

Efficient energy research for effective energy policy: strategy, design and methods

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The issue

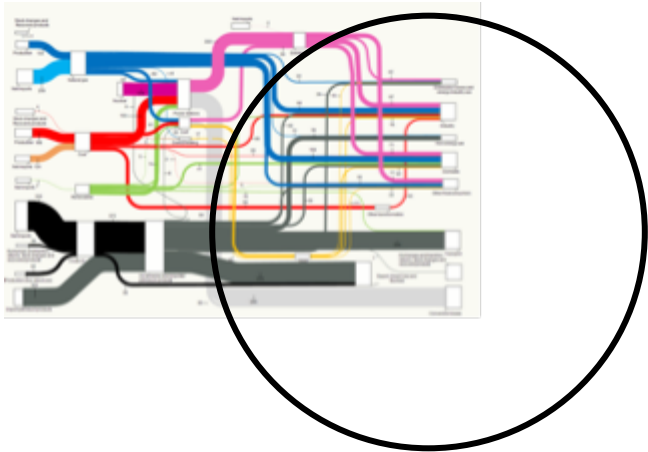
- UK energy policy **lacks effectiveness**
- Internal evidence is either **technical** or **'social'**
- Most external research follows this pattern

- **Question:** how to make policy more effective?
- (One) **Answer:** by making the evidence more effective

First Dichotomy

Nonhumans
Engineering

Humans
Psychology



Second Dichotomy -



Hybrid
network

WORK OF
TRANSLATION

After Bruno Latour (1993) *We Have Never Been Modern*. Cambridge, Mass: Harvard University Press

What this means for research

- Socio-technical research is much **more complex** than current modes: multi-level from ant to satellite
- New **ontological** and **epistemic** ideas required
- Likely much more **expensive** (compared to standard social research)
- Limited budgets means **planning & efficiency** essential for rapid impact



Key issues at the **strategic** level

- Research for energy policy must recognise:
 - Diversity and dynamism of assemblages/A-Ns
 - Need to represent (democratically) entire populations at some point (satellite level)
- Needs a **structured relationship** between **ant-level** and **satellite-level** to avoid ontological and epistemic lock-in and maximise collective enterprise
- Need to promote **ontologic discovery** and **epistemic innovation**

Design issues

- For large N studies, how do we make it socio-technical (not just social *and* technical)?
 - **Sampling**: not household, not dwelling, but home? Or meter-using group? (sampling frame a problem)
 - **Co-ordinated deployment** of physical and social measurement methods, chosen through theoretic relevance
 - Spatio-temporal dynamics a major concern: **longitudinal** key
- Multi-tiered designs
 - breadth of sampling vs. depth of measurement

Methodological Issues

How to record the socio-technical relations as an integrated trait?

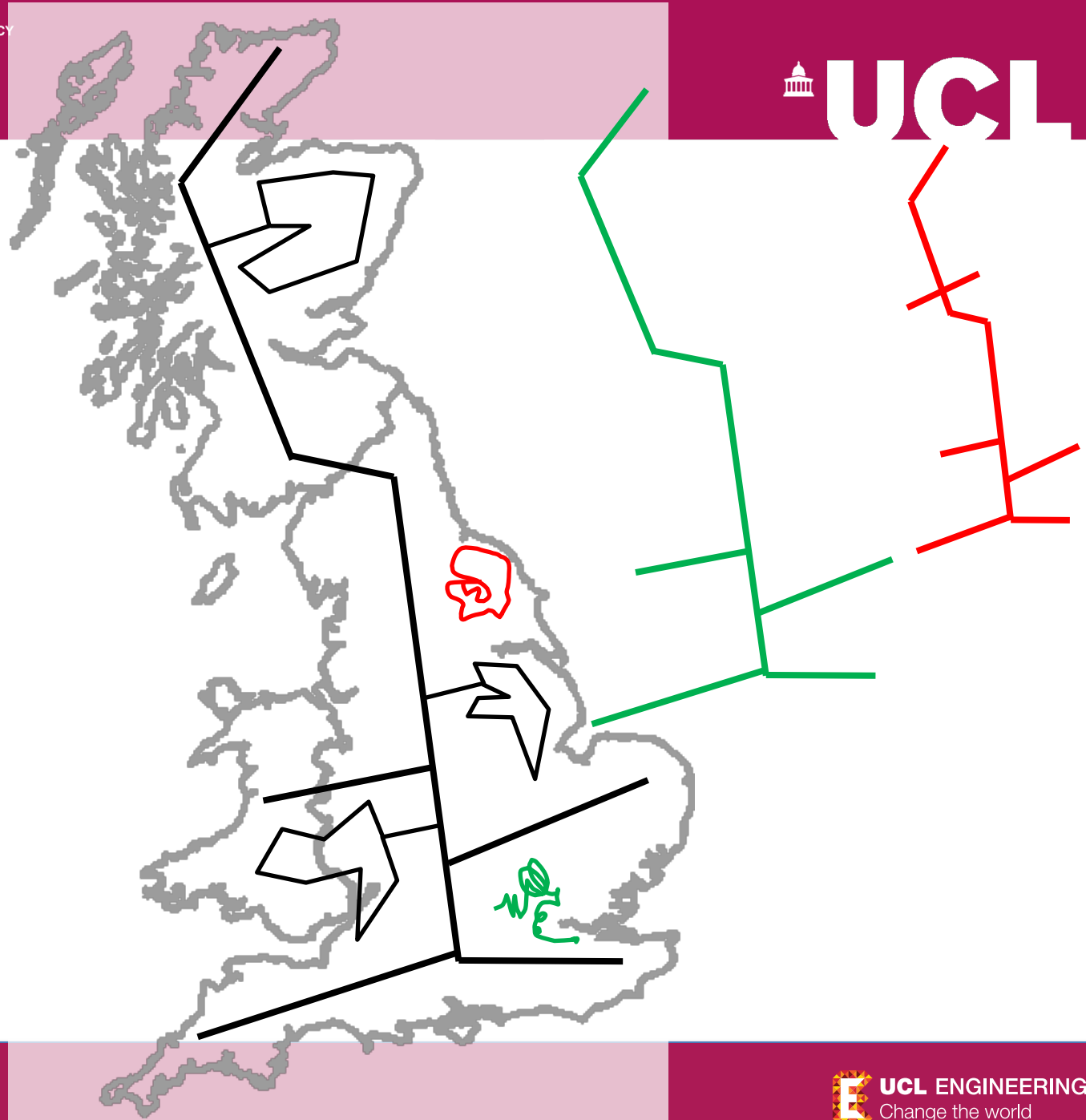
E.g. comfort: [self-report, observation] + physical measure...



From air temperature...



...to black-body radiation



Summary

- Socio-technical research for policy demands new thinking at the **strategic**, **design** and **methodologic** levels
- **Epistemic innovation** (development of new **methods**) goes hand in hand with **ontologic** discovery.

Key references

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Thankyou

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