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# Putting practice into policy: reconfiguring questions of consumption and climate change

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Understanding how societies change is core business for the social sciences and there is no shortage of theories about how transitions come about. Despite this reservoir of ideas, efforts to promote more sustainable patterns of consumer behaviour draw upon a remarkably narrow range of conceptual resources. The purpose of this paper is to illustrate the potential and the relevance of paradigms that lie outside the dominant discourses and traditions of economics and psychology. The method is to detail the implications of a handful of key propositions anchored in a ‘strong’ interpretation of practice theory. By organising this discussion around an invented conversation between a fictional policy-maker and an equally fictional social scientist, the paper explores further questions regarding the role of social theory and evidence in contemporary policy.

## Introduction

It is widely agreed that the challenges of climate change are such that in the richer societies of the West many familiar ways of life and many of the patterns of consumption associated with them are fundamentally unsustainable. If there is to be any substantial and effective reduction in resource use and emissions of carbon dioxide (CO<sub>2</sub>) new forms of living, working and playing will have to take hold. The task of understanding how social arrangements come to be as they are, and how they develop, is central to sociology, history, anthropology and material cultural studies and important for theories of socio-technical change, transition and practice. So far, few of these intellectual resources have found their way into climate change policy, much of which is dominated by efforts to nudge behaviour, modify attitudes and encourage individuals to make better, greener choices (Department for Environment, Food and Rural Affairs (DEFRA), 2008; Institute for Government, 2009).

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Rather than figuring out why popular and policy debates about consumption, sustainability and everyday life rest on such a narrow slice of social science, this paper considers the potential and the limitations of just one of the many other theoretical traditions on offer. In taking this approach, it has two main aims. One is to articulate the policy implications of taking social practice rather than the actions and attitudes of individuals as the central topic of enquiry and intervention (Reckwitz, 2002; Schatzki, 2002; Warde, 2005; Shove *et al.*, 2012). The second is to illustrate some of the conceptual and practical issues that arise when moving between social theory and climate change policy. With these ambitions in mind, the paper has a rather unusual form, being organised around an imagined conversation between a climate change policy-maker (Polly) and a social scientist (Sarah). An invented dialogue between these stylised characters provides a means of introducing and structuring a discussion of how theories of practice might be mobilised, whilst providing space for further commentary on the role of social science and the meaning of evidence and relevance in the policy arena.

Before going further it is important to remember that social theories do not lead directly to prescriptions for action. In allowing us to understand the world in a particular way, they are nonetheless relevant for how policy agendas are framed and for the kinds of intervention that are deemed possible, plausible or worthwhile. In defining the problem as one of promoting pro-environmental behaviour (DEFRA, 2008), policy-related documents like *I Will If You Will* (Sustainable Consumption Round Table, 2006), *Changing Behaviour through Policy Making* (DEFRA, 2005), *Motivating Sustainable Consumption* (Jackson, 2005), and *Mindspace: Influencing Behaviour through Public Policy* (Institute for Government, 2009) reflect the prevalence of theoretical traditions from economics and psychology. In brief, there is a common understanding of behaviour as something that is driven by identifiable factors like those of rational self-interest, attitude/motivation or habit. Within this literature there are important differences of emphasis. Although many policy initiatives depend on people making rational choices, habits, frequently defined as forms of behaviour that are characterised by automaticity, frequency and a stable context, are the subject of increasing attention, in part because they complicate the impact of policies predicated on deliberate, rational action. Efforts to predict and ‘nudge’ (Thaler & Sunstein, 2009) habits and other forms of what Whitehead *et al.* (2011) refer to as ‘more than rational’ behaviour are not without their critics. Amongst others, Jones *et al.* (2010) and Whitehead *et al.* (2011) worry about the democratic legitimacy of policy interventions that are, in theory, capable of editing choices beyond the gaze of public debate and scrutiny.

