoretical position in that it obscures the extent to which governments sustain unsustainable economic institutions and ways of life, and the extent to which they have a hand in structuring options and possibilities. For these reasons and more, energetic and vigorous efforts to promote alternative ways of thinking, or to make better use of the much more extensive range of intellectual resources on offer in the social sciences are likely to fall on necessarily deaf policy ears.

More an extended commentary than an article as such, this paper raises basic questions about the relation between social theory and policy and about the potential for social science – broadly defined – to make a much more extensive contribution to the challenges of climate change, also more broadly defined.

### *The ABC of climate change policy*

In the UK, the “Framework for pro-environmental behaviours” (2008) produced by the Department for Environment, Food and Rural Affairs (DEFRA) represents one of a slew of recent reports dealing with issues of lifestyle, behaviour and climate change. Others include “Creatures of Habit: the Art of Behavioural Change” (Prendergast 2008); “I Will if You Will” (Sustainable Consumption Round Table 2006); “Changing behaviour through policy making” (DEFRA 2005), “Motivating Sustainable Consumption” (Jackson 2005) and “Driving public behaviours for sustainable lifestyles” (Darnton 2004). The titles alone provide some clue as to how social change is conceptualised and indicate that issues of climate change have been framed in terms of an already well established language of individual behaviour and personal responsibility (Halpern, Bates et al. 2004). Similar approaches are adopted by business (Munasinghe, Dasgupta et al. 2009; World Business Council for Sustainable Development 2009), promoted in the USA (Dietz, Gardner et al. 2009; Swim, Clayton et al. 2009) and central to the United Nations Environment Programme’s efforts to persuade individuals to “Kick the CO<sub>2</sub> habit” (UNEP 2008). While there are points of difference within this literature there is no mistaking a dominant line of reasoning reinforced by extensive mutual cross-referencing.

For the most part, social change is thought to depend upon values and attitudes (the A), which are believed to drive the kinds of behaviour (the B) that individuals choose (the C) to adopt. The ABC model, derived from a strand of psychological literature grounded in theories of planned behaviour (Ajzen 1991) and in variously rational concepts of need (Gatersleben and Vlek 1997), resonates with widely shared, common-sense ideas about media influence and individual agency. The policy version of the ABC is a variant of that proposed by the social psychologist, Paul Stern, who suggests that “behavior (B) is an interactive product of personal-sphere attitudinal variables (A) and contextual factors (C)” (Stern 2000: 415). In keeping with the notion that behaviour is driven Stern treats context as an external causal variable along with others including habit, routine and personal capability. While the “C” of context sometimes appears in policy documents, it usually does so in the guise of a

barrier to change: figuring as a causal variable in much the same role as that described by Stern. But in policy, if not always in psychology, the concept of choice is absolutely central. It is so in that it lies behind strategies of intervention (persuasion, pricing, advice) which presume that environmental damage is a consequence of individual action and that given better information or more appropriate incentives, these damaging individuals could choose to act more responsibly and could choose to adopt “pro-environmental behaviours”. “C”, then, is ultimately for choice. The combination of A and B and C generates a very clear agenda for effective policy, the conceptual and practical task of which is to identify and affect the determinants of pro environmental behaviour.

As represented in DEFRA’s Framework, the extent to which people adopt pro-environmental behaviours depends upon a mixture of positive “motivators” and negative “barriers”. In the words of that report, the practical impact of common motivators like “the feel good factor; social norm; individual benefits (e.g. health, financial outlay); ease; being part of something”, is often compromised by equally common barriers including “external constraints (infrastructure, cost, working patterns, demands on time); habit; scepticism; disempowerment”. (2008: 7).

