Event Report

BSA Climate Change Study Group: Conceptual and Methodological Challenges of Researching Climate Change at Multiple Scales

Beth Perry and Milena Buchs

A distinctive feature of 21st century society is the prominence of climate change within and across academic, policy and public debates. It is widely acknowledged as a 'wicked' contemporary problem, demanding interdisciplinary, cross-sectoral, multi-scalar, innovative and collaborative approaches from a variety of stakeholders. Sociology has a critical role to play in these debates – reflected in the launch in 2011 of the BSA Climate Change Study Group.

A critical question relates not only to what sociology can contribute to addressing climate change, but how? Sociological research on climate change-related topics is still a relatively young field and climate change is a complex area, with implications for different societal scales – from the individual, household, workplace, community, regional, national and international levels.

This raises a series of questions about whether the sociological imagination and the tools at our disposal are 'fit for purpose' for the challenges posed by climate change.

- How applicable are existing conceptual approaches in researching climate change at multiple scales?
- Do we need new methods to address complex issues? Or should we be changing the questions we ask?
- What challenges are sociologists facing in their daily research practices?
- How can we think critically about these practices and how they help generate insights into broader climate change debates?

To discuss these issues, a BSA Climate Change Study group conference was held in March 2012 at the University of Southampton. The seminar was organized by *Milena Büchs, Pauline Leonard, Rebecca Edwards* from the University of Southampton, Sociology and Social Policy & Third Sector Research Centre and *Beth Perry* from the Centre for Sustainable Urban and Regional Futures, University of Salford and Mistra – Urban Futures.

The seminar brought together academics and researchers, as well as government representatives and community group representatives, to reflect on the conceptual and methodological challenges of researching climate change at different societal scales. Day 1 consisted of three parts: keynote presentations, parallel workshop sessions and a

plenary discussion. On the second day participants were invited to join a guided walk around the New Forest led by Minstead Study Centre.

Setting the Scene
The day began with keynote presentations from *John Urry, Elizabeth Shove, Pauline Leonard, Patrick Devine-Wright* and *Heather Lovell*.

"Systems are like a juggernaut careering at full pace to the edge of the cliff", we heard from John Urry in his presentation on 'why finding the reverse gear is so difficult'. Continued social science input is essential to examining climate change, he argued, as the two massively interdependent problems of climate change and peak oil rely on changes in social practices. Whilst economists are often seen as the social science discipline best placed to address these issues, Urry argued that sociology has a critical role to play in displacing forms of economics and economic calculation from centre place. Energy is not just a commodity but a central feature of society which orchestrates and facilitates social lives and practices. At a conceptual level, the first challenge we heard was therefore about the mechanisms through which solidified practices and enduring, seemingly natural, social habits can be reversed, within socio-technical systems.

