

#### Sustainable Consumption Institute

SCI Newsletter July 2015

# Spotlight on the latest research, news and events from across the Institute

Dale Southerton (SCI Director) and Andrew McMeekin (SCI Research Director)

It has been six months of publishing at the SCI with 7 Journal Articles and 6 book chapters, tackling topics such as theories for sustainable transitions, food security and methodologies, finding their way into the public domain. And, with SCI staff having been busy delivering eleven conference and workshop presentations in countries as diverse as China and Finland our contribution to critical debates in sustainable consumption continues to gather pace.

Such 'academic' activities have been balanced with a range of 'other' forms of dissemination, including public lectures, evidence to the Fabian Society Commission on Food and Poverty, and blogs on topics as diverse as low carbon electricity to food and drink packaging. This edition of our newsletter provides overviews of some of these activities and the full range can be found on our website.

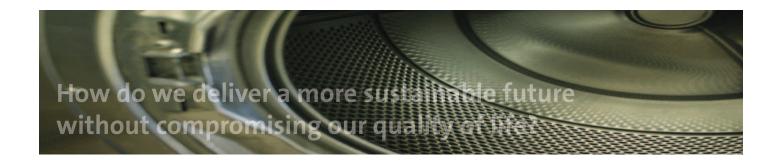
The SCI has continued to play an important role in the UK Economic and Social Research Council's 'food-energy-water-environment' Nexus, securing two networking and capacity building grants in collaboration with colleagues across several Universities. These two awards connect with a range of on-going SCI research projects, including (but not limited to) the 'diffusion of low energy

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systems' project led by Frank Geels as part of the Centre on Innovation and Energy Demand (CIED), the 'eating out' project led by Alan Warde, and Luke Yate's project 'the political economy of future households'. We will tell you more about the activities of these three grants in future newsletters.

Other exciting up-and-coming SCI initiatives to look out for include a

strategic partnership with the Chinese Academy of Social Sciences (CASS). Following a very constructive meeting with a delegation led by the Executive Director of CASS, a team of SCI researchers will visit Beijing in September for a series of lectures, a conference, and to sign the formal strategic partnership that will set the foundations for new UK-China research opportunities.



# Managing water demand

For a long time the water industry has tried to manage consumption through technological 'fixes'. But only by understanding how and why water is used can demand be reduced, argues Dr Alison Browne.

The mismatch between demand and supply balance was, for many years, 'solved' by the industry through engineering or technological solutions, including mega-projects such as dams and desalination plants. In recent years, the assumption that technological fixes are sufficient as standalone solutions has been challenged.

At the heart of this change of approach is a new focus on 'people oriented' forms of water management. This offers the potential to address water challenges at lower financial and environmental cost. However, while this shift to 'people oriented' water management could be viewed as progressive, paradoxically the models used by water companies only see 'average consumers', and fail to see the diversity in why people use water, why behaviours change, and how these changes relate to the development of water supply systems.

These 'people oriented' approaches do not really address the complex nature of what people actually do with water, or how water demand will change now and into the future. There is reluctance within the industry to develop new approaches that might engage with these complexities. By focusing on 'people', it is more difficult to understand why particular water using practices emerge or disappear, how to forecast changes over time and locations, and to think of innovative approaches to intervention to increase sustainable water consumption.

There needs to be more thought and understanding about how and why people use water. We need to analyse the practices in which water is used, the social trends that affect these and how they might change over time. These changes can be unexpected, yet greatly influence water consumption.

Current approaches fail to get us closer to understanding what people do with water



in the home, garden and elsewhere. At present, planning by the water industry fails to recognise the connections between different types of uncertainties – such as climate change, social and cultural change, technological change - around future demand. There is uncertainty about whether gardening and household lifestyles will increase demand for water – for example, with more garden watering or reduce, through increased water recycling and the adoption of sustainable household technologies, cultures, or practices. There is also uncertainty as to whether reductions of demand in moments of crisis can hold, or whether they always bounce back after periods of drought and water scarcity.

We also do not know if the culture of water use will become increasingly resource intensive. There are some indications that in the UK, for example, there is a rise in more than daily washing and showering. This change is not necessarily linked to water the resource, but changing social and cultural values about cleanliness across the generations.