As these discussions indicate, interpretations of what governments can and should do to modify behaviour vary widely, as do estimates of the relative significance of different factors including those of environment, cultural context or setting. Different approaches are nonetheless unified by the view that behaviours are outcomes of drivers, barriers and external forces, some more chosen than others (Shove, 2010). One consequence is that dominant discourses of change are situated within a bubble of intellectual space, protected and insulated from conceptual developments elsewhere in the social sciences.

Moving outside this zone implies a fundamental shift of paradigm and problem definition, but there is a growing sense that some such conceptual leap is required. The UK Committee on Climate Change (2010) has, for instance, acknowledged that since ‘recent emissions reductions were far slower than those required going forward’ (p. 42) a step change is required in technological innovation or behaviour change or both. The World Business Council for Sustainable Development (2009) has reached similar conclusions, also recognising that current measures are unlikely to make any really substantial difference to the carbon intensity of daily life.

### **Polly’s puzzle**

Having seen many of the reports referred to above, Polly, the fictional policy-maker, is frustrated and worried. She is well aware of the scale of CO<sub>2</sub> emissions and of the rate at which these need to drop if there is to be any chance of meeting current targets. She has had a hand in developing persuasive strategies and financial measures to change consumer behaviour and knows that these have had limited impact. She puts her concerns to Sarah, a social scientist of her acquaintance:

Polly: The last decade of concentrated effort on behaviour change has not changed anything very much at all. My colleagues and I have tried driving public behaviours towards more sustainable lifestyles but to no effect. What is going wrong, what can I do next?

Sarah responds but not in the way that Polly expects. This is what she says:

Sarah: Perhaps you should reframe your problem: what if you forgot about persuading individuals to use less energy and water and concentrated on how resource intensive practices take hold in society and on how they change? Surely that is the key question.

Warde (2005) suggests that consumption is usefully understood as an outcome of the routine reproduction of ordinary practices. Sarah’s advice clearly builds on this idea. But what does Sarah mean by ‘practice’? Before taking the conversation further more should be learnt about her interpretation of this concept.

### **Sarah’s concept of social practice**

In the last few years, authors of articles on energy demand and sustainable consumption and have begun to write about practices. For example, Gram-Hanssen (2010) writes about the practice of standby consumption (meaning the practice of keeping appliances on standby); Crosbie & Guy (2008) consider lighting practices; Wilhite (2008) refers to energy practices, and Strengers (2011) to those that demand water. In most of these cases the terminology of practice signals affiliation to a loose tradition of sociotechnical approaches and distance from behavioural accounts emphasising attitudes and values. These authors make much of the fact that consumer choices are constrained and ‘scripted’ (Akrich, 1992) by material context and environment. In essence they contend that practices—what individuals do—reflect the pursuit of shared goals (comfort, mobility) within a particular sociotechnical setting. As

represented by Gram-Hanssen (2010), the value of practice theory is that 'it emphasizes sociotechnical structures as the basis for analyzing stability of consumer practices and opportunities for change' (p. 150). From this perspective, invoking theories of practice is more or less the same as invoking concepts of sociotechnical change in which practice/user behaviour is shaped by, and co-evolves with, relevant aspects of infrastructure, culture and design.

Others writers refer to practice as a means of developing a fuller, more comprehensive account of individual behaviour. This is the approach adopted by Hargreaves (2011) who suggests that practice theory is of value in that it 'provides a more holistic and grounded perspective on behaviour change processes as they occur in situ' (p. 79). In this case, reference to practice is liberating in that it legitimises reference to an unusually wide range of driving factors, including social relations, social norms and institutional contexts. 'In so doing, it offers up a wide range of mundane footholds for behavioural change, over and above individuals' attitudes or values' (p. 79). In Hargreaves's article, practice theory provides a convenient label with which to badge approaches that take social action to be constructed, situated and performed. For Halkier & Jensen (2011), this latter feature is crucial. They conclude that the distinctiveness of 'practice theory is that the performative character of social life is foregrounded and privileged analytically' (p. 103). Meanwhile, Barr *et al.* (2011) apply practice approaches, again very loosely defined, to the task of understanding localised instances of behaviour, as captured through case studies and interviews. In much of this writing the central project remains that of understanding how and why people act as they do.

