## Theorizing Rebound-Effects in A Pragmatist Manner

The academic discourse on how to transform problematic socio-economic settings—here, I assume, one essentially refers to "transnational value chains" (Gereffi et al. 2005; Henderson et al. 2002) which induce severe "matters of concern" (Latour 2004) —seems to be stuck in an unfruitful opposition.

On the one hand, ecological economists persistently emphasize the general need to reform value chains efficiently (by gradually reducing the resources required). Thus, they claim, one has to opt for a sustainable economy with "qualitative growth" (see for example the "Global Marshall Plan Initiative" or the "Green New Deal"). On the other hand, degrowth-scholars argue that such a vision is too optimistic since growth-driven (material or psychological; direct or indirect) "rebound-effects" may easily outweigh any effort to optimize value chains. Hence, one has to get rid of growth, be it quantitative, qualitative, green, whatnot (cf. for instance Binswanger 2000; Jackson 2009), and reductionist measurements such as the GDP that back such visions (van den Bergh 2010).

However, both perspectives do propose interesting claims that should encourage a new theorizing of rebound-effects—by blending them. I would like to give a brief outline of such an endeavour. First of all, one has to link the inquiry to specific empirical cases. Let's name these (using a Latourian sense of Governance) "parliaments of things" where thus human and non-human actors 'try' to find a common ground to live on (Latour 2001). This idea becomes interesting when earthing Latours occasionally polemic overtones with John Deweys pragmatic philosophy (Dewey 1938). In sum, subsequently, it is the "experiment" which moves to the very core of this intercontinental amalgam; an experimental theory and practise of rebound-effects opens up several beneficial perspectives bridging the economist-de-growth gap. That neutral strategy might also help to build a social and ecological economy.

A vibrant transnational 'parliament' is electronic waste, in public and academic affairs well known as e-waste. Such waste may also be framed as a specific kind of transnational value chain. See for example the work of Josh Lepawsky (Lepawsky/Billah 2011) on Canadian-Bangladeshi e-waste-rubbish networks. I, however, would like to focus on the Indian case of e-waste. It is of foremost interest because since the early 2000s a collective effort has been formed to make the hazardous e-waste handling practices (involving the local informal sectors) more sustainable (BAN/SVTC 2002; Greenpeace 2005; GTZ 2007). In 2011, the Indian government enrolled the "E-Waste (Management and Handling) Rules" (MoEF 2011) which try to tackle the problem using multiple measurements. During the first decade of this century civilian, economic, academic, and governmental actors

negotiated on this issue, including a bottom-up drafting process of the final legislature by a colourful NGO-company alliance. Indeed, here we find a 'parliament' in its central connotation.

Today, the most important question surrounding this issue is how the Indian law is transformed into reality and, conversely, if and how the multiple ontologies of e-waste—consisting of local, international and transnational parts—*in*-form the new legislature. How can we capture this progress adequately?

John Dewey's experimentalist reading of public processes underlines that democracy (at its very core) works well if it constantly transforms during its existence with regards to the actors who state (to put it symmetrical: actors which translate) their objection. "Till the Great Society is converted into a Great Community, the Public will remain in eclipse" (Dewey 1927: 142). Bruno Latour's political ecology implicitly refers to such a logic (cf. the subtitle of his book: "How to Bring the Sciences into Democracy"). Latour moreover offers an updated version of Dewey logic of inquiry (cf. Latour 2001: 91ff. with Dewey 1938: 101ff.; see Lamla 2013 for this hypothesis) by separating the democratic process into four major steps hierarchization; (problematization; consultation; institutionalization). framework lies at the core of any experiment and is thus fruitful for theoretical purposes, especially because it is rendered dynamic, multi-layered, and-most importantly—reversible.

The Indian e-waste law indeed needs a public "revision in translation". Thus, social scientists must document how the empirical state of the art is evolving. By doing so, they might learn from the actor's abilities to induce and/or lower rebound-effects. The pessimistic reading of rebound-effects is always just a stone's throw away. What's of utmost interest is how such a development is actually prevented by creative collective actors (Elinor Ostrom's take on "Governing the Commons" (1991) states a similar proposition yet recites rational-choice theories that do not capture the full amount of hybrid agencies involved in value chains). In my PhD-thesis (which is still at its beginning) I try to follow this pragmatist idea. At the conference, I want to testify in the name of the actors struggling in the 'parliament' by presenting one crucial example of the e-waste-law negotiation process which focuses on the nexus of the formal-informal sector value chain (to be even more precise: by concentrating on informal refurbishers who initially were a major part of the e-waste law but, during the drafting process of the legislature, got kicked out of it).

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