We must change the focus from what people think about the environment/resource, to focusing on what people are actually doing when they consume particular resources in their everyday lives. We must let go of the focus

on water and to instead focus on the services such resources provide in everyday lives and how these services could be more sustainably provisioned. This means thinking about what people are doing in their day-to-day lives— in their, routine and habitual daily lives of travelling and eating and also in looking after others, their selves, their gardens, their homes. Demographic change is another important factor - water consumption changes in relation to a person's life stage/course and the life course of those around them whether these are babies, toddlers, teenagers, commuters, retirees, or the elderly.

Change is also triggered by social conventions, such as expectations of cleanliness, which vary over time. Technology can evolve in unexpected ways, potentially altering demand for water. And infrastructure matters – where supply changes, demand changes. Most of these factors will be simultaneous.

These reflections show the importance of developing a new approach to understanding the everyday practices that consume water; the need to develop alternative ways to capture, track and potentially model water demand; and some insight into how to intervene in everyday practice in ways that reflect existing patterns and diversities in practice.

• The full version of the blog will feature on the policy@manchester website. This blog is based on Insights from the everyday: Implications of reframing the governance of water supply and demand from 'people' to 'practice by A.L. Browne, published in Wiley Interdisciplinary Reviews (WIRES) Water.

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Contact Ali Browne at: alison.browne@manchester.ac.uk

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# Moral Licensing

An important research question for sustainable consumption is whether individuals who are motivated to consume more sustainably will do so consistently over a sequence of similar decisions, both in terms of purchasing more sustainable products or adopting more sustainable consumption practices.

Much of the theoretical and empirical analysis of individual behaviour by economists and psychologists supports this view of consistent behaviour. A stronger notion, supported by some psychological research, is the 'foot-in-thedoor' effect whereby a small pro-environmental act may lead to a larger subsequent act. However over the past few decades there has also been some psychological research which suggests that individuals may display 'moral licensing' effects: one pro-environmental consumption decision (e.g. buying some products with low carbon footprints) 'licenses' an individual to make a subsequent choice which is less environmentally friendly (e.g. making a journey by plane rather than train). This phenomenon also occurs when individuals anticipate a future pro-environmental decision, which licenses a current less environmentally friendly decision.

Moral licensing poses a potential challenge for policies designed to shift patterns of consumption to be more sustainable, because some of the policy effort will be lost if people accompany a successful change in behaviour with a moral license. So it is important to understand how these different views of behaviour relate to each other and what factors might determine which form of behaviour individuals might adopt. This is the aim of a project led by Professor Alistair Ulph, an environmental economist at the SCI. To date the project has involved an initial literature review, funded by Unilever and written by Alistair and colleagues Professor Denis Hilton, a psychologist at the University of Toulouse, and Dr. Luca Panzone a lecturer in

Consumer Behaviour at the University of Newcastle. This review has been published as a Unilever Report. An extended version is being prepared for publication in a leading journal spanning economics and psychology. An important element of this paper is a model that shows how it is possible to construct a dynamic model of consumption in which an individual who behaves in accordance with the usual economic assumptions of rational behaviour can display elements of consistent behaviour, moral licensing and the 'foot-in-the-door' effect, depending on the precise context of such decisions. So the different approaches can be reconciled theoretically.



The next step is to test the theoretical model empirically. To provide the resources for such testing, the team (Ulph, Panzone, and Hilton), along with Manchester colleagues Prof. Ada Wossink, an environmental economist, and Dr. Andrew Stewart, an experimental psychologist, have submitted a significant research application to the ESRC, with some further financial and in-kind support from Unilever. Initial feedback on the proposal was positive and we expect to hear the ESRC's decision over the summer. The proposed project aims to test the theoretical model by observing actual

purchasing decisions. Much, though not all, of the empirical support for moral licensing behaviour has been based on results of experiments in psychology laboratories, often using a sample of university students. The aim of this project is to test the theoretical model devised by Ulph, Hilton and Panzone using observations of actual consumption decisions over four weeks. There are two elements to the empirical work. In the first we will establish in Manchester a 'virtual' GreenShopUK, a version of a research tool set up by Denis Hilton in Toulouse.