By contrast, Sarah takes an altogether stronger line and takes *practices* as the central topic of her enquiry (Giddens, 1984, p. 3). This might sound like a subtle distinction but it is one that matters for the types of questions she asks, and for how she goes about her work. In keeping with this orientation, Sarah is interested in understanding how practices emerge, persist and disappear. By practices she means recognisable entities that exist across time and space, that depend on inherently provisional integrations of elements, and that are enacted by cohorts of more and less consistent or faithful carriers.

Unlike those who talk of practices as a means of talking about materialised, situated moments of performance, Sarah has another agenda. She is primarily interested in the development of practices-as-entities, and in their distribution across space and time (Giddens, 1984). By practices-as-entity she takes a practice (for example, playing football, daily showering, commuting, etc.) to be something that exists between and beyond specific moments of enactment. Defined like this, practices are carried, sustained and transformed by cohorts of practitioners (those who do). Practices-as-entities would not exist without reproduction, and reproduction depends on localised instances of performance. Even so, it is both possible and, in Sarah's view, useful to focus not on the people who do the enacting, but on the practice that they reproduce/transform. Sarah is consequently interested in how certain practices manage to secure carriers or hosts who are willing and able to devote significant resources of time and energy to reproducing them over and over again. Rather than trying to

understand habit as a form of behaviour that people adopt, she is, for instance, interested in how habits capture and retain cohorts of suitably devoted practitioners (Shove, 2011).

While many turn to a vocabulary of ‘practice’ (as opposed to behaviour) as a means of signalling the socially constructed nature of action, Sarah believes that concepts developed by Giddens (1984), Schatzki (2002) or Reckwitz (2002) have further, deeper implications for the analysis of change. She is convinced that these theoretical resources can be used to describe inherently dynamic processes in which the constitutive elements of practice (the meanings, competences, materials) integrated in each performance are themselves subject to change (Shove & Pantzar, 2005), and in which the margins of practices-as-entities extend and shrink as new carriers are captured, and as others defect. In short, her interest in the changing contours of practices-as-entities sets her approach apart from those who invoke theories of practice as a means of enriching knowledge of consumer behaviour.

To come back to questions of climate change, the key issue for Sarah is to understand the trajectories and careers of variously resource intensive practices (as entities). From her point of view this is a matter of identifying the elements of which such practices are made, learning about their history (since elements are themselves outcomes of practices past) and about also crucial processes of recruitment and defection: how are people drawn into more or less sustainable practices and how do their lives and careers sustain the lives and careers of the practices they reproduce? In theory, the policy implications of such an approach are relatively clear: engendering long-term transformation in what counts as a normal and acceptable way of life depends on reconfiguring the elements of practice; relations between practices, and patterns of recruitment and defection. Let us now resume the conversation, allowing Sarah to continue.

### **Reconfiguring the elements of practice**

Sarah: As I was about to explain, social practices—for example, driving or cycling to work or cooking and eating dinner—involve the active integration of ‘elements’. These include: materials, objects and infrastructures; forms of competence and know-how, images and meanings.

Polly: Steady on! I am interested in changing people’s behaviour and encouraging them to adopt a more sustainable way of life but you are talking about elements and practices, I don’t get it. I need practical advice. Just tell me, what should I do?

Sarah: Your job, as a policy maker, is to influence both the elements of existing practices—to make them more sustainable—and to think about the total range of practices that might make up a more sustainable society.

Polly pauses for a moment before responding:

Polly: So far, my job has been that of persuading individuals to consume less. You are now saying that if I want to reduce water and energy consumption I ought to think about the materials, meanings and competences of which practices like daily showering are made, and how they change?

