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Exploring 'pro-environmental' actions through discarded materials in the home

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The household is a crucial focus of both waste and wider environmental policy, being seen as a central site of socio-economic-environmental change, a space in which people may perform their civic responsibilities and where individual and wider imperatives are brought together. Yet policy makers have shown limited appreciation and understanding of what happens *inside* the home. So in contemporary waste policy, for example, households remain a 'closed entity' in which every-day routines and practices remain hidden. Increasingly, though, it is acknowledged by social scientists that the *lived experiences* of environmental and waste management in the home are significant issues requiring further study, but *how* we might go about trying to study them is proving a challenging question. Conventional pro-environmental behaviour research has often tended to study behaviours in ways abstracted from the social contexts in which these take place. This has prompted recent research involving repeat in-depth interviews with householders and more ethnographic approaches, the use of reflexive diaries and narrative methodologies. Curiously, however, there has been little research considering environmental management(s) in the home which has focussed on waste itself.

This paper seeks to add to the discussion, by focusing on everyday processes *within* households, using a qualitative approach of 'getting in the bin' of households - that is, an interview approach which takes respondents' discarded waste as a starting point from which we ask them to discuss the lived experience(s) and activities of everyday life. More broadly by developing insights from what has been termed a 'realist governmentality' perspective the paper seeks to offer a more nuanced and finely grained analysis of governing *in situ*, exploring the extent to which governmental ambitions in relation to waste are accommodated, resisted or [re]worked at the household level.

The paper draws illustratively on case studies from a Leverhulme-funded research project based in Kingston-Upon-Thames, an outer London borough in the UK. The approach used a focus on the contents of household waste bins to develop a narrative approach driven by householders centred on stories about pro-environmental practice. The paper will deal with three elements of the research approach: texturing narratives of waste, generating narratives of recycling in practice, and producing narratives of understanding. The outcome is development of a more thoroughgoing understanding of how processes *within* the home shape waste governance, moving beyond treating the home as a closed entity.

Keywords: waste, households, recycling, narrative approach

Introduction

Management of waste by households invariably translates targets set by government into expectations that households and the individuals comprising them will behave in such a way as to enable those targets to be attained. This is seen clearly in the case of the United Kingdom (UK) where the *Waste Strategy for England 2007* set targets to reduce the amount of waste sent to landfill by 50% per person by 2020 through the principles of reduction, reuse and recycling (the three 'R's). This enlists the co-operation of the citizenry who are expected to respond positively to the waste management procedures instated for households by the various local authorities. These procedures usually involve households in separating recyclable materials into receptacles collected on behalf of the local authority or recyclables are taken by householders to local council-managed 'bring' sites. Householders with gardens are encouraged to compost and there may be incentives for reusing materials and other environmentally friendly practices.

Waste policy implicitly makes assumptions about the uniformity of citizens' lifestyle aspirations and behaviour, ignoring "what happens *inside* the home" (Horne et al., 2011, p.89 emphasis added) and thus failing to enlist wholehearted support from many households for the three 'R's' (Rutherford, 2007). Researchers have recognised this in numerous studies investigating factors promoting recycling by householders, and barriers to recycling and other pro-environmental behaviour (Barr et al., 2013). However, households have remained largely a 'closed entity' in which every day routines and practices remain hidden (Bulkeley and Gregson, 2009).

Giving attention to these processes *within* the home is important on several fronts. Large-scale quantitative surveys cannot fully detail the intricacies within households that inform resource use and divestment (Klocker *et al.*, 2012, p.2243) and "while statistics about households may be central to the representation of census data or economic growth, this technique does not capture the complex cultures of domesticity and identity that sense of home generate" (Hawkins, 2011, p.69). Household dynamics are embedded within sets of social and cultural relations and without paying attention to themes of consumption, identity, values and social relations, we "risk missing the key processes through which waste is generated within and discarded by households, and their relation to questions of social ordering" (Bulkeley and Gregson, 2009, p.930).

