

## Boundary Crossings

# Climate change and household dynamics: beyond consumption, unbounding sustainability

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Scientists increasingly realise that now methodologies for modelling climate change have been refined, what is needed is geographically sensitive research on its social and cultural dimensions (Hulme 2008). As a recent editorial in *Science* acknowledged, 'Natural sciences should no longer dictate the Earth system research agenda; social sciences will be at least as important in its next phase' (Reid *et al.* 2009, 245). In this essay, we seek to seize this moment of interdisciplinary convergence by raising fresh questions about much-needed research on the social and cultural geographical dimensions of climate change. Specifically, we ask whether key conceptual boundaries – often too comfortably framed around 'sustainability' and 'consumption' – require dismantling, and what might be necessary to move beyond them.

As a team of researchers based in a regional city at the heart of the Australian coal and steel industries, we are using close survey and ethnographic work on the everyday practices of households in the context of climate change and sustainability talk. Wollongong is a location we have dubbed 'carbon central', where coal and steel industries remain integral to the economy and imaginary of a community and region – a place where the conventional distancing of climate change among the general population (cf. Lorenzoni *et al.* 2007) might be expected to occur in novel and unanticipated ways, if at all. We see two boundaries constraining research into social and cultural geographical

dimensions of climate change: one around consumption as the main lens through which household sustainability is understood (which we argue needs to be transgressed, invoking a wider understanding of consumers also as producers); and a second around notions of sustainability that risk becoming unhelpfully normative. We advance a notion of cultural economy that identifies articulations between households, industry and government, and traces how responsibilities are shared and structured amongst these actors.

We are mindful of Diana Liverman's (2008) question about how to 'upscale' social research to match scientific datasets, if social and cultural researchers (including human geographers) are to claim a rightful place in the sandpit of policy debate over climate change adaptation and mitigation. We seek to enhance discussions before particular understandings of household sustainability and scale become too reified. For example, we note Reid *et al.*'s (2009) theorisation of the household as a significant scale of analysis in relation to pro-environmental behaviour. However, the conceptualisation of what constitutes pro-environmental behaviour remains opaque. Further, households are understood primarily as sites of consumption, rather than also production (and/or having their own complex internal economies). Much is at stake from challenging the conceptual boundaries that are rapidly forming around households, consumption and sustainability.

## Placing the household

There are key characteristics in the existing literature on geography, household and environment that we build on and integrate:

- 1 There has been a considerable focus on consumption, particularly official and corporate programmes that have sought to change household behaviour towards consumption that is more environmentally sustainable. A conclusion from this work is that promoting public awareness of global risks is inadequate to change behaviour (Lorenzoni *et al.* 2007; Robbins 2007), as is treating people merely as consumers rather than citizens or active subjects (Burgess *et al.* 2003; Malpass *et al.* 2007).
- 2 Programmes informed by science encounter and generate scepticism and distrust as a matter of course – not as a result of poor communication or misunderstandings, but as a result of public assessments of institutions and clashes of divergent rationalities (Eden *et al.* 2008; Hinchliffe 1996). People may accept climate change science, but not act on this because climate change may be unthinkable within the confines of everyday life.
- 3 The environment is just one line of responsibility being juggled in acts of consumption, which necessarily serve different anticipated needs (Burgess *et al.* 2003; Dowling 2000). Urging households to behave responsibly has its limits, with what constitutes ‘responsible’ behaviour developed within social practice, rather than abstractly distant from it (Gough 2010). In the absence of mandated action or new infrastructure that shifts what is ‘normal’ (Shove 2003), household consumption can remain unchanged for reasons that are perfectly ethical from that household’s point of view.
- 4 It seems obvious – yet important – to be reminded that households are more than mere units of human living: they are social assemblages – *homes* – in which families bond, people invest emotions and undertake all kinds of identity work beyond the putatively ‘environmental’ (Blunt and Dowling 2006). On the one hand, the home is positioned as a refuge or haven from the problems of the world (Hinchliffe 1997), confounding its potential role as a site of climate change mitigation via changes in household practices. On the other hand, home has the potential to be rendered ‘uncanny’, to make

clear the multiple materialities and networks that go into its construction (Blunt 2005; Head and Muir 2007a; Kaika 2004). How ‘households’ are conceptualised in climate change adaptation talk, and whether this relates to the way people make homes as social assemblages, requires further interrogation and dialogue between policymakers and cultural geographers.