Acknowledging the systemic character of sets of practices is a first step. Systems are socio-technical, a 'complex assemblage of economic, political and social relationships which get locked together'. Moving to a low carbon economy-and-society involves 'reversing' most systems/practices/habits set in motion during the C20th particularly in relation to high carbon, fashionable social practices.
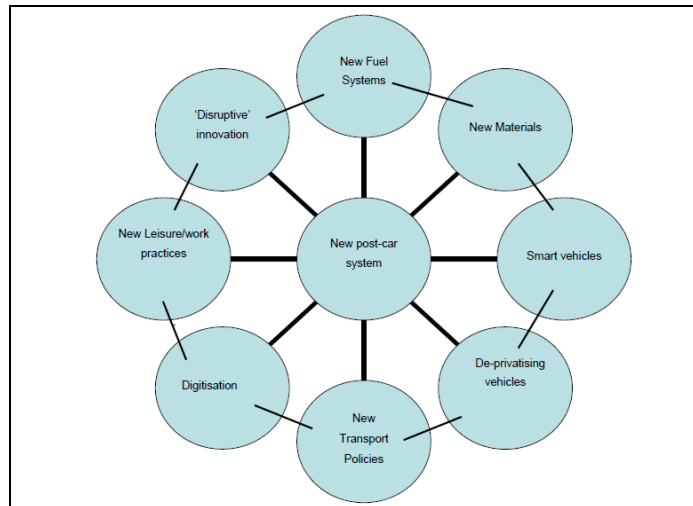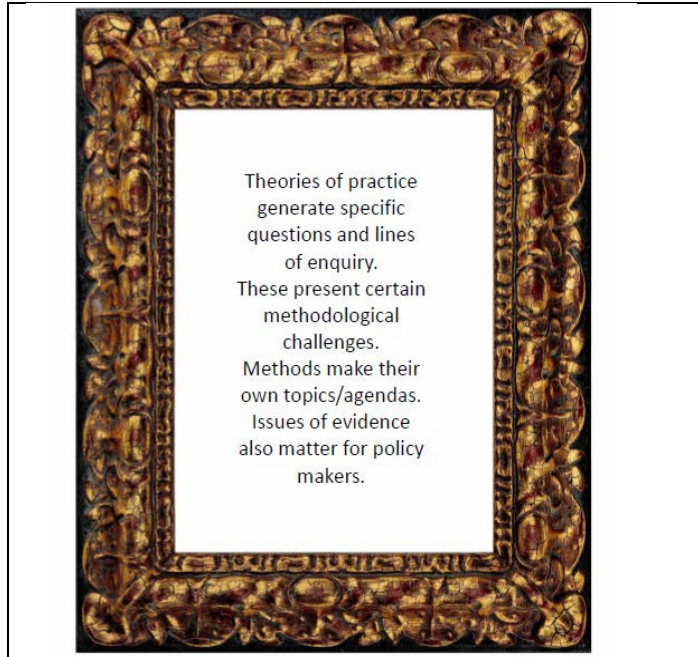

The Post-Car System, Urry, 2012

Yet such a reversal comes up against *inter alia*: systemic carbon interests; long-term path dependencies of existing systems including habits; the impact of low carbon systems in the short term on levels of income and consumption; the difficulty of orchestrating a global polity to reset global agendas; the general slowness of societal change; resistance and opposition to top-down change; lack of time; and the need to develop multiple systems simultaneously to generate new low carbon *clusters.*

Low carbon clusters, he concluded, provide a mechanism not of reversing within existing systems; but of rendering the existing system obsolete. Technological change and innovation have a key role to play here as illustrated in the example of the post-car system. Such systemic change is possible – systems have tipping points and thresholds and may often be altered at rapid speed under unusual or catastrophic events. A new 'powering-down' cluster is needed which incorporates not only environmental, but also social and community dimensions through the democratization of low carbon innovations.

Elizabeth Shove next turned to an examination of 'methods for capturing the dynamics of social practice' with the proposition that social science and climate change do not require new methods and methodologies but do require us to think about different ways of framing questions and topics. The challenge was therefore conceptual and methodological: to rethink social practices through an inter-relational perspective of 'configurations that work' and to consider how such practices can be identified and studied through considering practices as entities.

Theories of practice generate specific questions and lines of enquiry.
These present certain methodological challenges.
Methods make their own topics/agendas.
Issues of evidence also matter for policy makers.

"Different nets catch different fish" (Shove, 2012)

Drawing on the examples of showering and driving, *inter alia,* Shove built on previous work to highlight three key issues: first, identifying and bounding practices is a critical step in researching climate change and requires active work; second we need better understanding of how practices travel across time and space and third, specific methodological challenges are presented through considering inter-relationships between sets of practices and how practices co-exist.

Whilst a considerable body of work focuses on practices and performances as situated moments, the study of the trajectory of practices over time enables questions related to social learning, the role of social networks and collective trends based on private habits to be identified. Identifying which practices are arriving and leaving over time and seeing practices as entities is important, not only because all practices relate to resource consumption, but because social problems are formed through aggregation.

Theories of practice generate specific questions and lines of enquiry. Climate change is a distinctive topic insofar as the scale and complexity of the challenge requires a melding of systemic and institutional social theories of change with an understanding of individual practices, habits and behaviours. Methods make their own topics and agendas, Shove concluded – and different nets catch different fish.