In this snippet of conversation, Sarah turns the problem away from that of individual behaviour towards an understanding showering as an emergent, historically specific,

outcome of the interweaving of running hot water, bathrooms, concepts of freshness and invigoration, and taken-for-granted skills of personal care (Hand *et al.*, 2005). It is the repeated integration of these elements that makes showering such a regular and normal pursuit for so many people today. Intrigued by this curious perspective Polly begins to wonder. If the constitutive elements of unsustainable practices were not in circulation, what would become of the practices of which they are part? Could governments edit ‘bad’ elements, and hence ‘bad’ practices out of existence? This sounds far too radical and far too much like top-down state intervention, but at the same time Sarah has a point. Polly and her colleagues, past and present, clearly have a hand in structuring the materials, meanings and competences around which daily lives revolve.

In areas like public health there is a long and respectable tradition of combining investment in infrastructures (sewerage systems, mains water) with campaigns instilling techniques such as those of washing regularly, along with ideas about what it is to be clean (Ogle, 1996; Melosi, 2000). Similarly, post-war urban planning was, in many ways, about furnishing the ingredients of which desired ways of living might be made. Tapiola, a Finnish town designed and built in the early 1960s, was inspired by Ebenezer Howard’s vision of the model garden city (Howard *et al.*, 1951); by Patrick Geddes’ belief that spatial form could be used for social ends (Geddes, 1915), and by Lewis Mumford’s ideas of technological progress (Mumford, 2010). In setting out streets, shops, homes and schools, Tapiola’s planners were clear about what they wanted to achieve. Their aim was to create conditions in which children ran free, the community was strong, the interaction with nature was easy, and family life was close, harmonious and healthy. Ideological visions of the good life were inscribed and materialised in the smallest detail of kitchen design through to the distance between home and school (Hertzen & Spreiregen, 1971). Not everything went to plan, but there is no doubt that the ambition was to bring new social arrangements into being by providing the moral and material infrastructure around which they might develop.

The idea that daily lives might be scripted on such a scale, and with such precision, has fallen out of fashion and it is in any case clear that designers and nation-states have limited ability to control the circulation and flow of ideas about what it is to be modern or what a successful life entails. Many elements of practice circulate in ways that show scant regard for national borders. In addition, and in areas like food consumption or building design, global systems of provision are important in structuring diets and meals and in configuring the architecture of urban living. National policy-makers like Polly can do only so much to promote or stem the transnational diffusion of materials, meanings and forms of competence, but as Sarah’s next example illustrates, there may be ways of intervening in how practices are constituted and in the forms of energy and resource consumption they require:

Sarah: Changing elements of practice is not just a matter of engineering and planning. Take a look at what has been happening in Japan—in 2005 the government introduced a programme called ‘Cool Biz’, modifying conventions and practices of clothing as a means of reducing energy demand in the hotter months of the year.

Polly wants to know more, so Sarah provides a brief account.

Air-conditioning technologies have made it possible to manipulate humidity, temperature and ventilation and have been crucial in defining and diffusing standardised concepts of comfort and conventions of normal and appropriate clothing. In fewer than 70 years, methods of defining and calculating optimal indoor conditions, initially developed in Northern Europe and the United States, have been appropriated and copied around the globe: it has become normal to heat or cool buildings to a steady 22°C whatever the weather outside. Vast quantities of energy are already consumed in maintaining these conditions and there is scope for more. According to Sivak (2009: 1382), ‘the potential cooling demand in metropolitan Mumbai is about 24% of the demand for the entire United States’ (Isaac & van Vuuren, 2009). These are scary figures and the question faced by Polly and her colleagues around the world is whether they can break this vicious circle of energy demand by redefining the *elements* of comfort.

In 2005 the Japanese government took a step in this direction. The idea was simple: government buildings would not be heated or cooled between 20 and 28°C, and male office workers would be encouraged to remove jackets and ties in the summer and wear more in the winter (called ‘Warm Biz’). The effect was to change the *meaning* of normal clothing, along with the technologies (levels of air-conditioning) and competences (of dress and of facilities management) involved in the routine enactment and effective accomplishment of office life. By most measures ‘Cool Biz’, the summer variant, has been spectacularly effective, resulting in an estimated 1.4 million tonnes-reduction in CO<sub>2</sub> emissions (Knee Tan *et al.*, 2008) and making a tangible difference to what men and women wear at work and to a lesser extent in the home.

