Unequal access to affordable warmth and differentiated levels of capability deprivation: concepts, methods, and evidence for Belgium

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Energy justice in a changing market: an inter-disciplinary workshop

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Outline

- A relational approach (as in the title)
  - See: Fitzpatrick, Y. (2014). *Climate change and poverty. A new agenda for developed nations*. Bristol: Policy Press.
- Concepts
- Data & methods for a relational approach of the nexus energy poverty & capabilities
- Some results for Belgium
- Concluding discussion: Towards low-carbon energy transitions?

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Energy justice, unequal access to affordable warmth, and capability deprivation: A quantitative analysis for Belgium

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HIGHLIGHTS

- A conceptual and quantifiable framework on energy justice and capability is proposed.
- It is tested with statistical analyses that are replicable in other countries.
- Energy poverty is significantly associated with deprivation of many capabilities.
- Social stigma against energy poor is thus evident in many aspects of daily life.
- Energy-justice policy should equalise capability deployment, not energy consumption.

CONCEPTS

Concepts

- **Energy poverty (Bouzarovski and Petrova, 2015)**
  - They conclude that their review "hint[s] at the theoretical obsolescence of the notion of 'fuel poverty' (p.37)
  - They propose instead a concept of "energy service poverty"
  - Many good elements but notion of 'energy needs' not discussed
  - To compare countries, or to statistically measure whether energy poverty is associated with other difficulties – as done here – an operational definition is necessary.
- **The energy justice paradigm (many authors after Walker, 2012; Walker and Day, 2012)**
  - 3 dimensions (distribution, procedure, recognition)
  - These 3 dimensions "are often not only interimbricated but also reinforce each other", namely by policies and legislation (or the absence thereof) aiming at mitigating climate change (Bartiaux et al., 2016: 420)

Concepts

- **Capability (Sen, Nussbaum)**
  - The concept of capability was developed during the eighties by economist Amartya Sen and philosopher Martha Nussbaum
  - Def: the possibility to live a good life as defined by the persons themselves in a reasonable way given their context of life.
    => no exclusive focus on availability of means or on subjective well-being.
  - Poverty = deprivation in the capability to live a good life.
  - 10 capabilities hold as universal (Nussbaum, 2000): 1-life of normal length; 2-bodily health; 3-bodily integrity; 4-senses, imagination, and thought; 5-emotions; 6-practical reason; 7-affiliation; 8-other species & nature; 9-play; and 10-control over one's environment on both a political sense and a material sense.

Concepts

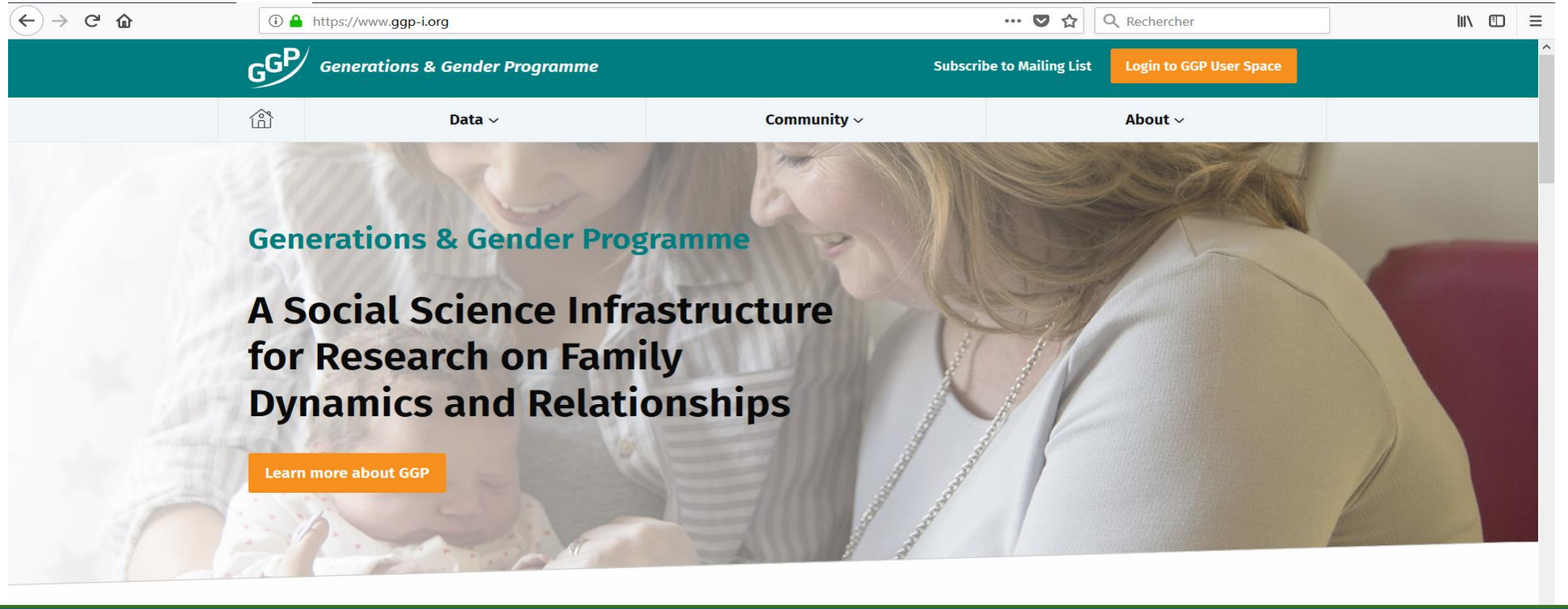
- **The nexus of energy poverty and capabilities (Day, Walker & Simcock, 2016) :** new conceptualisation of this relationship
  - fuel/energy source → domestic energy or power supply,
    → domestic energy services,
    → what they call 'secondary capabilities' (e.g. storing and preparing food, washing clothes…)
    → basic capabilities (e.g. maintaining good health, having social respect, maintaining relationships…)
  - Here, focus on the 10 capabilities of Nussbaum (2000)

