

Texturing waste: attachment and identity in every-day consumption and waste practices

Gareth Thomas, Christopher Groves, Karen Henwood, Nick Pidgeon

1. INTRODUCTION

Waste performs an ambivalent and value laden function in contemporary academic and policy discourse. Such use reflects conceptualisations of waste that are broadly in line with Douglas' (2005) definition of waste as 'matter out of place', wherein materials are spatially separated according to evolving socio-cultural norms and values which specify that which is clean, useful, valuable, dirty, unhygienic, or unnecessary (Gee, 2010; Scanlan, 2005). As a noun the term tends to be applied to flows of diverse materials that may be deemed unsafe or undesirable, or from which full human usefulness has been exhausted (Kennedy, 2007; Hird, 2012; Rootes, 2009). However, the spatial distinctions and material flows constituting waste and waste management processes are themselves undergoing a shift. Increasingly, materials formerly designated as waste are being differentiated and reclassified as economically and ecologically efficient resources, provided their flows can be realigned to the correct position in 'circular' resource and consumption systems (Ellen MacArthur Foundation, 2013; Watson, et al., 2008). Such flows may comprise reusable, repairable or recyclable resources and consumer goods (DEFRA, 2008; Barr, 2007), or potentially useable resources such as energy and food which are unnecessarily disposed of or allowed to spoil before consumption (Quested, et al., 2013, p. 47; Parnell & Larsen, 2005).

However, waste can also appear as a verb, designating profligate, careless or heedless consumption and disposal routines. In the move from disposal to waste as resource paradigms

(Lane & Watson, 2012), we see a concerted effort on the part of governments to alter the behaviour of individuals both instrumentally through price signals, and also by extending individual and corporate responsibilities for proper disposal of formerly owned goods (HM Government, 2013). We have also seen a growing focus on identities, habits, norms and values as loci of individual behaviours which, in combination with wider infrastructure systems, may either promote or discourage wasteful forms of behaviour (Collingwood & Darnton, 2010; DEFRA, 2008; Stern, et al., 1999). This approach has been influential in helping reframe waste governance as an activity that focuses on individual behaviour in relation to material objects. This new discourse on waste extends beyond material flows traditionally designated as part of the waste stream and also covers other forms of resource consuming behaviour such as domestic energy use (HM Government, 2011, pp. 38-39; DECC, 2015).

Increasingly, work in practice theoretical traditions has challenged approaches focussing on individual behaviours, in favour of examining the social and infrastructural relations that shape environmentally significant practices (Shove 2010). Practice oriented work instead seeks to foreground contextualised interactions between a diversity of human and non-human actants as key to shaping the performance of environmentally significant routines (Shove et al. 2012; Strengers and Maller 2012). Behaviour is then conceptualised as a product of biographically patterned engagement in practices that may be more or less deeply embedded in the material spaces subjects inhabit, and which are constitutive of their identities, relationships, and values (Hards 2011). We see elements of this co-evolution of biographies, identities and relationships in waste literatures emphasising the influence of shifts in family structure and identity upon routines of disposal and divestment (Gregson, et al., 2007; Hird, 2012).

This conceptualisation takes a relational perspective that brings together practice theory and biographical approaches to examine how people make sense of waste as substance and as activity. In taking up this perspective we follow practice theory in understanding waste as constructed through contextually specific meanings, materials and competencies which pattern subjects' enactments of consumption and disposal (Shove, Pantzar, & Watson, 2012). In line with other recent work (author papers), we seek to deepen and complicate practice theoretical understandings of identity and values through the incorporation of psycho-social concepts of emotional attachment and transition. We deploy these concepts, adapted from developmental psychology and object relations theories (e.g. Bretherton, 1992), in order to explore how subjects' capacity for engaging in practical interactions with others is shaped by experiences of transition through relationships with an expanding range of subjects and objects (Winnicott, 2005). Such processes are mediated by a plethora of relational connections, socio-cultural identities and emotional investments which help shape subjects' identities, alongside the competencies and meanings which compose regimes of practice (author paper, Marris 1996).

