Emerging energy practices in the smart grid: reframing ‘behavioural change’ approaches

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Gert Spaargaren; Wageningen University
<table>
<thead>
<tr>
<th><strong>Structualist Paradigm</strong></th>
<th><strong>Individualist Paradigm</strong></th>
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<tbody>
<tr>
<td>• Producers/states as key actors</td>
<td>• Individuals as key actors</td>
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<tr>
<td>• Technological innovation within production sphere decisive for social change</td>
<td>• Attitude and behavioral change decisive for social innovation and change</td>
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<td>• The ‘macro’/system as intervention level</td>
<td>• The ‘micro’/individual as intervention level</td>
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<td>• Behaviour of End-Users/Consumers determined by system dynamics</td>
<td>• End-Users/Consumers determine the fate of green products and ideas</td>
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<td>• Direct regulation targeting producers of products and services</td>
<td>• Social (soft) instruments targeting citizen-consumers</td>
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Source: Gert Spaargaren, Environmental Policy Group Wageningen
Critiques of mainstream

**Structualist Paradigm**
- Environmental change organized behind the back of citizen-consumers
- Engineering approach which does not fit the lifeworld
- Isolated technical solutions do not work
- Too ‘deterministic’

**Individualist Paradigm**
- Neglect of influence of context on consumption behaviour
- Emphasis on cognitive awareness and rational choice
- ‘ABC-models’ do not deliver in predicting behaviours
- Too ‘voluntaristic’

Source: Gert Spaargaren, Environmental Policy Group Wageningen

Individualist Paradigm

• Neglect of influence of context on consumption behaviour

• Emphasis on cognitive awareness and rational choice

• ‘ABC-models’ do not deliver in predicting behaviours

• Too ‘voluntaristic’
What influences human behaviours?
Factors to consider when thinking about governing behaviours

Situational and behavioural factors influencing human behaviour

Sociological approaches
- Infrastructure
- Culture
- Social Networks
- Geography

Social psychology based approaches
- Experience
- Norms
- Attitudes
- Beliefs
- Habits
- Self-efficacy
- Awareness
- Leadership
- Perceptions
- Altruism

Influencing human behaviour
- Information
- Social learning
- Identity
- Knowledge

Source: Defra, Sustainable Lifestyles Framework, 2011.
Theories of Social Practices:

not individuals, not structures, but instead: social practices

social practices are: (my definition)

- shared, routinized, ordinary ways of doings and sayings,
- performed by knowledgeable and capable human agents who
- – while interacting with the material elements that co-constitute the practice –
- know what to do next in a non-discursive, practical manner
Social Practices Model

Individuals

Social Practices

Systems and Structures

Discursive and Practical Consciousness

LIFESTYLES

Systems of Provision

Friends and Family

Individuals Performing the Practice

Institutional Embeddedness of Practices

Rules and Resources

Social Practices

- Shopping for Food at Freshmarkets
- Cooling or Heating the home
- Commuting between home and work
- Bathing and Showering
Theories of Social Practices: key concepts and assumptions I

- The world is ‘populated’ with practices
- Practices are unevenly distributed in time-space
- Practices ‘hang together’ in bundles, chains, nexuses, arrangements, complexes, networks of practices
- This hanging together can be more or less durable/ institutionalized
Practice Theory: selected concepts and assumptions II

- Practices are shared, routinized, taken for granted
- Practices crucially depend on material objects and infrastructures
- Practices are ‘organized by elements of the practices (skills, competences, values, objects, rules, emotions, teleo-affective structures)
- Practices ‘produce’ things for individuals, groups, and networks
Practice Theory: selected concepts and assumptions III

- Practices are entered, learned, carried, performed, cherished, enjoyed, reproduced, changed, quitted etc. by situated human actors
- When being involved in practices, human agents ‘follow’ and ‘follow up on’
  - The logic of the practice (TAS)
  - The logic of their lifestyles

- Groups of agents are involved as well in the reproduction of ‘networks or chains of practices’
Practice theory and social change

<zooming in on the network of practices>

- New practices emerging, affecting others
- Old practices ‘fading away’, being ‘out-competed’ by other practices
- Practices being dissolved or ‘destructed’ because of conflicts of interests/power
- Practices being transformed/reconfigured by new ways of performing the practice
- Practices being transformed by the up-take of new technologies/ideas
Practice Theory and social change

<zooming out from the network of practices>

- Components or elements of practices starting to circulate in wider networks
- Practices becoming (more tightly) connected to neighbouring practices
- Practices becoming linked to or de-linked from established networks or chains of practices
- (Chains of) Practices differentiating and evolving into new subsets of practices
Practices research and Smart Grids

Defining domestic practices

- Doing the laundry
- Heating and cooling the home
- Driving an electric car and bike
- Gardening
- Bathing and showering
- Etc.
Practices research and Smart Grids

Defining domestic E-practices and their social relations

- Managing the energy system
- Producing energy
- Storing energy
- Etc.
Social Relations within Networks of Energy practices

- Vert
- Self
- Hybr
- Hori

= Non-local provider
= Local provider
= Network of households
Practices research and Smart Grids

Analyzing social change in configurations or networks of practices (Schatzki: practice-arrangement bundles)

Finding the ‘hooks’=

Defining key practices for social change
Analyzing when and how performances are changing
Exploring how networks of practices are transformed
Erving Goffman (1967)

“Not then, men and their moments. Rather moments and their men”