Concepts

- From ‘energy needs’ →concept of **social historic (Castoriadis, 1987)**
  - This notion cannot be objectively defined **+** not validated empirically
  - Bauman (2013): our consumerist societies will not be able to tackle climate change and its social consequences if we continue to delegate to markets our needs of happiness.
  - Economic logic is heteronomous (i.e. decided by others) whereas people themselves could reduce their needs while developing ways of life that they consider as good
  - Lifestyle diversity and the variety of concepts of the good life lead to acknowledge that we share a common human condition rather than a common human nature: its conditions are peculiar to each society and **constitute the social-historic** (Castoriadis, 1987)
- **Social imaginary (Castoriadis, 1993)**
  - “The capitalist imaginary of pseudorational pseudomastery, of unlimited expansion, must be abandoned. (…) It is indispensable to insert the ecological component into a radical democratic political project.” (Castoriadis, 1993)

DATA & METHODS FOR A RELATIONAL APPROACH OF THE NEXUS ENERGY POVERTY & CAPABILITIES

Data: Generation and Gender Programme (GGP) http://www.ggp-i.org



Australia, Austria, Belgium, Bulgaria, Estonia, France, Georgia, Germany, Hungary, Italy, Lithuania, Netherlands, Norway, Poland, Romania, and the Russian Federation.
Details on the different waves and on the access to the data: http://www.ggp-i.org/data/
First wave international questionnaire is at http://www.ggp-i.org/sites/default/files/questionnaires/GGP_QuestW1Full.pdf

Methods for a relational approach

- A five-group **typology** of households according to their access to affordable warmth
  - affordability problems in keeping the home adequately warm
  - Arrears on utility bills
  - Difficulty to meet ends, thinking of your household's total income(6-point ordinal response scale)
  - Financial and non-financial assistance granted by the State as a last resort

As in Thomson and Snell (2013)

- A new simple **statistical index**
- importance given to the **self-valuations on one's income** and financial possibilities (e.g. to heat the dwelling), for income and wealth also shape "our internal sense of worth in relation to others" (Fitzpatrick, 2014: 27)

EVIDENCE FOR BELGIUM

Capability 2: Bodily Health. Being able to have good health; to be adequately nourished

Capability 2 proxies	Types of households according to their access to affordable warmth				
	Energy Poor	Poorest (last-resort aid)	Other self-perceived 'poor'	Energy vulnerable	Energy richest
In a (very) bad health in general.	15.8%	*(16.5%)*	6.4%	(5.9%)	3.1%
Be limited in ability to carry out normal everyday activities because of a physical or mental health problem or a disability	23.6%	*40.4%*	17.9%	17.3%	11.9%
Cannot afford eating meat, chicken or fish or a vegetarian equivalent every 2nd day	34.8%	(14.5%)	5.0%	*83.1%*	1.6%
Mean	24.7%	23.8%	9.8%	35.4%	5.5%
Variability index	126.9%				

Source: GGP survey, Belgium, 2009

Variability index = (24.7% - 5.5%) / [(24.7% + 5.5%) / 2] = 126.9%

Note: figures in parentheses refer to subsamples smaller than 30 and figures in italics point to a non-linear trend.