For all the effort invested in plotting the prevalence of positive and negative factors, the list of what is thought to be involved is surprisingly arbitrary. In the documents cited above pretty much anything can qualify as a driver or a barrier, and it is in any case not always easy to tell which is which, a point acknowledged in DEFRA’s conclusion that “Lifestyle fit and self identity can be a potential motivator or barrier, depending on where people are starting from” (2008: 7) and in Darnton’s observation that broader factors which appear as “barriers to behaviours can also be viewed as drivers to behaviours, if they are applied differently” (Darnton 2004: 17). Although one might expect the ambivalent status of barriers to be of real concern to those seeking to specify causal relationships, the fact that it is not so is, I think, related to the parallel capacity to characterise context as a catch-all variable. Stern’s list of contextual factors is extensive, including, in no apparent order:

“interpersonal influences (e.g., persuasion, modeling); community expectations; advertising; government regulations; other legal and institutional factors (e.g., contract restrictions on occupants of rental housing); monetary incentives and costs; the physical difficulty of specific actions; capabilities and constraints provided by technology and the built environment (e.g., building design, availability of bicycle paths, solar energy technology); the availability of public policies to support behavior (e.g., curbside recycling programs); and various features of the broad social, economic, and political context (e.g., the price of oil, the sensitivity of government to public and interest group pressures, interest rates in financial markets) (Stern 2000: 418).

As this catalogue suggests, there is no obvious limit to the number of possible determinants and no method of establishing their history, their dynamic qualities, their interdependence or their precise role in promoting or preventing different behaviours. As Blake (1999) observes, this feature leaves policy makers free to selectively focus on those barriers which are unrelated to the role or previous effects of policy itself.

While the language of motivators and barriers is in keeping with the dominant model of behavioural change the more factors that are added to the plot the more muddled the picture becomes. Many policy-related documents consequently make ritual reference to the need for a “holistic” approach. As the authors of “Changing behaviour through policy making” explain, “we will only succeed in making the changes we need if we adopt a new, comprehensive approach” (DEFRA 2005: 2), a

sentiment that prompts calls to take note of “the social and institutional context of consumer action” (Jackson 2005: v) and to develop methods capable of analysing “the complex array of factors which influence our choices” (Prendergast 2008: 47).

For the casual reader, this invocation of complexity is theoretically bewildering: is the intention to combine basically causal models of change with what sounds like a systemic paradigm of emergent process? Is the view that “Individual behaviours are deeply embedded in social situations, institutional contexts and cultural norms” compatible with the preceding statement that individual behaviour is “determined by many factors” (Prendergast 2008:1)? Likewise how is it possible to square the conclusion that “Consumers often find themselves ‘locked in’ to unsustainable behaviours by a combination of habit, disincentives, social norms and cultural expectations” (DEFRA 2005: 1) with a rhetoric of agency, aspiration and choice such as that woven into “I Will if You Will” (Sustainable Consumption Round Table 2006), a report that is especially confused in this respect?

On closer inspection passing references to contextual factors and social norms represent an attempt to handle, and in effect re-absorb some of the problems that the Attitude-Behaviour-Choice model itself generates, particularly within the policy arena. Efforts to accommodate what is known as the “value-action” gap and to make sense of the awkward topic of habit illustrate this process. Put very briefly, the value-action gap refers to the problem that people who espouse green values do not always act in accordance with them (Blake 1999). In commissioning research to address this glitch, and to highlight the barriers involved, funders reproduce precisely that understanding of social change which has generated the problem in the first place: after all the gap is only mystifying if we suppose that values do (or should) translate into action.

Much the same applies in relation to habit, this being something that tends to gum up the otherwise smooth operation of incentive and response. For Nicholas Stern, an economist, “Individuals and firms behave habitually and in response to social customs and expectations. This leads to ‘path dependency’, which limits their responses to policies designed to raise efficiency” (Stern Report, 2006: 381.). Meanwhile, Paul Stern (2000), the psychologist, concludes that “habit or routine is a distinct type of causal variable. Behavior change often requires breaking old habits and becomes established by creating new ones”. For Stern, as for other psychologists, notions of habit provide a means of importing concepts of context, positioning this as a driver of behaviour in cases where volition and choice is evidently lacking. But if we take a step back, the idea that habits drive behaviour is really very odd – implying, as it does, that habit is not itself behaviour but is, rather, some abstract factor bearing down upon the behaviours it directs. Although odd this interpretation is also necessary if core understandings of behaviour as something which is so driven are to be preserved. For both Sterns, the concept of habit helps explain situations that fall outside the familiar run of ABC (with C as choice), and helps do so in terms that keep this model intact.