A sample of over 500 consumers will first undergo a short series of tests to measure things like their attitudes to the environment. They will then have 4 weekly budgets of £25 to spend on a range of products with different degrees of environmental impact. They will shop on-line, with the products being supplied by a local Tesco supermarket. We will monitor the quality of their purchases (e.g. in terms of carbon footprint) in relation to the outcome of the tests we administer. In the second version of the empirical work we will work with a sample of several thousand Tesco Clubcard consumers. We will use Tesco's online 'Shoppers Thoughts' facility to collect initial data (e.g. attitudes towards the environment), and then, using ClubCard data, monitor their shopping over 4 weeks. We will again assess aspects of their purchases such as carbon footprint and assess how that relates to the underlying attitudes of the

An important part of the project is that we will hold two workshops, to which we will invite policy-makers in business, government agencies, NGOs etc, to both share our emerging findings and to discuss the potential policy implications of the research.

Contact Prof Alistair Ulph at: Alistair.Ulph@manchester.ac.uk

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# SCI co-hosts lighting event

#### Light and Sustainability: Concepts, Practices, Experiment

The Sustainable Consumption Institute hosted and organized the fourth Configuring Light seminar held on 30 April. Configuring Light is an LSE and ESRC-funded research programme of social science interventions into the configuration of light. The research programme develops interlinked projects focused on the ways in which light is configured into built environments - and with what consequences - by using multidisciplinary and academicpractitioner collaborations. The theme for this event was light and sustainability, from concepts, to practices and experiments. The event did not set out to resolve any major sustainability issues but pose questions, raise issues and generally acknowledge the complexity of light vis-à-vis sustainability. Given that technical innovations in lighting have been held as successful examples of lowcarbon transition, we wanted to use this seminar to temper this hubris and address additional concerns beyond the technological efficiency of lighting.

The first panel opened up what we might mean by sustainable lighting and explored various concepts and issues associated with it. Chris Lowe, Lighting Designer at consultants BDP, challenged us to think about light within a much broader historical and human evolutionary context and to consider the important role of darkness. He argued for a more holistic and human centred lighting design practice that moves beyond the metrics and numbers of lighting standards. He also encouraged lighting designers to appreciate darkness and natural rhythms of daylight when creating lighting master plans. Such changes in lighting design practice have the potential of significantly reducing energy-use of lighting while also creating more pleasurable environments within which to live and work.

Saska Petrova, Research Co-ordinator of the Centre for Urban Resilience and

Energy spoke to issues of energy vulnerability and the place of light in homes. She outlined the usefulness of an emerging energy vulnerability framework that shifts the focus from the access or affordability of fuel to look instead at the complex relations between energy services and poverty. Saska's paper drew on her research on homes in Greece to explore vulnerabilities associated with lighting. It is clear that light has an important place in how people experience their home and lighting can be a social and cultural signifier of deprivation. Calculations of energy cost sometimes have poignant consequences: Saska gave the example of a grandmother who turns the lights off to save money but worries for the safety of her grandchildren when they come to visit.

Tim Edensor, Reader of Human Geography, Manchester Metropolitan University challenged us to think critically about the sustainability agenda: to consider social patterns more and not simply and universally advocate 'turning the lights off/down'. He focused his attention on aspects of social practice, like festive lights and Christmas lights, which, while not energy efficient, are important to maintaining particular social rituals and tastes. Rather than posing a uniform agenda of sustainability across the board, he argued that we need to respect different tastes and practices. We must accept the complexity of light in everyday life rather than try to standardize it.

The second panel concentrated on experiments and innovations in light and lighting and their implications for creating environmentally and socially sustainable societies and buildings. Martin Green, doctoral researcher in Sociology at Lancaster University, focused on the fascinating socio-political history of daylight saving in the post-war era. Daylight saving was introduced in the UK as an 'experiment' which continues to this day and Martin explored the various

political discourses and the different stakeholders tied to this experiment. He demonstrated forcefully and clearly the socially constituted nature of our relationships with time and daylight and the implications these have for energy demand.

