DEMAND Summer School, 8<sup>th</sup>-10<sup>th</sup> July 2014, Energy Histories and Energy Futures.



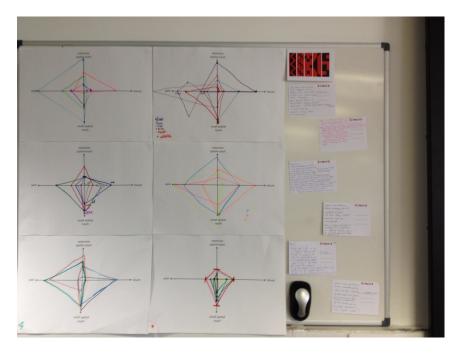
The DEMAND Centre's inaugural summer school was held from 8<sup>th</sup>-10<sup>th</sup> July 2014, there were 29 participants from Europe, Canada and the US, who had a broad range of backgrounds, including engineering, history, sociology, architecture and design.

### Day 1: Energy Histories

Participants introduced themselves with an object or photograph which represented their current work, these were exhibited so everyone could get a closer look.



Discussions about 'demand in the past' were centred on presentations by Anna Carlsson-Hyslop, who spoke about *Building and Managing Energy Demand in British Council Housing* based on recent archival research in Stocksbridge, Stevenage and London, and Conor Harrison who focussed on *Histories of Supply and Implications for Demand*, drawing on his PhD research on Carolina Power and Light, an electricity utility operating in North Carolina, USA. The talks highlighted the different scales at which we might look at energy histories, with Anna focussing on which forms of energy were made available to homes, when and how, and seeking traces of associated everyday practices within the historical data. In contrast, Conor discussed how the electric industry was made and how supply became so widely available, through the development of institutional structures, management of competition and formalization of markets. There was some discussion about the potential connections between these contrasting but interrelated energy histories.



In the first workshop, groups discussed the presentations and two pre-readings and completed a 'cobweb'; positioning their work relative to others in the group along two axes of past-future, and small-extensive spatial reach (see photo above). Participants wrote postcards to themselves, colleagues or other participants, noting ideas or questions emerging from the discussion. Next was Floorball, before the commencement of evening activities.



Ted Schatzki spoke on The Dynamics of Large Phenomenon. In brief, his argument was this: there is a tendency to equate a focus on social practices with a focus on the small scale, and with fine grained ethnographic research. In contrast Ted argued that there is no reason why theories of practice should not provide compelling and persuasive accounts of 'large' scale social phenomena – including markets, forms of governance, and big trends in social arrangements. Equally, the 'large' can be studied and analysed without resorting to a terminology of 'higher levels' or of macro as distinct from micro phenomena. In explaining how this goes Ted made much of the multiple ways in which practices and arrangements link to each other: he talked of bundles, and of chains, series and cascades of action. He discussed processes of imitation and mediation, and considered loops of feedback as well as blockages, breakages and circuits of reproduction. One core idea is that 'large' and 'small' phenomena are not essentially different: they hang together in much the same way. Another has to do with methods of 'overviewing' – that is characterising, narrating and representing 'large' social phenomena – again as distinct from methods of abstracting seemingly macro-level factors. The discussion was led by our discussant, Elizabeth Shove, and explored the relevance of these ideas for energy histories and energy futures.

The day concluded with a barbeque looking out over the Lancashire countryside.

#### Day 2 – Flexibility and Negotiability

The second day started with a presentation from Greg Marsden, exploring what we can learn about flexibility and negotiability through studying disruptions. The presentation reviewed data collected from a series of unplanned disruptions (e.g. flooding) and planned disruptions (e.g. the 2012 Olympics) showing how much time shifting across the day and week is possible, at least in the short run.



Images from the York Floods of 2012

Greg explained how other responses such as reallocating of tasks and reconfiguring of ways of working or sharing across social networks emerged. The talk also provoked some important discussions about how the policy environment treats and responds to disruptions and how disruptions which repeatedly occur might cease to be experienced or perceived to be disruptions.

The themes of flexibility and negotiability were discussed in greater detail through an exercise in which small groups of participants made their way around a carousel of puzzles, discussing each in turn:

PUZZLE 1	PUZZLE 2
What redundancies and back-up systems do we have to	"As archaeologists create accounts of the past from fragments of evidence, so 'future archaeology' creates accounts of the future from fragments of evidence There is evidence of the future just as
mitigate disruptions?	there is of the past" (Watts, L.)
How important might	In what ways is the future known and unknown? Where might we
these be for energy	look for evidence of the future in the present?
demand?	