When faced with problems like the value-action gap, or with behaviours that don’t respond as normal the tendency is to commission further studies in the same mould (see, for example, the ESRC/DEFRA call for proposals for a research centre on sustainable behaviours). This results in a self-sustaining paradigm, along with an entire industry of research and advice in which behaviour is consistently treated as something that is shaped by factors - sometimes including social situation, history or infrastructure. Some subtleties are no doubt lost in the academic-policy translation but at the level of overall theoretical orientation concepts of choice (central to economics) and driving factors (important in psychology) comfortably coexist and just as comfortably feed “evidence based” policy organised around the clear, and clearly

legitimate role of encouraging and persuading citizens to opt for pro rather than anti-environmental behaviour.

What I have referred to as the ABC of climate change policy is extremely influential in shaping strategies and defining relevant research, but is it capable of comprehending let alone intervening in dynamic processes of social change on the scale required?

Contemporary policy documents bring an accumulated weight of behaviour change literature to bear on a surprisingly limited set of goals that have to do with encouraging certain styles of purchasing (in which green is the brand of choice), avoiding waste (turning off the tap when brushing teeth; switching off lights that are not required; recycling rubbish); promoting efficiency by adopting green technology (for instance installing insulation, acquiring more efficient appliances) and occasional restraint (taking fewer non-business flights; consuming a lower impact diet). The extent to which these suggestions reinforce the status quo - broadly sustaining existing standards and conventions but doing so more efficiently – is partly but not simply a matter of politics (on which more below).

As hinted at already, the lexicon of ABC does not contain within it the terms and concepts required to discuss or debate significant societal transformation. While there is a recognised need to make “major changes in the way we meet our needs and aspirations” (Sustainable Consumption Round Table 2006: 33), and while social norms are often cited as driving factors there is no scope at all for wondering about how needs and aspirations come to be as they are. In Uzzell’s words “Trying to persuade people to consume and waste less through behaviour change programmes will not address the larger and more significant problems concerning the ways under which people need or think they need to live and consume.” (Uzzell 2008: 4). In effect the idea that desires and attitudes drive behaviour produces a blind spot at a particularly crucial point, making it impossible to see how the contours and environmental costs of daily life evolve.

#### *Beyond the ABC: transitions and practices*

Not all theories of social change externalise context and need and many are in fact rather good at demonstrating and analysing ongoing processes of societal transformation. In what follows I comment briefly on a couple of different approaches in order to show how they depart from the ABC.

In the Netherlands “Transition Management” is an influential concept in environmental policy, sustained and promoted by a cohort of research entrepreneurs, adopted as part of the Dutch National Environmental Policy Plan and widely discussed across a range of disciplines (see, for instance, the First European Conference on Sustainability Transitions "Dynamics & Governance of Transitions to Sustainability" held in June 2009). There are reasons to be cautious about efforts to engender radical sociotechnical transition (Shove and Walker 2007). But there are also reasons to celebrate the intellectual space the transitions management literature (Rotmans, Kemp et al. 2001; Smith, Stirling et al. 2005; Kemp and Loorbach 2006) has created and to exploit the room it makes for thinking seriously and systemically about how environmentally problematic ways of life are reproduced and how they change. The scholarship on which this literature draws comes from not one but a number of traditions – including innovation studies, science and technology studies, evolutionary economics, history and complexity science – all of which have important and relevant things to say about how social arrangements hang together and about how they fall apart.

The resulting field is not as homogenous as that which sustains the ABC but it has certain distinctive features that are more or less held in common. One is a recognition that societal transformations “not only involve new technological artefacts, but also new markets, user practices, regulations, infrastructures and cultural meanings” (Elzen, Geels et al. 2004: 1). For Elzen et al. innovation is characterised by ongoing, not necessarily equal interaction between elements in a coevolving system. Compared to the ABC framework, consumer behaviour is located *within* rather than outside this system. Accordingly, it makes no sense at all to attribute behavioural change to a cast of externalised factors: instead, the model is one in which institutions, infrastructures and daily life interact. There is little or no reference to attitude or belief in any of this literature, and where such reference is to be found, needs and desire are located as *outcomes* of sociotechnical change, not as external drivers of it.