Hargreaves (2011, p.80) takes this discussion further in relation to pro-environmental behaviours by arguing that: "close examination of behaviour change processes as they occur *in situ* reveals many more aspects and complexities of daily life than existing approaches capture". What is needed, it is argued, are approaches which allow us to get closer to the contexts and particular material settings of everyday life in which these actions take place.

Getting in the Bin

The research reported herewith used a methodological approach drawing upon recent insights from qualitative pro-environmental behaviour (PEB) research (Hargreaves, 2012). The paper draws illustratively on research undertaken in a Leverhulme-funded research project based in Kingston-Upon-Thames, an outer London borough in the United Kingdom. A total of 27 households were used as case studies, with detailed participant observation employed in endeavouring to capture the route of waste materials through the home. This is similar to work by Evans who utilised cupboard rummages and fridge inventories suggesting: "the analytic thinking behind this

approach was that it would ‘thicken’ the interview data by allowing for a focus on talk as part of situated action” (Evans, 2012, p.46). We wanted to engage directly with waste and used this to elicit conversation with householders in their own home. We also wanted to ensure that the affective qualities of waste were taken account and harnessed. This acknowledges the phenomenological reality of waste (Hawkins, 2006, p. 80) or as Rathje and Murphy (1992, p.14) in their championing of ‘garbology’ stated, we used waste “to investigate human behavior ‘from the back end’ as it were”. This approach was also influenced by the ‘visual turn’ in the social sciences, which has highlighted how objects may be useful within research in encouraging memories and allowing the elaboration of stories about experience. In this case, by referring directly to household waste *in situ*, this can create a dynamic encounter between the residents and the researcher, discussing household waste together with the ‘evidence’, that is the waste itself, in front of them (Metcalf et al., 2013).

This approach prioritises respondents’ own forms of expression; they can select information they see as most relevant rather than using pre-defined categorisations of the researcher. It also emphasises the individual’s own experience, employing open-ended interview questions to enable respondents to elaborate on what they feel are significant issues, events and background material. This narrative inquiry allows for a more holistic approach so that “stories about pro-environmental practice might refer to other life-events, explaining how these relate to the practices concerned” (Hards, 2012, p.3).

All respondents in these households were positive during interviews when asked if the contents of their household waste bins could be looked at and discussed. They agreed to empty out their various household bins to be then picked over and analysed. Bin contents were usually emptied onto newspaper, with photographs of whole contents and individual items. Respective items were then used to develop narratives about the object itself, why it was placed where it was, who put it there, when was it used and by whom. These questions inevitably drew out discussion about household relations, daily routines and broader consumption practices, such as shopping, use of particular items, and food consumption. The main focus tended to be the kitchen bin, which invariably was the principal conduit for non-recyclable objects and gave access to the greatest range of materials. Once completed the interviews were transcribed and analysed literally, interpretively and reflexively (Mason, 2002). The interpretive and reflexive elements produced themes, issues and ideas that were central to the analysis. Transcripts were combined with the photographs of the items to give lists of materials discarded and a range of object narratives.

The following analysis draws on a small selection of more intimate snapshots of the households encountered, with the aim of both exploring what insights working with bin contents might provide and reflecting, more broadly, on waste governance. This is a far from conventional approach, but it is a logical outcome of a theoretical orientation to the micro-scale, as well as reflecting the methodological concern for specific, artefact-centred, discussion and is the most appropriate strategy for considering the everyday activities of waste management in the home (Evans, 2012).

Narratives from the Bin

A highly pro-environmental couple, Martin and Veronica, illustrate the type of detailed understanding of household waste practices that can be developed by this research. They have built and installed multiple bins and drawers for the storage of materials, and neatly fit Paterson and Stripple’s (2010) description as “self-regulating, carbon-

conscious citizens". They have appropriated the food caddy supplied by the council for their own compost production and this stands in the small middle bowl of the kitchen sink unit where they can easily access it to place peelings and food scraps as well as occasional egg boxes and pieces of newspaper.