Pauline Leonard took us through concepts and methods to issues of scale by examining the role of organizations in reducing climate emissions in her presentation on 'changing workspace: green? Or mean and lean?' Starting with Lefebrve's (1991) conceptualization of organizational space as simultaneously socially producing and socially produced, her work emphasized the relationship between spatial practice, representations of space and representational space to analyse how sustainability is framed and interpreted in workplace design and practices. Walking interviews in the work environment were used as a mobile method to gauge different employees (managers/workers) reactions to the same space.

A distinction between 'strong' and 'weak' sustainability discourses was first identified in relation to both the interplay between economic and environmental concepts of sustainability and the development of different practices to maintain, encourage or enforce workplace sustainability. The emphasis was on how green discourses are used as a justification for lean and mean and invariably concealed cost-cutting exercises. This was supported by numerous work-based measures from the use of technology to reduce carbon footprints through teleworking; actively discouraging people to come into work through the reduction of desk and meeting space; clear desk policies; removal of rubbish bins and not allowing food in the office.

Reactions to these measures were variable, including new clothing practices to manage changes in temperature, the development of new routeways and mobilities within the office and changing habits – including in one case working in the toilet to carry out work needing prolonged concentration. Some workers can therefore experience such 'green' spaces negatively and as a loss, particularly in relation to a sense of personal territory in relation to individual workspace. The potential for the muddling of green and lean agendas led to rebellions and resistance as workers respond by bringing in their own rubbish bins or industrial ear defenders.

The work identified moments of resistance in reaction to the discourses and measures implemented under the rubric of green workspaces. How managers conceptualized green space, how this was experienced and then imagined provided a means of examining the extent to which organizations are dealing with the challenges of climate change.

Patrick Devine Smith turned attention to a different scalar challenge: to 'think global and act local'. Drawing on an interdisciplinary perspective bringing together the concept of place attachment and climate change, he asked how climate change is framed and

understood as a global, national or local problem? Can individuals form relationships to the whole earth? And if so, how would such relationships of belonging occur and with what consequences?

A key challenge, we heard, is to displace the localist bias that presumes that individuals are hard wired to value the local over distant interests. This localist bias is presented as a consensus, within many discourses on place attachment, NIMBYist responses to initiatives such as wind farms and reflected within national coalition politics in the UK.

Relationships with place are instead complex. Place is better seen as a transdisciplinary concept, a way of seeing, knowing and understanding the world that requires human geographers and environmental psychologists to combine and reorient their frames of analysis. Whilst feelings of attachment play a role in motivating individuals to take actions on behalf of particular places, these attachments can also be conceived at a global scale to impact on how people react to climate change.

More systemic work is needed on poly-local and poly-scalar attachments, based on belonging and ideology as much as proximity, particularly in a context of globalization and the web-based social media. The dearth of extensive empirical studies has practical and conceptual consequences: first, in terms of strategies to communicate and encourage action on climate change in terms of mobilizing place attachments at multiple scales; and second in requiring further collaborations between social scientists and psychologists in addressing complex climate change issues.

The final keynote presentation reflected on the need for social researchers to take themselves into unfamiliar territory in addressing the challenges of climate change and the challenges posed for research practice. Heather Lovell's presentation on 'speaking the language' examined the challenges of dealing with experts in the area of carbon markets and accounting. Her work has taken her into new fields raising specific issues

relating to expertise, knowledge and understanding, relationships with participants and the communication and engagement with complex topics.

The conceptual ambiguity about new tools and mechanisms for addressing climate change – in this case carbon credits and emissions allowances – has led to a series of difficulties in corporate accounting practices, particularly in view of the absence of an industry standard and resulting differentiations in practices.

Attempting to examine these practices posed a number of challenges for the researcher including corporate cultures of commercial confidentiality leading to a lack of openness about how allowances are calculated; general low levels of awareness of the broader climate change agenda in which the tool had originally been designed leading to a mismatch between intention and ultimate use; and the levels of technical expertise needed to engage with and study this area.

Lovell's experiences highlighted the gymnastic agility needed from researchers in addressing complex systemic challenges. Prior knowledge of the field was critical leading her to take an accounting course and engage with new academic networks around accounting. At the same time, she reflected, it was useful to come to the area as an outsider and to make use of this perspective throughout the research process.