John Hindley, Head of Environmental Strategy at Manchester Metropolitan University spoke to the introduction of new lighting schemes around the campus of MMU and described how different lighting problems were resolved in both the buildings themselves and the surrounding external environment. The focus of his presentation was on the introduction of LED lighting systems and light sensors that have already significantly reduced energy-use, saved the University money and have received positive feedback from students and staff. The thrust of the presentation was that these changes in lighting at MMU constitute a successful experiment and one that must continue.

Rosa Urbano Gutiérrez, Lecturer (Assistant Professor), Liverpool School of Architecture showed various design-led initiatives using ceramics to demonstrate how this cheap and highly versatile material can be utilised to create more sustainable lighting environments in a range of different social spaces. Rosa drew primarily on her work in the Environmental Ceramics in Architecture Laboratory (ECAlab) and on the project 'Illuminating through Ceramics'.

The event successfully brought together a range of speakers to share and discuss a broad set of ideas relating to the topic of light and sustainability. It was particularly encouraging to have a number of lighting designers and people from professional practices participate. The hope is that events like these can go some way to developing multidisciplinary and academic-practitioner projects in the future.

Contact Cary Clark at: alexander.monrealclark@manchester.ac.uk

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#### PhD Student Spotlight:

## **Marc Hudson**

I am a second year doctoral researcher looking at how incumbent industries respond to threats to their existence. My topic is the coal industry and its responses (political, economic, social) to climate change, which has been on the public agenda since the late 1980s.

I am using, and hopefully extending, the Dialectic Issue LifeCycle (DILC) model, which looks at how some social problems climb up the public agenda while others don't. The DILC looks at the interplay of tactics between social movements, states and the industry 'in question', especially around technological innovation to attempt to resolve concerns.

Contact: marc.hudson@postgrad.mbs.ac.uk



"I am using, and hopefully extending, the Dialectic Issue LifeCycle (DILC) model, which looks at how some social problems climb up the public agenda while others don't."



## SCI Student wins prestigious award



Ulrike is a first year doctoral researcher at the SCI focusing on framings of the 'responsible consumer' in discourses of sustainable consumption. She is interested in how concepts of 'the consumer' straddle markets and democratic processes, and the ways in which individuals are accorded responsibilities for responding to global challenges. She aims to bring clarity to the various and often competing moral perspectives – for example discussion about fairness and justice – that underpin and articulate the meaning of sustainability.

Focusing specifically on the food sector, her empirical research will investigate the ways in which experts and stakeholders (such as NGOs, corporations, policy makers, campaigners, lobbyists and third sector organisations) understand, construct and mobilise 'the consumer'. Particular attention will be paid to the underlying beliefs, assumptions and moral philosophies that shape understandings of socially and environmentally responsible consumption.

Before joining the SCI, Ulrike studied at the University of Graz, Austria. Here, her MA dissertation explored the so-called "value-action-gap" between positive environmental attitudes and patterns of sustainable food consumption. In doing so, she addressed the challenge of developing an adequate concept of "education for sustainable development". Her work received recognition when she was awarded the 2014 Foodscapes award. This is a prize awarded by the University of Graz in co-operation with the EU-LEADER regions Almenland and Steirisches Vulkanland as well the Federal State Government of Styria in recognition of an outstanding student dissertation on the production and consumption of food. On the 7th of May Ulrike attended the award ceremony at the University of Graz to present her findings and receive her first-place prize.

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## Researcher Spotlight: Viki Johnson

In each SCI Newsletter we'll take the opportunity to introduce one of our researchers and ask them about their projects and engagements - Viki Johnson is a Research Associate at the SCI.

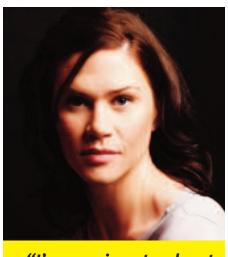
#### Viki, please tell us about the research you're currently working on?

I'm currently working on a project that is examining how diffusion of low-energy systems such as heat networks and trams occurs. By comparing more successful experiences in other European countries with the UK, the project aims to make contributions to academic research and policy. This work programme is part of the Centre on Innovation and Energy Demand (CIED), one of six EPSRC-funded End-Use Energy Demand Centres.

