Action across multiple levels for scaling up sustainable behaviour: The case of individual

upcycling in the UK

(Track: Sustainable consumption and supply chains)

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Abstract:

As increasing scientific evidence has shown the potential risk of climate change, various actors at

different levels across society have participated in action to mitigate climate change. Such action has

included sustainable lifestyle choices by individuals at the household level (Goodall 2007; Jackson 2005;

Jones 2010), environmental initiatives in businesses as part of corporate social responsibility at the

organisational level (Swaffield & Bell 2012), regulations and policies by national governments (Urwin &

Jordan 2008) and various other participants (Yamin & Depledge 2004) at the macro-level. Such action

mostly appears to comprise single level cases (e.g. Jones 2010; Swaffield & Bell 2012; Urwin & Jordan

2008), largely underestimating the complex nature of each action involving or requiring different

stakeholders at various levels (e.g. individuals, households and community groups at the micro-level;

companies, local authorities (LAs) and educational institutions at the meso-level, and national

government and other international organisations at the macro-level). This paper aims to show how

action across multiple levels (or a set of interventions by different actors at micro-, meso- and macro-

levels) for 'scaling up' certain forms of sustainable behaviour (van den Bosch 2010) could, in theory, be

more effective in addressing negative environmental impacts than action at a single level.

Individual upcycling, the emerging household behaviour which creates or modifies any product

from used materials, components or products to generate a product of higher quality or value than the

original (Sung, Cooper & Kettley 2014) was used as a case for analysis. This paper is part of a PhD

study on 'sustainable production and consumption by upcycling' which investigates upcycling by

households as an opportunity to reduce carbon emissions related to materials and energy consumption.

Household upcycling currently has marginal or niche status in the UK and one of the aims of the study

was to develop actionable strategies for scaling up such activity. The research has three main elements:

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a) understanding behaviour and actors; b) identifying key behaviour-influencing factors, and c) developing intervention strategies for scaling up. This paper, based on the final phase of the research, answers the question, 'Which combination of interventions should be implemented by which actors at which level, for successful scaling up of individual upcycling?'

A Semi-Delphi method which took the form of a questionnaire followed by a workshop was employed. The questionnaire explored intervention strategies developed on the basis of previous interviews and a survey of British consumers. The respondents were asked to rate the level of importance (in terms of potential impact on scaling up) and feasibility (technical, economic and political) for each intervention, and vote for the most suitable actor(s) in each case. During the subsequent workshop, participants critiqued a preliminary analysis of the questionnaire results and, collaboratively, selected a combination of interventions for short-term or long-term success using card sorting exercises. About 80 individuals in the UK were contacted for participation based on their expertise in areas such as environmental policies, behaviour change, transition management and sustainable design. Twenty five responded and completed the questionnaire, of whom twenty two were academics from eight universities (in disciplines ranging from politics, engineering, psychology, sociology, art and design, business management and economics), and three were policy-related professionals. Eleven of the respondents took part in the subsequent workshop.

The questionnaire results revealed eight interventions to be considered important and nine to be feasible. For many of the interventions, suitable actors tended to be multiple. For example, LAs and NGOs, with the support from local communities, might be most suitable for improving facilities, access and services relating to community workshops.

The interventions for short term success that received most support, based on potential impact and feasibility within two years, were a) operating a reuse/upcycle centre with a product collection service aligned with an existing waste management system (LAs and NGOs), b) providing a service model for improved provision of used materials (companies) and c) changing government procurement policy to favour upcycled goods (government and LAs). The interventions for long term success that received most support, based on the potential impact and feasibility within 10 years, were a) enriching the curriculum in art and design at schools, colleges and universities to incorporate advanced upcycling skills and knowledge (government, educational institutions and designers) and b) providing tax benefits and subsidies for upcycling-related businesses (government).

The paper demonstrated how individual upcycling may be scaled up from niche to regime (Geels 2002, 2011) through a combination of interventions by actors at various levels. This highlights the potential importance of collaboration (or coordinated actions) between actors at different levels with a shared vision. Meso-level organisations, in particular, may be able to play a key role in connecting micro- and macro-level actors to achieve collaboration and partnerships, and hence should not limit their sustainability activities to internal team efforts or schemes (e.g. climate champions). Managers and decision makers at this level may need to shift their organisational mission and vision to become a key actor, implementing coordinated actions at different levels in society in order to achieve more effective action to prevent climate change.

Keywords:

Scaling up; Sustainable behaviour; Sustainable consumption; Sustainable design; Sustainable production; Upcycling

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