Second, present social arrangements are thought to shape the conditions of their own future development. For authors like Berkhout et al. (2004) understanding social change is in essence a process of characterising and analysing the emergent qualities and characteristics of different types of sociotechnical configurations. In the present context the crucial point is that history matters, generating pockets of stability and pathways of innovation and effectively shaping behaviour in ways that figure not at all, or not at all explicitly in the ABC.

Third, systems of provision whether of food, water or energy are assumed to constitute more than the context in which consumer choices are made. Critically, certain forms of demand are unavoidably inscribed, for example, in the design and operation of electricity and water infrastructures and in the architecture of the home itself (Moss 2000; van Vliet, Chappells et al. 2005).

A fourth theme builds upon Abernathy and Clark’s (1985) suggestion that radical innovations are those which redefine the rules of the game; which render previously important forms of competence redundant and which reconfigure interpretations of value and significance. By implication, effective responses to climate change entail parallel processes of decay and the radical unmaking of unsustainability (Shove and Pantzar 2006; Geels 2008).

This way of thinking suggests that transitions toward sustainability do not depend on policy makers persuading individuals to make sacrifices, specified with reference to taken for granted benchmarks of normal non sacrifice; or on increasing the efficiency with which current standards are met. Instead, relevant societal innovation is that in which contemporary rules of the game are eroded; in which the status quo is called into question and in which more sustainable regimes of technologies, routines, forms of know how, conventions, markets and expectations take hold across all domains of daily life. These are not processes over which any one set of actors has control as Arie Rip makes clear in his discussion of the reflexive governance of sustainability: “instead of the heroism of the policy actor vis-à-vis the system there is a variety of actors and roles, and a distributed coherence which is self-organized. Some actors may contribute more to the self-organization than others, but there is no general rule” (Rip 2006: 87). In short, co-evolutionary accounts of change do not deny the possibility of meaningful policy action, but at a minimum they recognise that effect is never in isolation and that interventions go on within, not outside, the processes they seek to shape.

As these observations indicate, discussions of transitions, broadly defined, and of behaviour change narrowly defined, depend upon contrasting ideas about how social change comes about. Before saying more about how these translate into

correspondingly varied templates of relevant research I comment briefly on one more strand of social thought.

In recent writing on sustainability and climate change words like “behaviour” and “practice” are often used interchangeably, or loosely as in attempts to interpret “behaviour change” through a “practice lens” (Hargreaves, Nye et al. 2007). This is ironic in that social theories of practice, as characterised by Giddens (1984) and more recently by Schatzki (2002) and Reckwitz (2002) are not in the least bit behavioural. As such, sociology harbours a further treasure trove of theoretical resources, not unrelated to concepts of transition, but not quite the same either (Southerton, Chappells et al. 2004).

Some twenty five years ago, Giddens argued that “social practices ordered across space and time” constitute “the basic domain of study of the social sciences” (1984: 2). In contemporary writing on sustainability we can find weaker and stronger versions of this position. Weaker interpretations, such as that developed by Spaargaren et al. (2006) treat domains of practice as *sites* in and around which consumers and systems of provision interact. While this approach evidently situates behaviour in a social and institutional context, it does not treat social practices as dynamic entities in their own right. In stronger and definitely more challenging formulations, social practices take centre stage to the extent that people, and sometimes things, occupy secondary roles as the carriers of practice (Reckwitz 2002). From this point of view, understanding social change is in essence a matter of understanding how practices evolve, how they capture and lose us, their carriers, and how systems and complexes of practice form and fragment. In other words, practices like those of eating, playing, walking and sleeping represent more than a “domain of study”: in effect they constitute *the unit of enquiry*.

This latter position generates a menu of important questions about how resource intensive practices-as-entities circulate and diffuse, and about how they are sustained and transformed (Hand and Shove 2004; Hand, Shove et al. 2005). In this regard the analytic distinction between practice-as-performance (that is as enacted in specific moments and places); and practice-as-entity (that is the emergent outcome of such performances) is particularly useful (Schatzki 1996). For example, in washing clothes every day, people keep a specific formulation of laundering alive and keep it in circulation. Daily laundering becomes normal but only so long as sufficient numbers of carriers continue to reproduce it in this fashion (Shove 2003). There are two relevant insights to take from this observation, both of which resonate with but also add to the transitions analyses considered above. One is that meanings of normal and the patterns of consumption associated with them require constant reproduction. The second is that conventions that are often taken to constitute the context of behaviour have no separate existence: rather they are themselves sustained and changed through the ongoing reproduction of social practice. In the language of ABC, the driver and the driven are as one.