I've just returned from field work in Austria where I was conducting interviews with actors involved in the development of biomass district heating systems there. The first biomass district heating scheme was developed in Austria in 1979. By 1999 there were around 500 biomass district heating schemes and over the past 15 years this has risen to 3,100. Austria went from importing Swedish boilers in the 1980s, to a global leader in the manufacture of biomass boiler technology. How this happened is both impressive, and fascinating. Over the past 6 months I've been preparing a paper with Frank Geels which uses this example of rapid diffusion of a low-energy system to examine the relative importance of, and interactions between a range of economic, political and socio-cultural models of diffusion. This Austrian case study is very rich, and there are many policy lessons to be drawn from it too.

#### What was it about this particular area that you found so interesting?

I started my academic career as an atmospheric physicist, so I know only too well how urgent the transition towards a low carbon future is. After spending six years working for a think tank where I led research on climate change and energy policy, it became clear to me that the mechanisms that would actually drive the socio-technical transition we were calling



"I'm passionate about communicating my research to wider audiences..."

for were missing from our analysis. Frustratingly policy debates also tended to focus on technological solutions and were crucially missing the human element; making huge assumptions about how people, communities, institutions behave, and how they interact with one another and the technologies in their everyday lives. Naturally, I found myself reading literature written by my current colleagues at SCI and the CIED. Developing a deeper understanding of how low energy systems diffuse is central to understanding how a socio-technical transition might play out (or not), and there are clear practical policy implications. Of course it is one part of a bigger puzzle, but this particular area is under-explored within the diffusion literature which tends to focus on individual (although sometimes collective) purchase decisions to adopt discrete technologies such as televisions, fridges or mobile phones. It is an exciting project to be involved in.

## How difficult has it been to make the shift from a natural sciences PhD to working in a social sciences setting?

I have been moving in this direction for the past eight years and my first degree in Environmental Sciences was interdisciplinary, so it did provide me with some grounding. But yes, it has been, and continues to be a challenge, but I love that. A mentor once told me, 'Never become an expert!', but he'd been an astrophysicist who had shifted to atmospheric physics. I think I took his advice a little too literally. There is logic to my move, however. Quite simply it is a drive to understand how a rapid shift from a carbon intensive society can be achieved. Since there are so many dimensions to this puzzle, there is obviously value in seeing the challenge from a range of different perspectives. It's also worth noting that I'm not so unusual. A surprising number of social science scholars working on energyrelated issues come from a natural sciences background – often engineering or physics.

#### What do you hope to achieve whilst at the SCI?

In addition to my current research commitments, developing as a researcher and developing future research ideas, I'm passionate about communicating my research to wider audiences whether it's scholars from different disciplinary areas, students, policy makers, practitioners or the general public. In practice this means blogging, writing policy papers, designing events, teaching and utilising social media. I'm also planning a series of exciting events as part of Manchester Policy Week in November 2015, so watch this space...

Contact: viki.johnson@manchester.ac.uk

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# Upcoming activities and events at the SCI

To find out more about the SCI's research and related activities please visit our website at: www.sci.manchester.ac.uk

#### **SCI Seminar Series - Dr Ronan Bolton**

#### 30th September 2015 4:00pm to 5:30pm

Dr Ronan Bolton, Lecturer in Science Technology & Innovation Studies, University of Edinburgh, will be giving the SCI Seminar on the 30 September 2015, further details to follow.

Ronan is an interdisciplinary energy researcher working as Lecturer in science, technology and innovation studies (STIS) at the School of Social and Political Science, University of Edinburgh. He has an undergraduate degree in mechanical engineering and completed a PhD in energy policy at the Sustainability Research Institute in Leeds.

His work examines the policy, market and regulatory challenges of transforming high carbon energy systems and enabling the deployment and diffusion of low carbon technologies and practices. Drawing from science and technology studies, innovation studies, and governance perspectives, he is interested in the changing relationships between regulators, government, energy companies, users and local authorities in the governance of energy systems in the UK and internationally.

Ronan is part of the Energy and Society Research Group at the University of Edinburgh which brings together energy research in sociology, STIS, social anthropology and political science.

