

Social diffusion of energy-related practices in two European areas: A way for reducing inequalities?

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Aims

- Show energy-related inequalities between social classes
- Examine how these inequalities can be exacerbated or reduced by social diffusion processes
- Discuss how energy policies influence this social diffusion
- Propose some policy instruments to accelerate social diffusion of energy retrofits and energy-saving practices

Framework

- **Environmental Justice Theory** (Schlosberg, 2004; Timmons Roberts, 2009; Walker, 2012)
Three dimensions of environmental injustice:
 - **Distribution** (Rawls)
 - **Procedures**
 - **Recognition** (Young, 1990; Fraser, 2000; Honneth, 1996)
- **Social Theories of Diffusion**
 - **Vertical Diffusion** (Veblen, 1902; Bourdieu, 1979...)
 - **Horizontal Dimension** (Katz & Lazarsfeld, 1955; Rogers, 1995)

Typical Portuguese dwellings (Lisbon)



Typical Portuguese dwellings (Porto)



**Multi-
apartment
buildings and
houses**

Method: Portugal

- **6 focus groups with home owners, by social classes** (3 Lisbon & 3 Porto - 43 informants)
- **Household composition/life cycles**
 - Singles living alone, unmarried
 - Small families – 2 or 3 pers with children
 - Big families – 4 or more with children's
- **Age:** between 28 and 60 years old
- **3 Social classes: upper, middle and low** (profession, income, education levels, neighbourhood)

Typical Belgian houses (Wallonia)

Style diversity and social
integration



Eastern Wallonia (+ stones)



Methods: Belgium (Wallonia)

- **In-depth interviews**, 23 house owners
- **2 subsamples**:
 - bought an energy certificate before it was mandatory (+ affluent)
 - Bought their house 2—5 years before the interview (in general, less affluent)
- **Varied household composition:**
- **Age** between 30 and 65 years old
- **3 Social classes**: upper, middle and low (profession, income, education levels, neighbourhood)

1) Distributional injustices

Daily Practices and representations

➤ In Portugal:

- lower-class informants try to save more in everyday life, mostly with the economic crisis *“we used to have the electric heaters on. Not anymore. We put on more clothes”*
- Upper classes take more expensive and effective measures
- **Horizontal diffusion of CFLs** in 2010 (free exchange)

➤ In Wallonia:

- More energy-saving practices if higher status
- **Horizontal diffusion of a representation:** energy-saving practices to save money are increasingly seen as ‘normal’ and socially acceptable

1) Distributional injustices (cont'd)

Energy retrofits

- In Portugal:
 - Only in the upper class
 - A vertical diffusion seems hampered by the economic crisis
- In Wallonia:
 - DIY widespread in all social classes (horizontal diffusion)
 - Energy retrofit in all social classes but at various degrees
 - Vertical diffusion of energy-saving material and techniques may be often hindered by a lack of knowledge and practical experience of the contractors who usually belong to the lower class, are self-employed and lack time to upgrade their knowledge: *“an old thing (...) [because for the other solutions she thought of] he didn't want to go into that.”*
 - Solar panels also capture symbolic capital (inclusion in a consumption society), so a vertical diffusion should be facilitated

Energy retrofits (cont'd)

- ➡ In Wallonia and Portugal:
to increase comfort is the main reason for carrying out energy retrofits
 - ➡ Comfort is a poly-semantic concept: heat/cold, light, silence and space (Bartiaux, 2011)
 - ➡ In Portugal in the lower class: also related to security, well-being and affection for the family (Schmidt et al, 2012)
 - ➡ ironically some renovations leads to an increase of energy consumption

1) Distributional injustices

2) Procedural injustices

Energy-related subsidies

► In Portugal:

- Fiscal reductions for A+ dwellings
- In 2009-2010, subsidies for photovoltaic and thermal panels
 - lack of information, inefficient dissemination...
 - → Only the upper class could afford them

► In Wallonia:

- Various subsidies for energy retrofit also for DIY roof isolation
- Increased subsidies if lower income
- Subsidies for rehabilitation of old houses with a “light” energy assessment
- For lower-income families with 2+ children: Housing Fund:
 - low-rate loan and energy assessment → list of for customised but mandatory energy-related works

1) Distributional injustices

2) Procedural injustices

Energy-related subsidies (cont'd)

➡ In both Portugal and Wallonia:

➡ Social inequalities in competences

➡ for searching for and obtaining public subsidies

➡ for making calculations

➡ for filling in forms

➔ “subsidies are for the rich”

1) Distributional injustices

2) Procedural injustices

Energy-performance certificates

➔ In Wallonia:

➔ Better knowledge of the energy-certification process than in Portugal

➔ In both Portugal and Wallonia:

➔ Energy Certification is not seen as an advantage by the owners

➔ only a few participants (women) directly admitted that they have benefited from energy certification

➔ No difference by social class

Representations on Energy certificate

"So I think that I have now done nearly all of what was to be done. The only thing that one could possibly still do, (hesitation) – because I had a... an energy assessment of the house done, that is how I learned that what was interesting was the insulation of the walls, (hesitation) and the boiler – is to possibly insulate the... the ceiling of the cellar." Later "I prefer to use my money to play golf"
(Elite, BE)

- "Mine doesn't have an EC, and I see no advantage in paying so they can say that it [the house] is inefficient! What is the advantage?"
(Middle class, PT)
- "I see no advantage! I bought the house 15 years ago, [if I] spend 200€ in the evaluation, I [will be] rated [with a] C or D, I have to make costly works at home – where can I benefit from it?! "
(Lower class, PT)

Social representations on the energy certificate

- Portuguese and Belgians informants
 - agree with the existence of subsidization of works for the refurbishment of houses
 - but they **disagree** with **procedural** and **distributional** aspects:
 - Time consuming
 - Bureaucratic
 - Complex
 - Not accessible to low-income families (need to pay upfront costs)

Environmental Justice

1) Distributional injustices

2) Procedural injustices

3) Injustices related to recognition

- In Wallonia: Energy-saving practices and energy retrofits are often invisible and do not bring more **prestige** or social recognition, except for **solar panels**
- In Portugal, solar panels are still seen mostly as smart gadgets and as a source of prestige only among small groups of middle-class well informed people

Conclusion: distributional injustices

- ➡ Subsidies for solar panels have increased social inequalities in both PT and Wallonia
 - ➡ paid for by direct and indirect taxes raised by all
 - ➡ But only affordable by the more affluent
 - ➡ contribute to reinforce the social valorisation and recognition of the upper class or affluent middle class
- ➡ Energy-retrofit subsidies
 - ➡ None in PT: lower class reduced to self-restriction measures to diminish energy bills
 - ➡ in Wallonia, several policy instruments favour energy retrofits for lower class (but for owners only)

Prospective insights for energy policies

Our empirical comparison suggests:

- In Wallonia, a **'vertical diffusion'** (from the upper class to the middle and lower ones) **of solar panels**, both thermal and photovoltaic, could be encouraged as they appear as 'signs of distinction' (see Bourdieu, 1979), **whereas**
- In Portugal, it seems more appropriate to put on the agenda a policy triggering a **horizontal diffusion of solar panels** (in all social classes at the same time, such as a contagion).

Energy-policy instruments and social diffusion processes

- To accelerate too slow a vertical diffusion: innovative training and sensitising policies targeting contractors (→ advocate of energy efficient products & technologies)
- To boost horizontal diffusion of energy retrofits
 - Zero-interest loans
 - Subsidies for roof isolation, also for DIY
 - Increased subsidies if lower income
 - Energy-related information advice,
 - Progressive tariffs on energy and gas
 - ...

Energy-policy instruments and social diffusion processes

- ➡ So policy instruments to favour both vertical and horizontal diffusion of energy-saving practices and techniques do exist.
- ➡ Their full implementation is unlikely, however, given the economic and political context as of 2015, both in Portugal and in Wallonia.



**Thank you
for your attention!**