The core of the combination of practice theory and biographical/psycho-social approaches we develop in this paper is the concept of 'texturing', a term we deploy to draw together ideas of meaning making and identification as performances through which subjects stitch together diverse linguistic and material elements in an ongoing labour of situating themselves in relation to their wider social and cultural contexts (Hall, 1996; Wetherell & Edley, 1998). Importantly, such performances rely on embodied competencies as well as linguistic ones (Watson & Shove, 2008). By texturing we thus refer to how biographically patterned experiences create emotional and relational bonds which tangibly shape how people engage in these performances. In particular we are interested in how texturing in this sense influences how we interpret objects and practices as wasteful. As such texturing is best read as

contributing to but analytically distinct from the discursively informed concept of construction, drawing attention to how embodied and affective social and material relationships shape how subjects construct meanings. Drawing on data produced as part of the [project], we illustrate how emotional attachments can lead subjects to identify with consumption and disposal practices in particular ways, thus influencing the degree to which such practices are perceived as wasteful. Rather than viewing waste as the product of abstract knowledge, values or norms specifying the efficiency of resource flows, we show how tangible, intersubjective and interdependent experiences of the world rub-up against and re-shape articulations of waste in everyday life. From this we argue that approaches to waste reduction and pro-environmental behaviour should look to the tangible interdependencies through which subjects experience and designate waste in practice.

2. THEORISING WASTE: BEHAVIOUR, PRACTICE AND INTERDEPENDENCY

2.1. Context, Norms and Values in Policy and Pro-Environmental Behaviour Discourse

While we opt for a practice-based rather than behavioural model, for many the extensive work on pro-environmental behaviour has provided a useful starting point for considering waste and waste reduction. Beginning by noting the ‘value action gap’ between stated intentions and actions, this literature models human agency as the product of individual decision making processes (Kollmuss & Agyeman, 2002).

Within this literature, the role of values and identities is somewhat contested. Attitude, behaviour choice and theory of planned behaviour approaches have tended to treat values as little more than the sum of social norms. Here values take the form of personal norms, the internalised products of injunctive messages and subjective observations of what constitutes acceptable or average behaviour. Combined with situational constraints, beliefs about the causal efficacy of an action, and judgements as to possibility and convenience of carrying it

out, norms are key drivers of behavioural choices (Ajzen, 1991; Kollmuss & Agyeman, 2002; Corraliza & Berenguer, 2000). Conversely value-belief-norm approaches identify pro-environmental behaviour with acting on personal norms, which are accepted on the basis of prior knowledge and beliefs located in relatively stable value sets that may be more or less altruistic, egoistic or biospheric in orientation (Steg, et al., 2005; Stern, 2000). While allowing for contextual changes to facilitate behavioural reassessment, these approaches also emphasise the capacity for norm or value driven behaviour to become habitual and entrenched over time.

For others, values and norms are variables rooted in self-identity, their acceptance determined by individuals' self-conceptions as role holders or members of particular social groupings. In this view habitual conformity to norms and more intentional symbolically significant behaviours are undertaken for the social acceptance and emotional rewards they provide (Nigbur, et al., 2010; Whitmarsh & O'Neill, 2010). Nevertheless, identifying as, for example, a recycler does not always require acceptance of pro-environmental norms and values (Thomas & Sharp, 2013; Rettie, et al., 2014). Collingwood and Darnton (2010) suggest that identifying with values of frugality, thrift, anti-consumerism can all alter perceptions of appropriate consumption and disposal behaviours in ways which may enhance or limit participation in various pro-environmental behaviours.

2.2. Practice Theory, Interdependency and Biographical Texturing

The idea that values and behaviours are rooted in identity is not unique to behavioural models. Theories of practice suggest that identifying as a practitioner of a given skill can endow subjects with access to values and meanings internal to that practice. Such values may encompass ideas about what it is to perform a practice well, or norms of behaviour and beliefs about the desirability and efficacy of particular actions. They derive from rules about

what participation in a given practice entails that are widely recognised by the communities participating in it (Shove & Pantzar, 2007; Wenger, 1998). Where practice-theoretical approaches differ from approaches discussed earlier is in their insistence that identities are one among other co-evolving elements of practice. For Shove et al. (2012, p. 14), these elements consist of:

- *materials*- objects, technological devices, tangible physical entities and the stuff of which they are made
- *competences*- skills, embodied know-how and technique
- *meanings*- symbols, beliefs, ideas, norms and values.