For those who start from the ABC it is tempting to conclude that an emphasis on practices and/or processes of transition is useful in drawing attention to new or alternative lists of driving factors with the effect that “institutions” and “social norms” are given greater weight, or that the word “practice” is occasionally substituted in place of behaviour. While this might look like fruitful integration, such moves are doomed to failure. On all the counts that matter, social theories of practice on the one hand, and of behaviour, on the other, are like chalk and cheese. Whereas the former emphasises endogenous and emergent dynamics the latter focuses on causal factors and external drivers. Likewise, people figure in the first case as carriers of practice and in the second as autonomous agents of choice and change. It is useful to be clear about the incommensurability of these contrasting paradigms and hence

about the impossibility of merger and incorporation. Whatever else it might be, a more holistic approach is not one in which letters like “S” for system, or “P” for practice are grafted on to the ABC.

### *Paradigms, policies and (ir)relevant social research*

Given that the ABC is the dominant paradigm in contemporary environmental policy, the scope of relevant social science is typically restricted to that which is *theoretically* consistent with it. At this point it is important to acknowledge that the ABC is not *just* a theory of social change: it is also a template for intervention that locates citizens as consumers and decision makers and that positions governments and other institutions as enablers whose role is to induce people to make pro-environmental decisions for themselves and deter them from opting for other less desired courses of action.

In identifying “Twelve Steps to Help You Kick the CO2 Habit” and in aiming to give “a human face to environmental issues” and empower “people to become active agents of sustainable and equitable development” (UNEP 2008), the United Nations Environment Programme’s “World Environment Day” places responsibility squarely on the individual CO2 addict and in the same move deflects attention away from the many institutions involved in structuring possible courses of action and in making some very much more likely than others. The UK’s Sustainable Consumption Round Table proposes a sneakier approach, suggesting that that the best way to promote pro-environmental behaviour “is to drop new tangible solutions into people’s daily lives, catalysts that will send ripples, get them talking, sweep them up into a new set of social norms, and open up the possibility of wider changes in outlook and behaviour.” (Sustainable Consumption Round Table 2006: 39), but the reasoning is basically the same. This interpretation both of the problem (one of consumer behaviour and choice) and of potential policy responses (influencing choice) structures the meaning and the *method* of useful social science.

DEFRA currently defines evidence as any information that it “*can use to turn its policy goals into something concrete, achievable and manageable*” (DEFRA 2006). I will have more to say about manageability in a moment, but in so far as policy goals are currently specified in terms of the ABC, evidence is likely to include data on the “A” – hence resources invested in repeatedly surveying attitudes toward climate change in order to inform programmes of social marketing that in turn rely upon and reinforce the idea that attitudes drive behaviour and lifestyle choice. It is also likely to include generic evidence relating to success factors in promoting behaviour change. The Department for Transport is, for instance, currently interested in learning from seemingly successful initiatives in other fields – the classic references being smoking, littering and wearing seat belts – and of profiting from an accumulation of apparently transferable knowledge. As these examples indicate, useful data is specified in ways that rule out historically grounded analyses of how relevant social practices, systems of practice and related infrastructures and institutions evolve.

By contrast these would be crucial lines of enquiry if the task was one of analysing the emergence and disappearance of more and less sustainable ways of life. If long distance flying was approached as a socially and culturally specific practice, as opposed to a lifestyle choice, relevant evidence would probably include writing on mobility (Urry 2007); urban living (Graham and Marvin 2001; Amin and Thrift 2002); time, and the pulse of society (Lefebvre 2004). More broadly, useful social science would be that which engaged with problems like those of understanding the details of path-dependence; the spatial and temporal configuration of innovation junctions (De Wit, Van den Ende et al. 2002); or the potential for aligning and modulating the elements of social practice (Rip 2006). By the same token, efforts to draw generic



behavioural conclusions would be largely irrelevant in that they necessarily fail to capture vital processes of social change.

