Why do energy conservation policies use the behavioural sciences rather than the social sciences?

A few lessons from the emergence of the behaviour change agenda in Japan

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Two kinds of approaches which aim at changing behaviours to reduce energy consumption:

- **Behavioural approaches / sciences**:
  behavioural economics, psychology, brain science…
  → focus on the individual (his decisionmaking and behaviour)

- **Socio-anthropological approaches / social sciences**:
  anthropology, sociology, ecology…
  → focus on the socio-technical dimension of energy demand

(Evans *et al.* 2012; Shove 2010; Wilhite *et al.* 2000)

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According to some scholars, socio-anthropological approaches (e.g. social practices) would not be helpful for designing policies because they would not provide clear and concrete levers for action (Jackson 2005: 63-64).

→ I argue that the success of the behavioural sciences can mostly be explained by their coherence and compatibility with the culture and the expectations of energy conservation policy stakeholders.

Methodology

- 40 semi-structured interviews with Japan's energy policy stakeholders and Japanese researchers working on behaviours and energy consumption;

- Analysis of government policies and of the discussions within the Energy Conservation Committee (2001-2016), which provides recommendations to METI.

METI: Ministry of Economy, Trade and Industry

The use of behavioural sciences in Japan's energy conservation policy

- 2005: *Team Minus 6% campaign* (including *Cool Biz*)
- 2010: *Communication and Marketing Working Group* uses behavioural economics and social psychology
- 2010: Behavioural economist as advisor for METI's smart grid strategy and experimentation of demand-response
- 2015: METI commissioned Opower Japan and a Japanese think tank to test Opower's Home Energy Reports (40 000 households; see Hirayama *et al.* 2016)
- 2016/2017: Ministry of Environment supports the implementation of "behavioural sciences-based approaches" (mainly "nudges")

Why this increasing focus on behaviour change?

- The climate change agenda
- The Fukushima disaster (March 2011)
- The deregulation of the energy markets (2012-2013)
- The advocacy of behavioural sciences from policy entrepreneurs (three think tanks, close to the METI)

    - JYURI (Jyukankyo Research Institute)
    - CRIEPI (Center Research Institute of the Electric Power Industry)
    - IEEJ (Institute of Energy Economics of Japan)

Why behavioural sciences, rather than social sciences?

→ Behavioural sciences are internationally "consensual knowledge" (Stone 2004: 6)

→ A few factors specific to the Japanese case:

- Emergency after the Fukushima disaster;
- Japanese literature about environmental and consumption behaviours mostly in psychology (and engineering; very little in other social sciences);
- A lot of books in psychology and behavioural economics have been published in Japanese while social practices are very little known.

Why behavioural sciences, rather than social sciences?

→ Behavioural sciences have become "practical knowledge" (Bergeron and Jouzel 2011, Stone 1989: 289)

= knowledge with great "policy practicability" (Padioleau, 1977: 948-949)

Four processes / characteristics:

- "economicisation" of the behavioural sciences;
- changes in their methodology;
- capacity to provide concrete policy measures;
- cultural and normative compatibility.

Why behavioural sciences, rather than social sciences?

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<u>1- The (cosmetic) "economicisation" of behavioural sciences</u>

- 2000s: increasing prestige of behavioural sciences (Kahneman's Nobel prize in 2002 for its introduction of psychology in economics = behavioural economics)

- According to policy entrepreneurs, psychology was:
  - "too phenomenological"
  - "too complicated"

Why behavioural sciences, rather than social sciences?

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<u>2- Changes in behavioural sciences' methodology and investigation tools, which would be "more scientific"</u>

"[My colleagues and I] found [behavioural economics and nudges] very exciting… because there are a lot of ideas that are very practical, most of them have already been implemented in the real world… They already evaluated their effect… Traditional psychological research cannot provide practical information for policy making."

"It has only been recently that we had scientific support to change lifestyles."

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3- Behavioural approaches provide cheap and concrete measures with clear targets (individuals)…

4- … and are compatible with the pursuit of economic growth and the divide between energy policy and non-energy (or invisible energy) policies

Why behavioural sciences, rather than social sciences?

Beyond Japan's peculiarities, this study suggests that the *practical* and internationally *consensual* dimensions of behavioural sciences explain their use in public policy.

It also suggests that socio-anthropological approaches could have more impact over policy by being better adjusted to policymakers' culture, expectations and constraints.

Thank you for your attention, questions and comments!

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P-S: if you are looking for a postdoctoral resarcher, my currrent contract comes to an end in August…