Practices are never the products solely of individual choices, but instead result from the making and breaking of links between configurations of elements that co-evolve over time (Shove & Pantzar, 2007). Individuals are then understood as carriers of practices whose identities and actions are patterned by the contextualised relationships and shared routines that are shaped by practices (Reckwitz, 2002; Strengers & Maller, 2012). Over time, old practices may be transformed or new ones introduced through the migration of ideas, frames of reference and competencies between practices (Maller & Strengers, 2013; Shove, et al., 2012). Practices may also be influenced by biographical experiences of transformation which pattern the meanings and competencies carriers develop throughout their lives (Hards, 2011; Wenger, 1998).

Given practice theories' insistence on the co-evolution of meanings, materials and competences, little room is left in some iterations for ideas, values or identities beyond the knowledge and know-how enrolment in practice provides (Reckwitz, 2002). Elsewhere (Author Paper), have suggested it is the performance of a practice according to shared understandings of proper performance that makes participation meaningful and internally

rewarding- securing access to valued culturally available identities. For Schatzki, to engage in practice is to become subject to its 'teleoaffective structures' which hierarchically order tasks and projects, specifying the normatively appropriate purposes and emotions they produce (2003, p. 193). By insisting such structures are products of practices rather than simply being the mental states of individual practitioners, Schatzki leaves space for multiple intersecting practices to differently shape individual identities, desires and emotional attachments to particular elements of practice.

Other practice theoretical work has sought to move beyond accounts that embed individual performances thoroughly within structures of practices. Hobson (2006) notes how the integration of sustainable consumption technologies into the home does not simply script consumer practices. Instead, it can be a prompt for ethical negotiation between object and subject which may draw in a wider array of values and emotional commitments that shape perceptions of reasonable consumption and disposal activities. Drawing on Collingwood's theory of interaction-rituals, Spaargaren (2011) suggests material flows and the practices that sustain them are motivated by the emotional energy interaction with symbolically significant objects provides. Desire, fantasy, cultural meaning and social solidarities are positioned as external to these flows but sustain emotional investment in the meaningful practices which propel them through society. While both these accounts depart from the kinds of embodied relationships and attachments we wish to focus on, the notion of object relationships as sites of ethical negotiation and meaning making that can influence how people engage in practices provides a valuable starting point for our own work.

In other work from [Project], we have sought to illustrate how regimes of practice serve to not only sustain particular routines, but also valued emotional attachments, identities and inter-subjective relationships (Author Papers). While shared meanings may mediate these

relationships and provide some emotional rewards that are internal to a given practice, experiences of attachment and relationships at the subjective level are ontologically distinct from and irreducible to such structures. Thus, we follow Borgmann (1993), in arguing interactions with some objects (for example, stoves and fireplaces) provide, physical, emotional and imaginative satisfaction, derived from the embodied experiences and relationships of care that practices involving such objects enact (Author Paper).

Similarly the concept of attachment, derived from object relations theory and developmental psychology, captures the sense of physical and emotional security we derive from our relationships with other subjects and objects, the range of which expands as we transition into adulthood (Bretherton, 1992; Winnicott, 2005). For Marris (1996), attachment allows us to make sense our place in an uncertain world, providing the sense of emotional security we need to explore and act within it. Others also emphasise the centrality of attachment relationships to identity formation. In such accounts individuation takes place through a series of relationships with other subjects (starting with caregivers), objects, places and ideas, such that practical interactions and interdependencies between them become central to subjects' conceptions of self and also to their capacity to act in the world (Groves, 2015; Yates & Day Sclater, 2000). Identity is thus dependent on ongoing processes of attachment formation, loss and re-attachment, and so is our sense of agency and our propensities to adopt practices and perform them. Conversely, the emotional attachments and competencies we develop as practitioners may induce us to seek out new social, cultural or object relationships.

Working with ideas of practice and attachment, rather than norms and behaviour, fundamentally alters how we approach the production of waste in daily life. Practice theory situates waste as a product of the material contexts we inhabit and the competencies we

develop over time. What defines waste changes over time as a result of the co-evolution of competencies, materials, and meanings (as when recycling practices change as a result of technological innovation). Relationships of attachment to objects and other subjects add more complexity, as is demonstrated by accounts of waste that emphasise the shifting meanings and emotional values objects take on within social networks as individuals within them proceed through their life-course (Gregson, et al., 2007). In contrast to top down models that pre-specify waste as a particular form of substance or specific set of individual behaviours, we show below how subjects construct and texture waste as performers of practice but also as participants within affective and embodied interactions and relationships. Through such practical and emotional interdependencies, consumption and disposal routines are physically and emotionally felt, their texture shaping how subjects define what is useful, useless, efficient or wasteful.