The elaborate bin and container system created can arguably be seen as government successfully 'crossing the threshold' (Bulkeley and Gregson, 2009) and entering into daily lives within this household. However, interviews with Martin and Veronica, focusing on the actual contents of their bin, added a further layer to the discussion. It suggested more than just compliance (with the local government scheme for recycling) and environmentally-motivated actions at work, but rather embodied a sense of self-government and of control and order. In effect the government's current waste regime places emphasis on households to enact pre-disposal 'interventions' (through acts such as classifying, cleaning and sorting waste materials). This is then performed in various ways, with Martin and Veronica's household representing one type of response, involving powerful notions of order, self-control and the maintenance of cleanliness.

The interviews allowed recognition of discordance between reported actions and those evidenced by materials in the 'wrong' bin, e.g. recyclables in a receptacle for non-recyclables, or consumption of 'ready' meals (convenience foods) by a family who had stated they only ate fruit and vegetables and freshly cooked produce. The interviews involving examination of bin contents allowed a more holistic insight to waste practices, with each artefact requiring a piecing together – often quite literally on the floor during interviews – of how, where and by whom this material has arrived in a particular bin. In many cases a stated intent in favour of environmentally responsible behaviour could be suborned by the realities of everyday life, e.g. being too tired or insufficiently time rich to cook a meal with fresh ingredients.

Examination of the contents of household waste containers also enables a greater appreciation of intra-household dynamics and the generation of narratives of *who* did what within this process. For example, in a household in which Hereward, a recent retiree, expressed the prime responsibility for managing the contents, it was revealed that the bin for landfill items actually contained several recyclables. Hereward acknowledged that this material was in 'the wrong bin', but explained that he and his wife had three children under the age of twelve, and "the children were asked to tidy up, and they can't be bothered to take it to wherever."

This is illustrative of the fact that in most households there is not a unified, controlled, system determining what goes into the bin. So the commonly used term, 'household waste management' masks the intersecting everyday practices of multifarious household members, illustrating how they may not all perform the requisite subjectivities. Intra-household dynamics mean that waste management may fluctuate and vary. Further probing revealed that Hereward's wife, Sue, is a committed environmentalist and it was she rather than her husband who had insisted on waste for recycling being placed in the recycling receptacle. Hereward complied with this essentially because "it's mainly to make the wife happy!"

This is an example of 'actually existing sustainabilities', which Krueger and Agyeman (2005, p.411) refer to as "practices not explicitly linked to the goals of or conceived from sustainable development objectives but with the capacity to fulfil them." Hereward's actions are not just as a direct result of concern for the environment, but more through a sense of moral obligation to the aspirations of his wife. Uncovering such interrelations is of significance for understanding environmental governance in the home. It also highlights the precarious nature of pro-environmental actions in some homes. Further

investigation of the contents of the landfill bin enabled the narratives associated with discarded items to be traced and allowed us to see their placing is more complex than being a simple function of attitudes (be they pro-environmental or not), but instead disposal is set within the context of social relations, emotions and everyday activities.

In another household consisting of three recently arrived South African immigrants in their 20s, responses revealed that disposal, particularly for smaller incidental items such as receipts, was often an unthinking activity, with disposal made into the nearest bin without full consideration of its appropriateness in relation to governmental rules. As Shannon from this household said, "For me it's just a ..., it's a laziness thing!" The result was that material placed in the bin in her bedroom was then tipped into the bin for landfill in the kitchen even though material that could be recycled was present. Re-sorting rarely occurred and definitely not for items placed in a bin in the bathroom: "You don't know what's been in them, razors or anything" (Gareth). Communal spaces, such as bathrooms and living rooms, were ones where fixed routines of waste sorting were rarely observed and where, often, no one member of the household took responsibility for sorting the waste. This is part of what Nansen et al., (2011) refer to as 'logics of materiality' in the home and in particular how dynamics of the home may become naturalised over time as particular cultural norms are inherited.