This strategy appears to have transformed collective conventions rapidly and on a significant scale. The Cool Biz programme worked on a number of fronts at once. Established marketing techniques were used to transform the *meaning* of smart and appropriate wear. The then prime minister, Mr Junichiro Koizumi, and members of the Cabinet were shown wearing loose-fitting short-sleeved outfits in formal settings. Successful business leaders were involved, the clothing industry responded to the challenge and large department stores promoted especially designed garments under the Cool Biz name.

Although not inspired by social theories of practice and not positioned as a rejection of unsustainable conventions imported from the West, Cool Biz appears to have transformed expectations of indoor climates and of what it is acceptable to wear, and to have changed both in a direction that reduces energy consumption and CO<sub>2</sub> emissions (De Dear, 2007).

Polly and Sarah are both impressed by Cool Biz, but for different reasons. Polly takes it to be a surprisingly successful example of remarkably effective social marketing. For Sarah, the fact that Cool Biz resulted in a transition in practice was more by accident than intent. Even so, it demonstrates that policy-makers can intervene to shape the elements of office life and can do so on a societal scale. It also shows that programmes designed in terms of one paradigm (individual persuasion) can have unintended consequences, inadvertently reconfiguring the elements of practice.

To date, Cool Biz remains at the level of fashion and has yet to be embedded in building codes or estimates of future energy demand. From Sarah's point of view, it consequently falls short of its potential as an intervention in practice. Polly has other concerns:

Polly: As far as I can see, Cool biz is an interesting case, but office workers taking off ties is not going to change the world. My job is to reduce CO<sub>2</sub> emissions on a massive scale, and to do so fast. How can you help with that? How can I persuade people to leave their cars at home? Or to eat less meat?

Sarah struggles to disguise her frustration:

Sarah: I don't think you will get very far if you continue to define your job as one of persuading individuals to change their ways, one by one.

Polly has another go:

Polly: Alright, let me try another question. How can I use your ideas to foster transitions not in just in one practice, but in many at once?

Sarah: OK, that is a critical issue and yes, there is certainly more to say about how practices relate to each other. Let's talk about cars and bikes.

Before commenting on how Polly might act to forge or break links *between* more and less sustainable practices, Sarah begins by describing the changing relation between systems of velo and automobility.

### Reconfiguring relations between practices

Cycling is now widely recognised as a practice that is good for the environment and for personal health: Sustrans (2008) claims that 2 kg of carbon are saved for every short journey made by bicycle. Cycling is also a means of transport that used to be very much more widespread than it is today. In 1949 in the UK, an estimated '34 per cent of all mechanised journeys were made by bicycle. Fifty years later that figure had fallen to 2 per cent' (*The Times*, 2008). By any standards this is a spectacular decrease, representing a rapid and radical movement *away* from what used to be a normal and familiar (low carbon) practice, namely that of riding a bicycle to work.

Although this decline coincided with the rise of the car as an increasingly democratic means of personal mobility, the narrative is not one of simple substitution. As Geels (2005) explains, the development of cycling laid the foundations for many of the elements on which the coming system of automobility depended, including aspects of infrastructure (road surfaces, production capacity) along with ideas and expectations of personal mobility.

Histories of driving and cycling show that the relation between them is inherently dynamic, and important for the trajectories of both. Whether cycling is characterised as slow, dangerous or demanding is not just a matter of personal opinion, but is instead related to the systemic configuration of this practice and of others in terms of which it is defined. For example, in the 1940s, and when compared with walking, cycling provided a *fast* means of covering extended distances. These qualities are relative and when cycling takes place in urban environments designed around cars,

or when daily routines involve travelling distances only made possible by the car, cycling is redefined as slow, effortful and inconvenient. In short, interpretations of cycling as a normal or an unusual thing to do depends on how riding is positioned within and by an interdependent network of social and material arrangements.