3. [PROJECT]: RESEARCHING THE TEXTURING OF WASTE

The following sections draw on data generated within phase one of the [*Project*], a qualitative longitudinal study examining personal interactions with energy across the life-course. The project sought to encourage participants to explore through personal narratives their changing identities, temporal and spatial contexts, examining how pasts and imagined futures shaped energy related practices in the present [Authors]. Narrative elicitation has been praised for its capacity to examine dynamic mediations of identity and socio-cultural positioning in and through time, and for its capacity for insight into transformative moments and future expectations in which subjects reassess, defect from or enrol in new practices (Finn & Henwood, 2009; Hards, 2012). In eliciting biographies tied but not restricted to energy use, the [Project] has rendered visible, to some extent, what Pink and Mackley (2012) describe as the contingent material, sensory, social and experiential aspects of mundane

practices through which places, relationships and identities are (re)negotiated and (re)made, as well as their contribution to the meaning of energy (and waste) in everyday life.

The extracts we present below were drawn from narrative interviews conducted in phase one of the project, representing passages where participants discussed practices and relationships they considered to exhibit waste or wastefulness. 74 interviews were conducted, drawn from four case-sites selected for their capacity to represent a range of energy use practices and contextual variations:

- Ely and Caerau, Cardiff- an inner-city ward
- Peterston-Super-Ely, Cardiff- an affluent commuter village
- Lammas Tir-y-Gafel ecovillage, Pembrokeshire- a nine household low-impact development
- The Royal Free Hospital, North London- a large teaching hospital

The analysis highlights the ways in which participants' understandings of waste were textured through their everyday lives. Waste was not the subject of prescribed questions or prompts used in phase one interviews. Rather, in treating 'energy' as an element of practice they created spaces for participants to discuss its use and embedding in a range of materials and practices (including its embodiment in physical objects). Discussions of waste appeared within interviews as an emergent theme, one which participants textured in relation to a variety of everyday practices and experiences. The extracts we present below illustrate some of the key means through which attachment, emotional investments in practices, and felt interdependence, textured particular constructions of waste.

3.1. 'Blend[ing] our lives': waste reduction and familial attachment

In line with much of the pro-environmental behaviour literature, awareness of wasteful activity as contravening social norms was commonplace across case sites. Minimising waste

in lighting, heating and disposal were often framed through reference to descriptive and injunctive norms to consider the environment or cut costs. Compliance with injunctive slogans such as ‘reduce, reuse, recycle’, and common descriptive norms for energy conservation and domestic recycling practice were taken as the proper and appropriate responses of environmentally conscious citizens (Thomas & Sharp, 2013). Others interpreted waste as a cost, not in purely calculative terms, but also through ideas and assumptions about common standards of normal or ‘proper’ resource consumption. Often cost and environmental norms overlaid one another, as seen in Suzanna’s (RFH) account of waste reduction norms experienced as a child and today at home and in the workplace:

‘I think, when I was a child the argument was, switch off the light because it costs a lot. Whereas today the argument would be more, switch off the light because it costs a lot and it’s not environmentally friendly.’

Suzanna contrasts changing meanings connected to the practice of switching off electrical products which she associates with the injunctive norm ‘switch off the light’. In part this can be read as an example of meaning migration, in which an old practice gradually comes to be integrated into new cultural contexts (Maller & Strengers, 2013). In this view the meaning of waste and the practice of switching off becomes renegotiated through the introduction of an environmental frame of reference, overlaying cost reduction norms.

However this interpretation belies more complex interactions between injunctive norms and attachments to shared practices and identities present in Suzanna and others’ interviews, represented particularly in discussions of parental attitudes and practices relating to energy. Perceptions of familial hardship, thriftiness and frugality were often re-interpreted in light of contemporary environmental concerns. Recounting her childhood in Brazil, Suzanna provides a narrative of hardship encountered due to the failure of a family business, describing the changes in normality and expectation the family underwent:

‘So we had to downsize a bit and downgrade. And one of the things that we had to learn is how to use less resources because then my parents couldn’t afford to have big energy bills, big water bills. And we had to reduce as much as we could, still keeping warm and clothed and everything. I think my parents were great on that because they managed to show us that life could still be very good... Because we’re a very close family, we didn’t need to have anything that we had before in a material way, because we would spend time with each other, we would read together.’