#### **SCI Seminar Series - Dr Kersty Hobson**

#### 28th October 2015 4:00pm to 5:30pm

Dr Kersty Hobson, MSc Course Director and Departmental Lecturer at the School of Geography and Environment, University of Oxford will be giving the SCI Seminar on the 28 October 2015, further details to follow.

Dr Kersty Hobson is an environmental social scientist in the School of Geography and Environment, the University of Oxford. With an academic background in Anthropology and Human Geography, for the past 18 years she has researched and published in the fields of sustainable consumption, environmental governance and participatory methods. She has held academic positions at the University of Birmingham (UK) and the Australian National University, and is now the Director of the MSc programme 'Nature, Society and Environmental Policy' at Oxford. Her current research focuses on low carbon community groups in the UK (funded by the Economic and Social Research Council): and resource efficiency and the circular economy (funded by the Engineering and Physical Sciences Research Council).

### **SCI Blogs**

#### www.sci.manchester.ac.uk/ publications/blogs

- Sustainable Consumption: Multi-disciplinary Perspectives In Honour of Professor Sir Partha Dasgupta, Oxford University Press.
- Light and Sustainability: Concepts, Practices, Experiment, by Cary Monreal Clark & Joanne Entwistle, 19 May 2015
- Tales from a well-wrapped historian: smart meters and the management of heating, by Anna Carlsson-Hyslop, 17 March 2015
- Distributing power: Can the UK transition to a 50% distributed, low carbon electricity system? By Victoria Johnson, 26 February 2015
- The Wider Environmental Effects of Food and Drink Packaging, by Cary Monreal Clark, 19 January 2015
- 'Food for Thought' Workshop, by Dan Welch, 10 December 2014
- Sustainable Consumption and Behaviour Change, by Alan Warde, 6 November 2014
- Efficiency in washing machines mask laundry's continuing sustainability problem by Luke Yates & David Evans, 9 October 2014
- Q&A with SCI Director Dale Southerton
- Visiting scholar Prof. Dunfu Zhang reflects on his research interests, 19 September 2014
- How to make cooling measures cooler? by Hiroki Shin, 19 August 2014
- What is happening to the sustainable city? by Mike Hodson, 31 July 2014
- The food waste crisis by Joanne Swaffield, 25 June 2014
- Give local authorities more freedom to deliver sustainable cities by Sally Gee & Elvira Uyarra, 21 May 2014
- Is it time to take gender seriously in sustainable consumption? by Jo Mylan, 13 May 2014
- Towards sustainable consumption: start by reframing the questions by Daniel Welch and Nicola Spurling, 22 April 2014
- Back to the future; the recurring patterns of flooding in the UK by Anna Carlsson-Hyslop, 16 April 2014
- Pressure to cook and 'eat properly' leads to more food waste than Bogofs by David Evans and Daniel Welch, 10 April 2014
- Unsustainable practices: Why electric cars are a failure of ambition by Nicola Spurling & Dan Welch, 5 March 2014
- Fast Water versus Slow Water: Fragmentation in adaptation and resilience to flooding and water scarcity in Somerset, UK by Alison Browne, 4 February 2014

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#### Some of our recent SCI Publications



**Publication:** 

# Sustainable Consumption

Edited by Profs Dale Southerton and Alistair Ulph, SCI

This book contains chapters from world-leading experts from differing disciplines seeking to explain leading perspectives on sustainable consumption and suggesting how these might be further enriched by utilising findings from other disciplines. Contributors also consider what the implications are for new policies on key sustainability challenges.