For the time being the grip of the ABC, along with a corresponding philosophy of governance and definition of policy relevance is such that social theory is only useful when translated into a language of factors and influences amenable to management and manipulation. It is in this spirit that Darnton translates sophisticated accounts of the interlocking rhythms of ordinary consumption into the “useful” but conceptually flawed conclusion that convenience should be added to the list of barriers to change (Darnton 2004) and it is in these terms that Jackson assesses the relevance of social theories of practice. In his words: “our understanding of the dynamics of social practice, of the ways in which social practices evolve, and of the interaction between policy and social practice is as yet so limited that it would be difficult to see how policy could make use of this position – beyond taking social norms a bit more seriously as influences on behaviour” (Jackson 2005: 55).

The result is depressing for social scientists who are keen to contribute to climate change policy but who do not fit the mould. Either their research is deemed irrelevant, or it becomes relevant but only when stripped of its significance. Where does this leave geographers, social historians, sociologists and experts in fields like those of political economy, material culture, consumption and technology? Should they disregard successive calls for proposals to study drivers and non-technical barriers such as those issued by the UK Energy Research Centre and should they steer away from agendas like those developed within the interdisciplinary programme, Living with Environmental Change (LWEC)? Should they set aside the goal of utility as currently defined and instead argue for new forms of ideas based policy grounded in a much wider repertoire of social theory than at present? Or should they continue pursuing climate change agendas that bear no relation at all to the ABC or to contemporary policy as it is currently defined (Szerszynski 2009; Urry 2009)?

These questions raise others about how problem definitions and agendas circulate within and between academic disciplines and non-academic discourses, and about how competing theories of social change become embedded in, and excluded, from policy and practice. Thus far I have identified a number of reasons why contemporary policy is so dependent on the limited vocabulary of the ABC and why there is so little engagement with other theoretical paradigms. It is, in addition, important to notice that the ABC research-policy relationship is mutual: policy makers fund and legitimise lines of enquiry that generate results they can handle and that are consequently defined as “concrete, achievable and manageable” (DEFRA 2006). The result is a self-fulfilling cycle of credibility (Latour and Woolgar 1986) in which evidence of relevance and utility helps in securing additional resources, building capacity in some fields (and not others) and doing so in ways that exacerbate what Abbot (2001) describes as fractal divisions within the social sciences.

Although some would look for ways of overcoming these divides I am not going to conclude by calling for integration or for folding new concepts and terms into the ABC. Instead, I want to reflect on the circumstances in which social science might be useful, and at the same time make better use of a much wider range of intellectual resources. What would it take to go beyond the first three letters of the alphabet?

As hinted at above, one key condition is to shift the focus away from individual choice and to be explicit about the extent to which state and other actors configure the fabric and the texture of daily life. There are precedents for this, even within the present policy system, for instance in areas of public health and urban planning. To give just one example, the concept of an obesogenic environment implies that patterns of diet

and exercise are socially, institutionally and infrastructurally configured. Far from limiting the scope of possible intervention this idea has inspired discussion of an array of responses some relatively local, others implying societal change not only in eating but also in patterns of time and mobility (Egger and Swinburn 1997; Lake 2006; Dixon and Broom 2007; Townshend and Lake 2008). So why not something similar for climate change? What is to stop social scientists and policy makers paying close attention to the making and the erosion of “envirogenic” environments, these being ones that favour the reproduction of variously sustainable ways of life?