Capability 4. Senses, imagination and thoughts

Capability 4 proxies	Types of households according to their access to affordable warmth				
	Energy Poor	Poorest (last-resort aid)	Other self-perceived 'poor'	Energy vulnerable	Energy richest
No diploma at all	5.7%	*(6.9%)*	3.3%	(1.3%)	1.1%
Would like a colour TV but cannot afford it	(2.4%)	*(0.0%)*	*(0.5%)*	*(0.8%)*	(0.0%)
Would like to have an internet connection but cannot afford it	15.4%	*(15.8%)*	7.4%	(4.2%)	1.4%
Lack of leisure spaces like parks or play-grounds and (lack of public transport or would like to have a car/van available for private use but cannot afford it)	(1.1%)	*(3.8%)*	(0.5%)	(0.0%)	(0.0%)
Lack of services and shops and (same: lack of mean of transport)	(1.3%)	*(3.1%)*	(0.6%)	(0.0%)	(0.0%)

Source: GGP survey, Belgium, 2009

Variability index = 164.3%

Note: figures in parentheses refer to subsamples smaller than 30 and figures in italics point to a non-linear trend.

Capability 6. Practical Reason. Being able to engage in critical reflection about the planning of one's life.

Capability 6 proxies **How much control do you feel you will have over the following areas of your life in the next three years?** **Answer: Not at all or a little**	**Types of households according to their access to affordable warmth**				
	Energy Poor	Poorest (last-resort aid)	Other self-perceived 'poor'	Energy vulnerable	Energy richest
Your financial situation	43.7%	34.4%	22.5%	(9.0%)	8.7%
Your work	47.5%	*49.3%*	29.6%	22.7%	17.0%
Your housing conditions	33.8%	28.8%	13.8%	(8.5%)	6.0%
Your health	38.5%	37.8%	28.0%	17.7%	*20.2%*
Your family life	27.0%	20.6%	13.9%	(7.8%)	6.9%

Source: GGP survey, Belgium, 2009

Variability index = 105.7%

Note: figures in parentheses refer to subsamples smaller than 30 and figures in italics point to a non-linear trend.

Capability differences between energy-poor households and energy-richest ones by descending order

Capability	Variability index
10B. Control over one's material environment and property	170.9%
9. Play (→ other personal & social imaginary, as in Castoriadis)	168.8%
4. Senses, imagination and thoughts (→ other imaginary)	164.3%
5. Emotions	128.5%
2. Bodily health and protein intake	126.9%
6. Practical reasons (locus of control)	105.7%
3. Bodily integrity	82.9%
2. (Bodily health continued) Adequate shelter	77.9%
7A. Affiliation	38.0%

Source: Own calculations from the GGP survey, Belgium, 2009

CONCLUDING DISCUSSION

Towards low-carbon energy transitions?

Concluding discussion

- **Policy-related results**
  - Interface (often under-developed) between theories and empirical studies → explicit grounding of policies in tested theories as opposed to ad hoc assumptions
  - Before designing policies, a clear and encompassing description of the situation is a necessary first step → fighting energy poverty as a transversal issue and with energy justice as a first concern
  - **Energy poverty = deprivation of capabilities** not only re housing, health, mobility, and relationships but also re access to culture and recreational activities, and the feelings of fulfilment and ontological security
  - → crucial **extensions of the sole "heat or eat" dilemma**, resulting in heavy mental load and in constant and practical difficulties as evidenced by the poor emotional well-being of the energy-poor households

Concluding discussion

- **Theoretical innovations**
  - Energy poverty = deprivation of capabilities also re access to culture and recreational activities, and the feelings of ontological security
  - → **+ difficult to develop alternative personal and social imaginaries** that could be less energy-demanding
  - Relational approach as a method and social comparison as a daily experience make the issue of **social stigma clearer**, and thus also the dimension of **political recognition**. → Theoretically important to acknowledge that energy poverty and deprivation of capabilities are also relative to the situation of other social groups, and therefore, to increasing social inequalities.

Concluding discussion

- **Main result: a paradox**
  - For all households but <u>especially for the energy-richest</u>, the development of all the capabilities that we could operationalise here **counteracts the deployment of the 8th capability related to** the ability "to live with concern for and in relation with (…) the world of **nature**"
    → <u>Environmental and social injustices</u> should thus be therefore tackled in **conjunction**
  - **BUT** in this era of climate change, policies towards distributive justice cannot equalise energy consumption between energy-poor households and energy (much) richer ones, whether within or across countries:
    → **Energy-justice policy should equalise capability deployment**, not energy consumption.

THANK YOU!