# PUZZLE 3

Disruption is a normative concept which comes from a deviation from some notion of normality. Studying disruption – and identifying what counts as disruption - can bring understandings of normal into sharp relief.

"We need to make sure our networks are reliable as we decarbonise our supplies, and as demand changes as a result of new technologies. The energy system must function effectively across all energy sources, in the near future and after 2030." (DECC evidence base, 2014)

By focussing on disruptions, what might we say about how notions of normality are constructed, how they are perpetuated, and how they change?

## PUZZLE 4

"everywhere there is interaction between a place, a time, and an expenditure of energy, there is rhythm" (Lefebreve, 2004)

"the rhythmic structure of the day is not merely individual but collective and relies upon the synchronisation of practices that become part of how 'we' get things done" (Edensor, 2010:8)

How do synchronicity and rhythm matter to energy demand?

## PUZZLE 5

Does an understanding of the flexibilities observed in response to short-run disruptions provide insights for longer-term change? What are the limits to this?

#### PUZZLE 6

"A great network of power lines which will forever order the way in which we live is now superimposed upon the industrial world" (Hughes, 1983:1)

"...despite the fact that cities are considered to be dynamic and flexible spaces, numerous examples illustrate that it is very difficult to radically alter a city's design: once in place, urban structures become fixed, obdurate." (Homells, 2005:323-324)

What types of obduracy are found in transport infrastructures? What types of obduracy are found in energy infrastructures?

Field Trip – Seeing the Invisible: Identifying linkages between energy, infrastructure and practice

The afternoon of Day 2 provided an opportunity for participants to create their own take on the relationship between energy, infrastructure and practice. Armed with a map of Lancaster and a few sketchy ideas, groups of four set off to develop an exhibit which described an important, but taken for granted aspect of this relationship. The innovation across the groups was amazing to see and the competition between groups was tough, particularly for the printer...



The participants looked at topics ranging from the evolution of surveillance (from castle walls to CCTV), through the remaking of coffee houses and coffee culture to the changing nature of leisure in the Lancaster and Morecombe area (and the death of the lido and midnight swimming).



The evening finished with a talk from Mike Colechin, head of partnerships at the Energy Technologies Institute. Mike provided a fascinating insight into the sorts of inputs that drive the work of the ETI and DECC when considering energy futures. He identified the need to prepare for some key energy provision decisions in the coming decade. The challenge of replacing the generating capacity we already know will be decommissioned is very significant. The future projections suggest that adding additional costs to this to pay for more advanced low carbon technologies will be yet more challenging. In this context, the DEMAND Centre agenda which looks at the comparatively simplistic assumptions underlying future energy demand projections seems yet more important.

# Day 3 – Energy Histories and Energy Futures

The third day began with a viewing of fieldwork exhibits before we were pitched into a session looking forward, asking how we take what we know about conditions today and how we got here to inform thinking about the future. Michael Stauffacher described the role of scenario development in considering energy futures. He suggested that energy futures, as conventionally imagined, were very strongly technologically oriented and lacked any significant understanding of how society might change over time. The key message from his talk was to see scenario development as a learning tool rather than as producing any versions of the truth. There is a danger that some scenarios become seen to have a reality detached from the process and debates that got their creators there.

Lenneke Kuijer then presented her doctoral research on proto practices and the use of design ideas to get people to consider different ways of doing things. In her case, the proto practice of 'splash', an alternative to showering, was introduced, showing how people engaged with a different way of keeping clean.

The final activity for the participants was to break into groups each working with different methodologies for understanding potential futures. The scenarioists worked with the methods introduced by Michael Stauffacher to develop comparable scenarios of more and less energy intensive futures. The future archaeologists worked with fragments of evidence from the fieldwork, to develop a narrative of a future Lancaster which began in the present. The performers of proto practices worked with the method introduced by Lenneke Kuijer to improvise new practices through performance. The repairers and fixers worked with images of the present (from the fieldwork materials), to adapt the present for a lower carbon future.

The Summer School concluded with reflections from Ted Schatzki and Heather Chappells on themes they had found particularly interesting. Some of the things which our participants found particularly enjoyable were:

"A tie between the fieldwork and the energy futures workshop. Both very interactive and lots of fun as well as being challenging."

"I particularly liked all the activities – puzzles, fieldwork, making posters – it is a great way to learn and reflect."

"The fieldwork was really fun, but the absolute best thing was talking to people who are working on very specific and similar dilemmas in their work." Whilst some people drifted away, the entertainment and exchange continued for many with the first DEMAND camping trip.