- 5 Any changes that a household makes are limited unless connected to larger scale movements. For example, in the absence of changed availability of water via the existing supply network, household reductions may make little appreciable long-term difference (Lawrence and McManus 2008). Apart from some restrictions on exterior use, there is no limit to overall household water consumption in most places of the affluent West. Boundless consumption remains ever-possible for the wealthy, inviting the ready exercise of scepticism. There also appears to be an emerging resistance to being told what to do, as illustrated in anecdotes about energy-saving light bulbs and water-saving showerheads being removed from newly built houses. The options to consume remain largely open.
- 6 The strongest predictor of carbon footprint/greenhouse gas emissions is affluence, at both the macro and the household scale (Australian Conservation Foundation 2007). The best way to reduce your environmental impact is to be poor, as economic activity is strongly coupled to fossil fuel use. The rich pollute more through high levels of travel (vehicle and air); more and bigger houses; more food wastage; more consumption generally. Yet the rich and well-educated may be among the strongest advocates of ‘green’ practices: recycling, composting, buying organic food, taking reusable bags to the supermarket. They may also be leaders in buying still-expensive technology: hybrid cars, solar electricity panels and green energy. The bourgeois ghettoisation of green consumerism during the boom times of the 2000s (Beard 2008) may only further deepen given recent economic turmoil.

## Households and sustainability: a cultural economy approach

Does this mean that focusing at the household scale is a waste of time until we can decouple economic activity from fossil fuel usage? We do not

claim to be able to resolve these tensions and contradictions. Consistent with much of the above research, however, we do argue that households must be understood within broader contexts. They are 'enrolled' in networks (social, industrial, governmental), with consequences for behaviour and resource use and for the extent to which households are actually able to change (or at least for the amount of 'friction' and corporate marketing savvy they must act against).

Our working framework is one integrating cultural perspectives into wider analysis of structural and biophysical systems – both economic and ecological – through which knowledges are articulated and power exercised. Cultural-economic research has much potential, because it brings the advantages of cultural theory to bear on questions of economy, regarding how humans access, use, exchange and value financial and material resources. It traces qualitatively the *in situ* relationships that unfold between humans, technologies, other living things, institutions and overarching ideologies (Amin and Thrift 2007, 145). Rather than seeing all people as *homo economicus* or seeing culture as separate from questions of material resources and transactional relationships, cultural-economic research focuses on relationships between agents that shape material outcomes. In the context of sustainability, the decisions households make are economic – making purchases, reducing consumption, opting for certain products, sharing resources in family and social networks. But the values shaping these decisions are fundamentally *cultural* – because preferences and behaviours stem from norms and beliefs. Up until now, the emphasis has been on encouraging households to 'be more sustainable'. Instead, research ought to decipher how household exchanges and transactions are shaped within powerful networks of external agents, and by the cultural contexts from which they materialise.

There are at least two boundary-crossing implications of this, both of which are pertinent to a project based in 'carbon central'. First, we wish to move beyond consumption as a starting point. Second, it seems that assumptions about 'being green' in personal conduct and behaviour have become too quickly normative, with uncertain potential consequences. Among the risks is that a set of class- and culture-specific practices become entrenched as 'green'. Therefore we want to unbound normative assumptions about sustainability and consumption.

## Beyond consumption: households as producers

The more green life becomes mainstreamed, the more it shares with consumerism, as certain personal actions and consumer products become codified as the 'right' green choices. In the context of Wollongong, however, we need to go further. Legacies of coal and steel form and dwell in the present. Employed in coal mines, steelworks and associated industries, people are implicated as producers of greenhouse gas emissions, with all the dependencies, commitments and outlooks that this entails. Mindful of the stresses households in our city face, we are concerned with the practical and social justice issues emanating from the discussions of ways households should reduce carbon emissions.

Wollongong is a place where reminders of greenhouse gas emissions are everywhere – the steelworks on the skyline; in the port through which coal, wheat, and steel and copper products flow to export markets; from the coal trucks that drive along freeways at night behind household backyards; and on its much-loved beaches, vulnerable to projected sea-level rises. Wollongong retains its blue collar workforce, and scepticism is common towards the middle-class values apparently informing the sustainability debate. Yet Wollongong is also a university city with widespread concern about coastal erosion, a lively environmental activist movement and organised schemes to promote sustainability. As our recent work has revealed (Waitt *et al.* 2010), images of climate change, its consequences and appropriate responses do not resonate equally (O'Neill and Hulme 2009).

We are energised by the impossible idea that in such a heartland we could start to re-imagine a post-coal economy. One step is to talk more about the cultures of coal (Pearse 2009). Other pathways we are exploring follow households as sites of production with their own divisions of labour, internal economies of lending and sharing goods (e.g. clothes), amidst neighbourly gift economies (of fruit and vegetables, plant cuttings, child care, etc.) and cultures of re-use (see Gibson and Stanes *in press*; Head and Muir 2007b; Lane *et al.* 2009).