Normative expectations of warmth and clothing remain present in this extract, positioned as essential elements of modern family life requiring trade-offs in the light of newfound situational constraints on consumption. Partly this narrative points to the priority given to highly normative forms of consumption deemed necessary by wider society (Shove, 2003). However Suzanna also highlights the more affective emotional bonds holding the family together during their transition to more constrained economic circumstances. Waste is constructed not in relation to habitual lighting and heating patterns, but instead in relation to what are felt to be expenditures surplus to the health and togetherness of the family. This process reflects common themes in literatures on attachment and insecurity, wherein perceptions of personal insecurity lead subjects to seek stability from relationships of attachment and the structures of shared meaning and competence they provide (Scannell & Gifford, 2010; Marris, 1996). In Suzanna’s narrative it is shared practices of collective reading and close living which allow her to re-conceptualise the relations she deems necessary to a good life. For Suzanna familial attachments become key elements texturing how she perceives waste.

Familial togetherness reappears later in Suzanna’s narrative as a central organising principal for her waste reducing efforts. In relation to her shifting and unstable rental and lodging arrangements since moving to the UK, energy use becomes intertwined with Suzanna’s description of how she ‘blended into the family habits’ of her cohabiters. ‘Blending’ applied to a range of practices from cooking and laundry to shared television viewing, and remained a theme in Suzanna’s current relationship and domestic practices:

‘And now that I’m living by myself, I try to keep that and, as I said, bring my boyfriend’s clothes to wash with mine if I don’t have a big darks washing, so it can compliment. I cook for both of us, sometimes I go to his house and then he cooks for both of us. It’s easier to make things that we both like, so I don’t have to cook two separate foods. Yes, try to blend our lives as much as we can, in order to make it easier and waste less time, less energy, less money.’

Mirroring her childhood narrative, Suzanna constructs waste reduction as inherent to interpersonal connectedness and participation in shared practices. The processes of blending she describes stitches together Suzanna’s own daily practices with those of her cohabiters. These practices then take on the texture of the emotionally stabilising familial practices of her youth. Suzanna does not privilege any single motivation, invoking money, time and energy as forms of waste lessened by shared cooking and laundry routines. However her description of blending as waste reducing, speaks to a texturing of wastefulness in opposition to attachments associated with the routines of familial togetherness which provide her with a sense of stability and self-efficacy as she manages her transition from Brazil to life in the UK. Despite strong environmental value statements made elsewhere in Suzanna’s interview, they are not foregrounded in her account of waste. Instead waste is textured by memories of blended family life, and is constructed as a failure to attend to the relationships practices that allow her to manage the pressures posed by financial or geographical life-course transitions.

3.2. ‘I’ve carried it forward’: repurposing norms, transition & identity

Transitional attachments to familial practices and identities arose in several interviews, often associated with cultural narratives of scarcity and frugality. These attachments were often signified via injunctive norms and slogans (‘make do and mend’, ‘waste not, want not’), however these did not carry identical meanings for participants. Rather slogans referred back to the biographical relationships and identities participants valued and associated them with (Thomas & Sharp, 2013; Hards, 2011).

For Jack (Ely), the injunction to ‘waste not, want not’ conjured strong memories of regional identity and experiences of his mother’s domestic practices:

‘Well I’m from Yorkshire and we make do and mend and I think when I grew up we didn’t have a lot of money and so we did recycle things, my mum would knit our clothes and make our clothes and she would take old knitted garments apart and wash the wool and reknit it and she would collect, because she came from a generation that lived through the war and so they saved things, they’d save and wash out plastic bags and keep pots and things and she’s actually got a hoarding issue with it...’

Above, Jack associates his Yorkshire identity and familial background with frugal norms and practices. Saving potentially useful items and applying skills to repair and reuse old garments and fabrics are remembered as practices integral to this identity. Invoking the wartime generation and slogan, ‘make do and mend’, Jack explains these practices as necessities of scarcity and rationing, while tying them to the symbolically powerful imagined community embodied in narratives of the Second World War (Anderson, 2006). Jack therefore situates waste reduction within the cultural discourses and familial identities he values.