More broadly, the presentation highlighted the difficulty in engaging with societal and economic agents who have critical roles to play in the implementation of low carbon futures yet may have alternative rationalities for action. The discussion highlighted the distinction between an attached place world in the context of social practice theory and systems thinking and other worlds of technical rationality which are unconnected to place.

Collectively these presentations raised questions about the systemic and inter-related nature of practices, the importance of organizational spaces and cultures in affecting behavior, the need to avoid simplistic dichotomies between global and local dimensions of climate change and the challenges of taking sociology into unusual and sometimes uncomfortable terrains.

Broadening the Debate

The second part of the day consisted of parallel workshop sessions for participants to share their own frameworks, methods and research experiences. 22 papers were accepted for the workshop sessions, each of which raised fascinating issues for discussion. Grouping these papers into thematic sessions was a conceptual and methodological challenge in itself, as each paper contributed to a number of themes. The full list of papers and presenters is attached (Annex A).

Whilst space precludes a detailed report of the dynamics and insights from the parallel sessions, a number of cross-cutting issues emerged and were consolidated through the final plenary roundtable. These included critically reflecting on the fit between our own framing assumptions, frameworks, methodologies and methods. Research approaches and methods on certain aspects of climate change sociology need to be refreshed because sociologists can find themselves confronted with new types of actors, contexts and forms of knowledge. Broadly speaking, four main issues emerged.

1) We need to better understand how to think about the systemic nature of sets of practices and how they are inter-related and embedded in socio-technical systems. Systems, scales and practices were common themes running throughout the session. Practices may bridge scales, such as in the case of legal frameworks, and may involve new intermediary forms of brokerage and hybrid organisations. However, the group discussed how practices may remain difficult to identify and study, particularly in the context of often limited sources of funding.
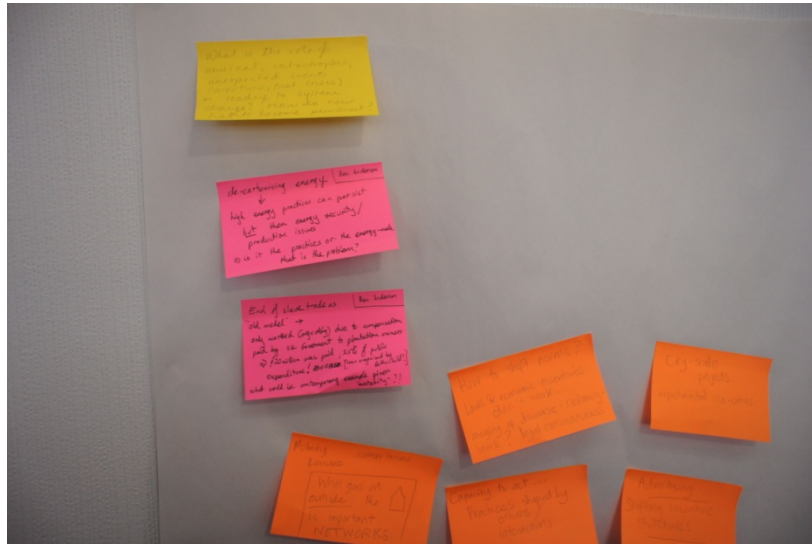
2) New ways of thinking and doing are needed. Climate change, one participant commented, is both exceptional and ordinary and requires exceptional and ordinary action. Whilst there was no complacency across the group, it was acknowledged that the challenge in researching climate change related as much to understanding social representations, communication strategies and the integration of existing knowledge as to the constant search for methodological innovation as an end in itself. A range of methods were discussed in the groups – including discourse analysis, visual methods, mixed methods, block models, local interaction platforms and computer modelling. It was highlighted that innovation often comes from applying existing methods or approaches to freshly constructed objects of study – for instance, through looking at soft law as a basis for changing behaviour or starting with a study of coats to explore the culture of practice and localised responses to climate change.