These ideas are useful in making sense both of the rapid decline of cycling in many European countries between the 1950s and 1970s and of its resurgence in some locations but not in others. According to Pucher and Buehler ‘the bike share of trips fell from 50%–85% of trips in 1950 to only 14–35% of trips in 1975 in a range of Dutch, Danish and German cities’ (2008, p. 502). In some European countries, rates of cycling have increased sometimes by as much as 20% since the mid-1970s, but in others, like the UK, the modal share has remained more or less unchanged at around 1% for the last 40 years (Cabinet Office Strategy Unit, 2009).

This variation is intriguing: what Urry (2004) refers to as the ‘system of automobility’ is no less established in Denmark or the Netherlands than in the UK. In these as in other countries, the petrol and steel car has been systematically locked in to the organisation of society. Cars have become progressively embedded through patterns of economic and suburban development and through spatial and temporal arrangements that demand and assume a relentless logic of automobility. However, generic trends in automobility disguise important local variation in the extent and degree to which alternative regimes (including those of cycling) coexist (de la Bruheze, 2000).

In the Dutch case the persistence of relevant meanings, competences and bicycle-related infrastructures seems to have made it easier to reinstate cycling at least to some degree. Reflecting on why similar efforts have met with limited success in the UK, de la Bruheze (2000) suspects that it might be ‘because bicycle use had declined too far’ and because the ‘material and social bicycle culture had disappeared’ (p. 4). These examples suggest that in some circumstances the elements of cycling-as-normal endure, but in dormant form, and that in others it is not just that requisite links are temporarily broken but that vital ingredients have actually disappeared. In such settings:

Attempting to reform technology without systematically taking into account the shaping context and intricacies of internal dynamics may well be futile. If only the technical components of a system are changed, they may well snap back into their earlier shape like charged particles in a strong electromagnetic field. The field also must be attended to; values may need to be changed, institutions reformed, or legislation recast. (Hughes, 1983/1993, p. 465)

For policy-makers seeking to engender change, the two situations described above—one in which links are broken but where relevant elements still exist (as in Denmark and the Netherlands), the other (the UK) in which necessary elements are not (or no longer) in place—call for quite different forms of intervention.

This far, Sarah’s reflections on driving and cycling draw attention to the changing relation between practices, to the potential for symbiotic as well as competitive relationships, and to the consequences of past configurations for the future. These thoughts prompt Sarah to remind Polly that currently dominant systems of automobility exist alongside the remains of past, partly dormant or largely extinct complexes

of practice and that policy interventions take place within and not outside these locally specific histories.

She makes this point by comparing policy interventions to promote more sustainable transport in London and Groningen in the Netherlands. In Groningen, almost 40% of local trips are currently made by bicycle, a situation in part shaped by long-term political commitment to cycling through mutually reinforcing policies of compact land-use planning, schemes to restrict car use and investment in cycling infrastructure. In this city, programmes designed to reduce transport-related carbon emissions have an effect in an environment in which cycling is already normal and mundane.

By contrast, efforts to promote cycling in London take effect in a situation in which riding a bicycle is *not* an entirely familiar thing to do. The congestion charge (introduced in 2003—car drivers pay to enter the Central London charging zone during certain hours of the day) and direct investment in bicycle routes have coincided with rapid and recent recruitment. Rates of cycling in London increased by at least 50% between 2003 and 2007 and continue to grow. Although this is from a very low base of 1–2% of modal share, the current pace of change might imply that certain positive feedback effects are underway: that cycling is quickly becoming more normal as the practice captures more normal people.

The prospect of deliberately engineering the demise of automobility and the rise of cycling as a newly dominant form might be a distant one, but in thinking about the potential for reconfiguring relations between practices, Sarah identifies two key points. First, in so far as they make a difference, policy initiatives do so not in the abstract, but to processes that already have a life and a history of their own. Political opportunities for intervention, and the form these take, are emergent effects of the very systems that policy-makers seek to influence. Second, where such interventions reconfigure the relation between practices, for example systematically prioritising bicycles over cars, they can set in train processes of positive feedback the effects of which are unpredictable in terms of extent (for example, regarding the scale of recruitment) and depth (for example, how firmly new configurations become embedded).