Explaining his aversion to waste today, Jack cites his eating practices and disgust at behaviours he perceives as wasteful. The sickening feeling he describes is discomforting precisely because such practices contravene his biographically experienced norms and identity attachments:

‘... I grew up with that so we didn’t waste anything so I don’t do it now, I’ve carried it forward, I hate throwing anything away, I would adjust my meals to accommodate something leftover from a previous day. I see people and I would, I eat everything on the plate, I see people wasting so much it makes me feel quite physically ill actually. I actually feel ill with it, I just see it as unnecessary.’

Elsewhere in Jack’s interview, he describes his business buying and selling ‘vintage and retro items and collectibles’ in terms of ‘re-using’, which adds to his claims to waste awareness. In each case the meaning of waste reduction and reuse migrates to and is transformed within new practices as Jack moves through his life-course. Waste is no longer

defined by hardship, scarcity and frugality. However, embodied and emotional and cultural experiences continues to be an important part of his identity and practices, particularly in relation to eating.

There is, however, ambivalence in how Jack's textures waste through mentions of his mother's 'hoarding'. This theme informs Jack's discussion of his 'efficient' household consumption and disposal strategies, whereby he tries to only keep items he finds useful:

'But everything else I use and... I'm quite proud to say that because I've cut things down to what I need. In my mums house she's kept everything from everywhere so she has lots of things that she doesn't use, I don't do that. I've made a conscious decision to just keep the things I use and that goes with everything so if I do have a compulsion it's to do with being efficient.'

Jack describes his mother's collecting 'everything from everywhere' as problematic. Nonetheless he understands hoarding as addressing uncertainty, cluttering life with unnecessary material objects that may 'one day' be useful. Jack's narratives construct hoarding as an old-fashioned compulsion, unsuited to contemporary consumer identities and cultures in which accumulating and wasting goods is easier. Opposing both forms of consumer identity, Jack's conception of efficiency allows him to manage relations with material objects in a manner consistent with his desired identity. Rather than rejecting his 'Yorkshire' identity, 'efficiency' allows him to carry it forward, re-interpreting and re-integrating his aversion to waste within new contexts and practices.

In contrast with its dominant meaning in policy discourse, for Jack 'efficiency' relates to the use and enjoyment he derives from particular practices and objects. Noting that his ownership of two vacuum cleaners and a hot-tub could be perceived as wasteful, he deems them nonetheless acceptable given the satisfaction their use provides. Similarly he enthusiastically describes the pleasure and use provided by his 'gadgets' built in clocks and standby lights:

‘at night time it’s like the Starship Enterprise, everything has got a little light on it but I quite like it.’

Such assemblages speak to notions of homeliness and sensory comfort which have formed recurrent themes in other [Project] publications [Authors], when different ways of using energy are valued to the extent they reinforce valued relationships, identities and attachments. In Jack’s case, home is constructed as a space wherein threats of a potentially wasteful modern society are, through his idiosyncratic interpretation of efficiency, balanced against a cultural and familial tendency to hoard. In constructing home as a space of efficiency, Jack seeks to secure his valued ‘Yorkshire’ identity, while transitioning to a very different lifestyle from that of his mother. Negotiating this liminal space between identities Jack experiences varying degrees of friction between the diverse energy and waste implications of the practices with which he identifies, a phenomenon further elucidated in other [Project] publications [author papers].

The biographical experiences narrated in Jack and Suzanna’s accounts bear resemblance to Jensen’s (2008) account of the ‘consumption of everyday life’, wherein the perceived normality of a practice and its fit with subjects’ desired lifestyles and identities combine in the meaning given to a particular mode of consumption, or in this case, waste reduction. However, the accounts we present also highlight ways in which transitions in identity over time are materially and emotionally shaped by shifting attachments and relationships with other subjects, objects and contexts which may be experienced as necessary, wasteful or ambivalent. For Jack, Suzanna and several other [Project] participants, wastefulness was also textured by the uncertainties and insecurities associated with life-course transitions. In such instances, disruptions to material and cultural contexts can operate to reframe distinctions between necessity and wastefulness.