3) Climate change is not a bounded or discrete field in academia, policy or practice. This porosity requires working across disciplines, epistemic communities and scales. A relational and interactional approach to scales was discussed resulting in a resistance to elevate one scale of action as more important than another. Individuals, families, households, communities, localities, cities, national states and international relations were all presented as offering insight into conceptual and methodological challenges. Cutting across these scales was a common interest in generating a debate between academia and broader social, political, economic, cultural and environmental arenas, breaking down a simplistic dichotomy between the expert and the lay person. The group discussed different approaches to working with communities and generating collective action and how new forms of collaborative knowledge might be produced.

4) Climate change raises questions over our normative assumptions and embodies different sets of transformative goals. The concepts that academics implicitly or explicitly hold frame research questions and methods. We need to remain open to reflecting on and publicly sharing how our frameworks, methodologies and outcomes relate - through a reflexive orientation that examines the relationship between values, learning and knowledge for and in action. The emphasis therefore should be as much on our forms of analysis and framing of the research, as on our methods.

Taken together, these issues indicate the need to reflect on our own research practices and critically examine different methodologies in producing knowledge for and in action.

Further information on the seminar can be viewed at http://bsaclimatechangesouthampton2012.wordpress.com/..

The seminar was kindly supported by the BSA Climate Change Study Group, University of Southampton Centre for Citizenship, Globalization and Governance (C2G2), the ESRC National Centre for Research Methods (NCRM) and Mistra - Urban Futures.

Full Conference Programme

Morning presentations

Is there a reverse gear and how to find it? - Professor John Urry, University of Lancaster

Changing workspace: green? Or lean and mean? - Professor Pauline Leonard, University of Southampton

Methods of capturing the dynamics of social practice - Professor Elizabeth Shove, University of Lancaster

Think global, act local? Place attachment in a climate changed world - Professor Patrick Devine-Wright, University of Exeter

Speaking the language: researching financial accountants and other experts - Dr Heather Lovell, University of Edinburgh

Afternoon Workshops

A: Conceptualising Climate Change Sociology	Moderator: Milena Buchs
Human responses to climate change: social representation, identity and social action	Rusi Jaspal and Brigitte Nerlich
Understanding climate science: the evolution of uncertainty management	Catharina Landström
Technological optimism within the economics of climate change: A Foucauldian answer to conceptual and methodological questions	Michael Keary
Climate change, need, and everyday life	Rebecca Wallbridge

B: Media, communications and mixed methods	Moderator: Rebecca Edwards
Visual forms and visual methods in climate change communication	Kate Manzo
A mixed methods approach to analysing online reader comments on newspaper articles concerning climate change	Nelya Koteyko, Brigitte Nerlich, Rusi Jaspal
Environmental citizenship and the European Union's climate politics	Mirja Vihesalo
Qualitative methods within the "quantitative" arena of carbon markets	Corra Boushel

C: Methods for researching climate change in different social contexts	Moderator: Pauline Leonard
Practices by proxy; climate, consumption and water	Ben Anderson, Alison Browne, Will Medd
Using network analysis to bring behaviour into the study of social movements: the relationship between environmental movement participation, attitudes to climate change and energy use	Clare Saunders, Milena Buchs, et al
Community scale approach to energy consumption	Sarah Hards and Sarah Hall
Putting policy and intervention into 'practices'	Nicola Spurling and Andrew McMeekin

D: Researching climate change at individual and household scales	Moderator: Tom Rushby
The scale of personal life and the study of climate change	Lynn Jamieson
Who sets the rules? Do practices have owners?	Ruth Rettie and Tim Harries

Climate change and coats	Russell Hitchings
Observations on sociology, and action on climate change at the 'community' and 'household' scales	Kevin Burchell and Tom Roberts

E: Researching the multi-level and local dimensions of climate change Thompson	Moderators: Beth Perry/Matthew
Local climate change in an ordinary context	Eva Heiskanen, Mikko Jalas, Jenny Rinkinen
Rights, regulations and legal consciousness	Brownen Morgen
Opportunities, challenges and approaches to researching the sustainable city: local interaction platforms as conceptual and methodological innovation?	Beth Perry