Narratives of understanding

Waste policy generally assumes that information flows in a linear, top-down way from governments and local authorities through to the individual. Yet, discussing the materials in household waste bins gave an insight into the realities of the intricacies and fragility of understandings and information flows. Publicity campaigns may target information *at* the home (Robinson and Read, 2005), but this information does not necessarily flow uniformly *through* it. Information may be misinterpreted, miscommunicated between household members or simply refuted in different ways by different individuals. Second, it reveals one of the potential fragilities of governing at a distance, which is the reliance on expert discourses being privileged over other forms of understanding and networks of knowledge that may be prevalent in individual households.

Helen's comment is typical, "there's loads of things I don't know whether I should be recycling or not". This problem is compounded because different local authorities may use slightly different approaches in terms of collection and recycling practices. Understandings of waste management are continually evolving in the crucible of the household and, importantly, these understandings may be fragile and easily disturbed. New household members, reconsiderations of new and pre-existing information amongst household members, and interventions from social contacts beyond the household mean that information from local authorities often faces reinterpretation, misinterpretation or refutation.

For example, comments from one resident (Phil) highlight the problems faced when dealing with certain materials: "The collection of plastic I think is a mess, right. All these different symbols and different things, so over the years I've probably given up on this, 'cause I've tried to put lots of different bottles out, some's been rejected; next week the same stuff's been taken and then back and I haven't got my head round the five or six categories of whatever they are. So now, mentally I've just fallen into, this is either soft plastic or it's hard. If it's soft they'll take it and they do. If it's hard, which is like rigid bottles or buckets that kind of stuff [...and] things like old butter containers or jars, plastic jars, which they won't take." However, under Phil's categorisation, things such

as butter tubs were classified as 'hard plastics' and thus not recyclable, when in fact they could be recycled under the rules of the local authority.

In contrast, individuals recognise glass easily, and it can accordingly be placed readily in the correct, recycling, bin without the need for cross-checking of local authority information sheets or by consulting recycling officials. In short, this knowledge has become a more performative, tacit, understanding. Plastics, however, present a different case in that their variety, as well the slightly different rules surrounding their recyclability in different local authorities, mean that there is a more constant need for recourse to information sheets as well as the need to cross-check PET (Polyethylene Terephthalate) numbers. Thus the process does not easily become a routine, unthinking action, and accordingly is more inconvenient and cumbersome. Responses ranged from those who overcame this inconvenience by placing all plastics in the same bin (either landfill or recycling) and thereby misplaced a certain percentage, or those such as Phil who attempted a quicker former of discrimination, based on the immediate characteristics of the item.

Conclusions

The approach employed in this research offers several insights not only to how we might study and understand waste and pro-environmental actions in the home but also to what recommendations we might make for waste management policies. The method goes some way toward closing the value-action gap, which relies on householders' self-reporting, as it allows a physical reflection on how what appears in bins correlates with what interviews and questionnaires tell researchers. There appear to be sufficient discordances between reported and actual actions to recommend caution be exercised when assessing the figures presented in self-reporting surveys. Furthermore, the contents of waste bins acted as a multi-sensual aide memoire and cue to discussion. It enabled the researcher to access those particular moments which may be seen as too insignificant to mention in surveys or interviews.

The research reveals that there is a need for more thoroughgoing understanding of how processes *within* the home shape waste governance, and thereby moving beyond regarding the home as a closed entity. Environmental discourses are just one set of moralities which are combined with other everyday domestic imperatives within the social and cultural specificities of the home. The discourses involve three main recurrent elements. First there is order and control. The provision of relevant bins provides a 'choice architecture' for households, but individuals look to maintain a sense of control. Second, the process of cultivating a particular self in relation to waste is not a uniform process across all household members. It intersects with both the moral and social commitment to other members of the household as well as their material presence in the home. These observations offer a challenge to the deployment of the information deficit model which presumes that the end target, the household, will respond and react to various stimuli in a uniform manner. Third, but interrelated, the configuration of the home and its attendant moralities shapes how respondents react to government imperatives to manage waste in a certain way.