I do not want to lapse into a language of barriers, but in response to this question it is important to notice that the ABC and the research industry that it sustains (and that sustains it) are part of an interlocking landscape of thought that constrains and prevents policy imagination of the kind required. According to Hajer (1997), the extent to which policy discourses circulate and the manner in which they endure, depends upon the existence of discourse coalitions these being variously dense, interconnected networks not only of people but also of concepts, terms and intellectual frameworks. In their account of how notions of transition took hold in the Dutch policy context, Smith and Kern conclude that the necessary coalition “emerged from a research-policy interface, whose research into environmental innovation, and whose evaluations of earlier policies, were feeding a dissatisfaction and appetite for policy change” (Smith and Kern 2007: 17). There are signs of unease, even in the UK: in a review entitled “The Challenge of Climate Change: the Challenge for Psychology” David Uzzell suggests that “an emphasis on individual behaviour change may not be the most effective way of tackling society’s relationship with climate change” (Uzzell 2008: 4), and in a study for DEFRA, Andrew Darnton makes a very similar point, arguing that “some of the ends of sustainability to which the behaviours laid down here are means may be better reached not through behaviour change by individuals but through government-led interventions, the targeted delivery of public services or upstream solutions.” (Darnton 2004: 9). However, if the current crop of climate change reports is anything to go by there is as yet no real appetite for conceptual renewal or for revisiting embedded models of state-citizen responsibility.

Moving beyond the ABC is not simply a matter of changing attitudes and behaviours within policy: indeed it would be ironic if that was so. As hinted at already, there are real political interests at stake in framing environmental problems in terms of the ABC. At the same time, the research community is necessarily involved in generating if not a hunger then at least a taste for substantially different ways of conceptualising social change. Since discourses and habits of thought wax and wane as they are carried (or dropped) by cohorts of more or less enthusiastic practitioners, those committed to the project of going beyond the ABC would do well to shun invitations to study barriers or behaviour change, limiting the energy that flows into this paradigm and diverting resources into the development of alternative (but by current definition useless) models of social change and policy. That is one practical strategy.

Another is to recognise that the policy arena is not of a piece. This far I have focused on behaviour change initiatives but there are other forms of policy that have to do with technology, resource management and efficient supply. These are frequently rooted in technologically determinist concepts of change that are extremely problematic in their own right but that are also poles apart from those that dominate efforts to change individual behaviour. For example, the UK Low Carbon Transition Plan, which focuses almost entirely on issues of efficiency and supply, comments briefly on the “lifestyle advantages of a low carbon economy”, (HMSO 2009: 34) in effect assuming that such an economy can and will be built. On a smaller scale, guidance on “Building Sustainable Transport into new Developments” explains how to use “the planning process to make cycling, walking and public transport the modes of choice” (Department for Transport 2008: 5), essentially suggesting that developers

can bring more sustainable patterns of mobility into being. Across the policy landscape there are sites, niches even, in which more systemic analyses of change and more subtle theories of innovation, path dependence and co-evolution are already more comfortably at home, public health and planning being two such locations.

But what if I have got the whole story the wrong way around? Could it be that the ABC is generated and sustained not by psychologists and economists but by the policy makers they serve, and could it be that this vocabulary is required in order to keep a very particular understanding of governance in place? In discussing the types of social science that do and do not count I have paid more attention to the conceptual limits of the ABC than to the raw politics of problem definition and agenda setting to which this paradigm contributes. It is nonetheless clear that policy makers are highly selective in the models of change on which they draw, and that their tastes in social theory are anything but random. An emphasis on individual choice has significant political advantages and in this context, to probe further, to ask how options are structured or to inquire into the ways in which governments maintain infrastructures and economic institutions is perhaps too challenging to be useful.

This has important consequences for social science and for research policy which prioritises non-academic impact and influence. In effect, paradigms and approaches that lie beyond the pale of the ABC are doomed to be forever marginal no matter how interactive or how policy engaged their advocates might be. To break through this log jam it would be necessary to re-open a set of basic questions about the role of the state, the allocation of responsibility and in very practical terms the meaning of manageability within climate change policy. Such breaking through may be just what is needed. After all, a further implication of this discussion is that policy, as currently constructed, is necessarily incapable of conceptualising transformation in the fabric of daily life on the scale and at the rate required. Ironically, the emphasis on manageability (as exemplified in DEFRA's definition of evidence) has quite the opposite effect, confining effort and attention to those few sites in which this demanding condition can be met and in which policy impact can be evaluated and measured. In conclusion, a move beyond the ABC would have to go hand in hand with the emergence of new genres and styles of policy that were both more modest than at present, harbouring no illusions of manageability, and at the same time more ambitious – recognising that policy interventions across the board have effect in shaping future ways of life whether they recognise it or not.

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