Polly, who has been listening quietly, has another question for Sarah:

Polly: I get what you are saying, but where do people come into the story?

Sarah: People are vital as the carriers and transformers of practice. If practices like driving or cycling are to survive they have to secure and maintain resources and practitioners willing and able to keep them alive.

Polly: That is all very well but what can I do to increase the chances that people will be captured by sustainable practices?

### **Reconfiguring paths and projects**

Now it is Sarah's turn to pause. There is a lot to think about here and there are various threads to follow. It is clear that she needs to talk about how forms of access and participation are structured by policy, not just now, but also by the cumulative effects of policies enacted in the past. But where should she begin?

At the most basic level, the probability of encountering and participating in different practices is structured by divisions like those of age, gender and social class. The suggestion that governments should enhance what Dahrendorf (1979) refers to as 'life chances' (meaning an individual's opportunity to maximise his or her own talents) acknowledges inequities of access and distribution, some of which are rooted in patterns of advantage built up over many generations. It also raises further questions about the range of practices to which people aspire, about what talents count and what it means to maximise them. For Bourdieu (1984), the idea of *habitus* provides a means of bridging between the cumulative (and unequal) effects of past experiences, resources, dispositions and tastes, and the content and character of *future-oriented* aspirations and opportunities. This is a theme also explored by Pred (1981) who writes about how

the particular economic and cultural practices in which individuals of a given group or class partake appear 'natural', 'sensible', or 'reasonable', even though there is no awareness of the manner in which those practices are either adjusted to other practices, or structurally limited. (p. 8)

Pred's conclusion that definitions of valued pursuits are themselves outcomes of dialectical interaction between individual and institutional projects is crucial. It is so in that it supports the conclusion that 'social transformation and altered structural relations can only occur through the introduction, disappearance or modification of institutional projects' (p. 17). The point is that individuals' daily and life paths are intertwined with collective, institutional projects to which they lend time and energy, for instance through roles such as those of employee, parent, etc. Participation is, in turn, relevant for the direction that individual life paths take, and for the kinds of experience and expertise acquired along the way. Past performances are evidently vital for the accumulation of know-how and competence and for the emergence of institutional projects, some of which are rather more sustainable than others.

Sarah knows all this but she is still not sure how to respond. What do these observations mean for policy-makers and others seeking to promote more sustainable practices?

At the broadest, most 'macro'-level, dominant institutional projects (i.e. those which command time, resources and attention) are complex amalgams of past trajectories and current aims and aspirations, many of which are materially sustained and reinforced by the state. Issues of sustainability appear in many guises when approached at this scale, and when considered with reference to the reproduction of social institutions, including conventions of family life, systems of provision and consumption, economic relations and more. In so far as governments have a hand in reproducing these institutions and systems, and the versions of normal and acceptable ways of life associated with them, they also have a hand in configuring related patterns of mobility and resource consumption.

To give one very specific example, the idea that parents should have a choice of schools has generated more moving around than was the case when children simply went to the school that was closest to home. Other self-fulfilling conventions of need and entitlement are tacitly buried in plans and strategies for energy supply

and in the design of resilient water infrastructures. Practices and associated ‘standards of living’ are, in effect, inscribed in how infrastructures are conceptualised and managed. Through arrangements like these variously unsustainable institutional projects are tacitly reproduced all the time, not at the forefront of explicit policy intervention but as part of the backdrop of taken-for-granted order: this being an order structured around specific bundles and complexes of practice.

It is in these terms that Sarah replies:

Sarah: You could think about how different areas of public policy (education, health, family, work, leisure etc.) inadvertently increase the chances that people will be captured by unsustainable practices. And you could reflect on more fundamental questions about the sustainability, or otherwise, of normal policy goals.

Polly: But that is a massive task, and one that is well beyond my reach. What you are talking about is a systemic review of the unintended consequences of just about every area of government policy. And you are also talking quite directly about questions of politics and power.