## Unbounding normative assumptions about sustainability

Our desire to unbound normative assumptions about what constitutes 'sustainable behaviour' at

the household level arises from what we have characterised as our *dilemmas of sustainability*. There are enough of these to fill a book, but they come in different categories, and escalating levels of complexity.

*Straightforward questions* arise from our concern that it seems possible to embrace green rhetoric and craft a 'green identity', to be knowledgeable about the 'environment' and purchase environmentally friendly products, but without significant reductions in resource consumption. What are the actual emissions embedded in different products? How much better is a pair of jeans made of organic cotton than other items of clothing (Gibson and Stanes in press)? Does the travel impact of items sold on eBay outweigh the recycling value? Do the greenhouse gas emissions of certain types and scales of food production far outweigh transport emissions, as some New Zealand-based work has suggested (Saunders et al. 2006), turning the injunction to 'eat local' into a misguided if not dangerous assumption (Johnston et al. 2009)?

*Tradeoffs* between different environmental goods/evils become a dilemma: is it worse to waste water rinsing out tin cans than to put them in the recycling bin dirty? Is it worse to use plastic supermarket bags for bin liners, or take reusable bags to the supermarket but then buy dedicated bin liners? Some of these are empirical questions dependent on the chemistry of plastic. But beyond the need for more transparent carbon calculations are dilemmas of everyday practice. How much time do well-intentioned people spend thinking choices through, debating them within a household? Which members of households undertake this 'thinking work'? Who feels guilty? Is it worth it, and what if the effort was invested elsewhere?

*What are the carbon implications of social processes and trends*, rather than of material products? For example, how many vehicle kilometres are expended each weekend in the pursuit of children's sport? Could we quantify the environmental costs of divorce in terms of expanded number of households - how many Australian children now have, for instance, two bedrooms? All societies entertain themselves in one manner or another - but what are the carbon impacts of different ways of having fun, eating out, attending festivals, cinemas, night-clubs (Gibson and Wong in press)?

These dilemmas become even more complicated if we then analyse the symbolic power of the green

bag or 'local' food, the social meaning of children's sport, or the thrill of the eBay hunt and its associated sociality. They take us to the heart of how symbols, habit, knowledge and practice are entwined in daily lives.

## Conclusions

With this in mind, we see three key contributions for future research on household sustainability - each of which has implications for broader socio-cultural research into climate change adaptation:

### 1. *To articulate diverse practices*

Researchers need to identify and bring to light practices different from those commonly ascribed as green, to contest a narrowly normative expression of 'sustainable behaviour' before boundaries become too entrenched, and to harness cultural diversity as a resource to imagine alternative ways of doing things. This is somewhat parallel to how Gibson-Graham (2006) imagine and articulate alternatives to capitalism, by naming and describing economic practices that are otherwise hidden. For example, retrieving and analysing vernacular practices of thrift and frugality, often associated with the poor, such as repairing clothing, hoarding reusable materials and containers, and dumpster-diving for food (Lane et al. 2009). Caution is needed here in order that vernacular frugalities be valorised without trivialising them. As Huber (2009, 481) recently argued, the use-values of material commodities must be struggled over.

### 2. *The total context of social practice*

It is important to focus not only on specific practices (recycling, composting, car use), but also the total context in which they are embedded (Hobson 2006; Slocum 2004). For example, for mothers who drive to work and manage the household with multiple stops on the way home, it is counter-productive to focus only on driving behaviour in isolation (Dowling 2000). A cultural economy approach enables consideration of intra-household distributions of tasks and responsibilities too. Who does the work on sustainability in the household, and what are the gender and time-allocation implications? What mundane or unheralded practices (of consumption and production) occur within households unbeknownst to climate change adaptation policymakers - and ought these be subject to policymaking?

### 3. Articulation

Can we then extend the concept of *articulation* (in both symbolic and material senses) to examine how household changes ratchet together (after Shove 2003) with broader social/economic processes? This may allow us to pick a constructive path between two negative extremes: giving up on the household as powerless, ascribing all power to wider economic and political forces, compared with putting the total burden on households without any expectations on industry and business. Geographers can productively connect the notion of articulated households with recent relational approaches to scale. Multiple scales of analysis can thus be mobilised, but the power of any particular scale becomes both an empirical question to be answered (rather than assumed as inherent), and understood as a field of relations rather than a nested hierarchy.

This conversation alone entails moving beyond limited and increasingly doctrinaire understandings of what it means to be sustainable around the house. An on-going challenge remains to find ways to plug geographically evocative empirical research into wider climate change debates, retaining – and indeed, harnessing – social and cultural idiosyncrasies.

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