- Geels F, McMeekin A, Mylan J and Southerton S, A critical appraisal of Sustainable Consumption and Production research: The reformist, revolutionary and reconfiguration positions in Global Environmental Change, Volume 34, September 2015, Pages 1-12
- Warde, A. (2015) 'Social science, political economy and sustainable consumption', in Strandbackken, P. & Gronow, J. (eds.) The Consumer in Society: a tribute to Eivind Sto, Abstrakt Forlag AS, Oslo, pp. 85-102.
- Welch, D. & Warde, A. (2015) 'Theories of Practice and Sustainable Consumption', in Reisch, L. & Thøgersen, J. (eds.) Handbook of Research on Sustainable Consumption. Cheltenham, UK: Edward Elgar Publishing, pp. 84-100.
- Warde, A. (2015) 'Social science, political economy and sustainable consumption', in Strandbackken, P. & Gronow, J. (eds.) The Consumer in Society: a tribute to Eivind Sto, Abstrakt Forlag AS, Oslo, pp. 85-102.
- Welch, D. (2015) 'Systems, actors, ends, narratives and identities', in Foulds, C., Jensen, C.L., Blue, S. & Morosanu, R. (eds.) Practices, the Built Environment and Sustainability – Responses to the Thinking Note Collection, Cambridge, Copenhagen, London: GSI, DIST, BSA CCSG.
- Paddock, J. & Marsden, T. (2015) 'Revisiting Evolving Webs of Agri-food and Rural Development in the UK: The Case of Devon and Shetland' in Milone, P., Ventura, F. & Ye, J. (eds.) Constructing a New Framework for Rural Development, Research in Rural Sociology & Development, 22, pp.301-324.
- Welch, D. (2015) 'Sustainable Production and Consumption', in Wright, J. D. (editor-in-chief), International Encyclopedia of the Social & Behavioral Sciences, 2nd edition, Vol 23, Oxford: Elsevier, pp. 839–844.

- Upham, P. & Dendler, L. (2015) Scientists as policy actors: A study of the language of biofuel research, Environmental Science & Policy, 47, pp. 137-147.
- Barton, J., Emmanuel-Yusuf, D., Hall, S., Johnson, V., Longhurst, N., O'Grady, A., Robertson, E., Robinson, E. & Sherry-Brennan, F. (2015) Distributing Power: A transition to a civic energy future, Bath: Realising Transition Pathways Research Consortium
- Hudson, M. (2015) 'Voice and Environmental Communication', Peeples, J. & Depoe, S. (eds.) Palgrave Studies in Media and Environmental Communication, New York: Palgrave Macmillan.
- Geels, F.W. & Penna, C.C.R. (2015) Societal problems and industry reorientation: Elaborating the Dialectic Issue LifeCycle (DILC) model and a case study of car safety in the USA (1900-1995), Research Policy, 44(1), pp. 67-82.
- Carlsson-Hyslop, A. (2015) 'Human computing practices and patronage: anti-aircraft ballistics and tidal calculations in first world war Britain', Information and Culture, 50(1), pp. 70-109.
- Baker, S., Paddock, J., Smith, A. M., Unsworth, R. K. F., Cullen-Unsworth, L. C. & Hertler, H. (2015)
   'An ecosystems perspective for food security in the Caribbean: Seagrass meadows in the Turks and Caicos Islands', Ecosystem Services, 11(1), pp. 12-21.
- Yates, L. (2015) 'Everyday politics, social practices and movement networks: daily life in Barcelona's social centres', The British Journal of Sociology
- Paddock, J. (2014) Invoking Simplicity: 'Alternative' Food and the Reinvention of Distinction, Sociologia Ruralis, 55(1), pp. 22-40.
- Penna, C.C.R. & Geels, F.W. (2015) 'Climate

- change and the slow reorientation of the American car industry (1979-2012): An application and extension of the Dialectic Issue LifeCycle (DILC) model', Research Policy.
- Yates, L. & Warde, A. (2014) The evolving content of meals in Great Britain. Results of a survey in 2012 in comparison with the 1950s
- Yeow, J. Uyarra. E. & Gee. S. (2014) 'Closing the loop – Examining the case of the procurement of a sustainable innovation', in Edquist, C., Vonortas, N. S., Zabala-Iturriagagoitia, J. M. & Edler, E. (eds.) Public Procurement For Innovation, Edward Elgar.

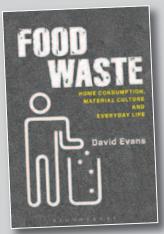
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#### Publication:

#### **Food Waste:**

Home Consumption, Material Culture and Everyday Life.

Dr David Evans



Drawing inspiration from studies of consumption and material culture alongside social science perspectives on everyday life and the home, this lively yet scholarly book is ideal for students and researchers from a wide range of disciplines, along with anyone interested in understanding the food that we waste.