In this exchange Sarah and Polly stumble over a number of limiting conditions. From Sarah’s point of view, she has done her best to introduce a handful of ideas rooted in a strong interpretation of practice theory and has tried to demonstrate their relevance for conceptualising and promoting new ways of living on the scale required if there is to be any really significant reduction in CO<sub>2</sub> emissions. However, Polly, who simply wanted advice about how to help people make ‘better’, more sustainable choices, finds herself drawn in to a rather challenging discussion of how policy-making structures patterns of consumption.

### **Reconfiguring the conversation**

It was not what she bargained for, but Polly is actually quite excited by Sarah’s account of how state actors influence the distribution and circulation of materials, competences and meanings, and how governments have a hand in forging and breaking some of the links involved in the surprisingly uncontrollable, surprisingly living system that is daily life. In catching sight of these dynamic processes, Polly caught sight of a new future: rather than persuading individuals to change their behaviour, one person at a time, she could be out there building networks and coalitions and constructing partnerships that make the conditions of sustainable practice possible. For Polly, the novelty is not in recognising that infrastructures and social networks matter. This is not in itself news: having flicked through many government reports, she is aware of attempts to marry notions of cultural capital, social networks and environmental circumstance with behavioural policy (Knott *et al.*, 2008). Rather, the key insight, and the one that has really caught Polly’s imagination, has to do with how change is conceptualised and with how she thinks about her own role.

Instead of looking for the drivers and barriers of individual behaviour, whether in cultural context, infrastructure or elsewhere, Polly is becoming interested in the dynamics of social practice, as such. Can she shape trajectories and promote and hinder the development of more and less sustainable practices-as-entities? There is

a limit to what she can do, and in any case, practices have lives of their own. Because of this, the practical consequences of Polly's interventions are likely to be unstable and unpredictable in that the practices they seek to shape are subject to ongoing reproduction/transformation. But from what Sarah has said, this does not rule out the possibility of thoughtful, practice-oriented strategies: if she plays her cards right, Polly might be able to increase the chances that lower carbon ways of life persist and thrive.

If she is to take these ideas to heart, Polly will have to redefine the agendas and priorities of those with whom she works. At the moment she spends a lot of time and money surveying individual responses to batteries of attitudinal questions about the environment. But is this really the sort of information she needs if the aim is to understand and potentially shape the range of practices of which contemporary society is formed? Probably not. If she redefines the problem, other sorts of data, and other styles of enquiry, will be required. These might include concerted and innovative efforts to quantify the growth of certain practices and the demise or transformation of others. Radical reduction in CO<sub>2</sub> emissions implies that conventions, standards, routines, forms of know-how, markets and expectations will need to change on a massive scale. Could Polly develop methods of detecting and quantifying systemic moves in this direction? Could she come up with some cross-sectoral analysis of how policy-making of all forms influences the texture and rhythm of daily life and the patterns of consumption on which such arrangements depend?

Wilson & Chatterton (2011) argue that policy-makers pick and mix from menus of conceptually incommensurable strategies and approaches, selecting a tool from here and a measure from there in pursuit of methods that 'work'. Polly is not committed to conceptual consistency for its own sake, but she is decidedly uneasy about flitting between practice-oriented and behavioural models, as if these provide different takes on *the same* phenomenon. It is true that practice-oriented policy might draw on similar methods and techniques (the scope of what government can do remains constrained), but for Polly, the crux of the matter, and the excitement, is that a practice orientation is strategically important. In very practical terms, the priorities that matter when the aim is that of promoting pro-environmental behaviour are not the same as those that pertain when the goal is one of reconfiguring the practices that people reproduce.

If Polly is to figure out how the state sustains unsustainable institutions, conventions and ways of life, and if she is to exploit opportunities for fostering other options and possibilities she will have to extend the range of social theory on which she draws. For the moment, policy relevant social science is that which is consistent with a dominant paradigm organised around theories of individual attitude, behaviour and choice, but if this tide should turn there would be no harm in giving Sarah a call and having a rather longer conversation about what more the social sciences have to offer.

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