This approach presents two principal ramifications for waste policy. The discordance between desired objectives of government and actions at household level needs to be recognised (see Hobson and Hill, 2010). Second, there is evidence that even where there is a strong level of self-reflection by individuals in relation to the discourses associated with waste policy, 'correct' waste management may not always be enacted, especially where methods of accommodating complex rules of what can and cannot be

recycled become misinterpreted or challenged through preference for other networks of information.

Recognising this more intricate picture of individuals in their home contexts illustrates the instability of environmental citizenship as a position enacted, with both the mundane and ordinary rhythms of everyday life, set alongside competing moralities of order, home and family. Such observations raise a broader challenge to the supposition in contemporary waste policy that the position of self-reflecting environmental citizens once reached by individuals is one where they will remain consistently positioned over the long-term.

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References

- Barr, S., Guilbert, S., Metcalfe, A., Riley, M., Robinson, G.M., and Tudor, T.L. 2013, "Beyond recycling: An integrated approach for understanding municipal waste management." *Applied Geography* 39:67-77.
- Bulkeley, H., and Gregson, N. 2009. "Crossing the threshold: municipal waste policy and household waste generation." *Environment and Planning A* 41:929-945.
- Evans, D. 2012. "Beyond the throwaway society: ordinary domestic practice and a sociological approach to household food waste." *Sociology* 46:43-58.
- Hards, S. 2012. "Tales of transformation: The potential of a narrative approach to pro-environmental practices." *Geoforum* 43:760-771.
- Hargreaves, T. 2011. "Practice-ing behaviour change: Applying social practice theory to pro-environmental behaviour change." *Journal of Consumer Culture* 11:79-99.
- Hargreaves, T. 2012. "Questioning the virtues of pro-environmental behaviour research: Towards a phronetic approach." *Geoforum* 43:315-324.
- Hawkins, G. 2006. *The ethics of waste: How we relate to rubbish*. Lanham, MD: Rowman & Littlefield.
- Hobson, K., and Hill, A. 2010. "Cultivating citizen-subjects through collective praxis: organized gardening projects in Australia and the Philippines." In *Ethical Consumption: A Critical Introduction*, edited by T. Lewis, and E. Potter, 284-297. London: Routledge.
- Horne, R., Maller, C., Lane, R. 2011. "Remaking home: the reuse of goods and materials in Australian households." In *Material geographies of household sustainability* edited by R. Lane and A. Gorman-Murray, 89-111. Aldershot: Ashgate.
- Klocker, N., Gibson, C., and Borger, E. 2012. "Living together but apart: material geographies of everyday sustainability in extended family households." *Environment and Planning A* 44(9):2240-2259.

Krueger, R., and Agyeman, J. 2005. "Sustainability schizophrenia or 'actually existing sustainabilities'? Toward a broader understanding of the politics and promise of local sustainability in the US." *Geoforum* 36:410-417.

Mason, J. 2002. *Qualitative researching*. London: Sage, second edition.

Metcalfe, A., Riley, M., Barr, S.W., Tudor, T., Robinson, G.M., and Guilbert, S. 2013. "Food waste bins: bridging infrastructures and practices." In *Waste matters: new perspectives on food and society*, edited by D. Evans, H. Campbell and A. Murcott, 135-155. Malden, MA: Wiley-Blackwell/The Sociological Review.

Nansen, B., Arnold, M., Gibbs, M., and Davis, H. 2011. "Dwelling with media stuff: latencies and logics of materiality in four Australian homes." *Environment and Planning: Society and Space* 29(4):693-715.

Paterson, M., and Stripple, J. 2010. "My space: governing individuals' carbon emissions."

Environment and Planning. D: Society and Space 28(2): 341-362.

Rathje, W.L. and Murphy, C. 1992. *Rubbish! The archaeology of garbage*. New York: Harper Collins.

Robinson, G.M., and Read, A.D. 2005. "Recycling behaviour in a London Borough: results from large-scale household surveys." *Resources, Conservation and Recycling* 45(1): 70-83.

Rutherford, S. 2007. "Green governmentality: insights and opportunities in the study of nature's rule." *Progress in Human Geography* 31:291-307.

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