3.3. *‘All that used to feed the farm animals’: tangible interdependency & narratives of loss*

In both the accounts we have seen so far, the retexturing of waste has formed a key component of participants' attempts to conceptualise those elements of life they deem necessary to their identities and their flourishing. This in some ways mirrors conceptions of waste as garbage, materials deemed that deemed used or useless that are best forgotten and cast aside (Kennedy, 2007; Hird, 2012), however such accounts tend to miss the ways usefulness and uselessness can be re-evaluated and re-articulated over time. By flourishing, we refer to concerns for the 'good life', interpreted relationally as products of the relationships which make life possible and give it meaning. A growing literature on environmental ethics situates human flourishing within what Hannis (2015) terms networks of 'acknowledged ecological dependence'. It is only through awareness of and attending to our interdependencies, that we can come to understand our own identities as mediated by the wider preconditions for our flourishing (Adam & Groves, 2011; Hannis, 2015). For many [Project] participants, waste was textured through reference to these physically and emotionally tangible interdependencies.

Interdependence often appeared in nostalgic cultural narratives bemoaning the loss of past competencies as giving rise to more wasteful contemporary practices. While a minority of participants constructed post-industrial modernity as inherently harmful or wasteful, several narratives were more ambivalent- balancing lost competences with benefits from the decline of polluting industries and improved energy efficiency. Comparing contemporary energy provision and disposal routines to older or obsolete domestic norms and practices, the narrative provided by Pat (65, Ely) exemplified such ambivalence. Describing contemporary life as 'a lot quicker and less electricity used', she nevertheless describes several obsolete physically and energy-intensive practices as waste reducing:

'And then you used to have the boilers to stoke up the heating systems... far more chimneys, yeah and the only thing I do think that we used less of are the landfill areas because alright, we used to use a washing machine or whatever to boil nappies but

when you think of the amount of nappies and tissues that get buried! We have the open fire, well that's [gesturing] a fake one. But with the open fire your groceries used to, you used to have a potato bag, which you went to the shops with and that was an old canvas bag, much of what they're trying to do today... Now any paper, apples or whatever if they came in a brown bag they were used to light your fire, so you didn't bury them, so much so that you burnt most of your packages cos that was for your fuel lighting to get your fire going. Anything around the house, dust or whatever, that would have got thrown on the fire. So you burnt more than you ever threw out.'

Above, Pat outlines the wastefulness she sees in contemporary landfill disposal through comparison with past practices wherein by-products from shopping, food production and domestic cleaning formed valued materials for domestic heating. Conversely contemporary life is presented as a throw-away culture where formerly reusable materials (nappies, dust, paper bags) are no longer part of the tangible interdependencies of daily life. Where present-day practices are discussed they are seen as imitating past usages, as in the case of potato sacks for shopping, or the 'fake' fireplace.

The disappearance of boilers and chimneys Pat references above is symbolic of the shift away from the tangible energy and resource interdependencies of her youth to more abstract systems requiring lower levels of direct physical (but also emotional) engagement. Lost tangibility is underscored as her narrative moves to declining domestic and localised agricultural practices:

'Your pig bin for your swills and that, that we now put out in a different bag, which is a bag to put the rubbish, the food and the waste in, that was in an old tin bucket and you washed it around with disinfectant once a week or whatever, that cost nothing, and then a man with an old electric cart used to come from the farm. So all that used to feed the farm animals, so you didn't have that either. So where they are saying the environment now is better, in that respect I don't think it was but in an electricity sense I think we used more then that what we do now.'

Mirroring her earlier discussion of landfill, Pat's narrative here illustrates the detachment of kitchen scraps from tangible and meaningful practices of swill collection and animal husbandry, and their recruitment into a more anonymous system of domestic waste collection. Her sense of loss in this transition is highlighted by her attention to waste 'you

didn't have' in the past but do today, and partial disagreement with (what she perceives as) the consensus that the general environment is better today. Through Pat's discussion we gain a sense of her attachment to an assemblage of past practices stitching together a range of material practices including shopping, heating and cooking with the locality and community she inhabits. In putting herself at the centre of these interdependencies, Pat's daily practice assumes the role of mindful attendance to their needs, the use of by-products as resources becomes an essential pre-condition for her own wellbeing. In severing these interdependencies, formerly useful resources become re-textured as waste.

In remembering past attachments to meaningful practices, Pat's narrative of interdependencies renders visible the changes she and others have experienced in the shift to faster, less meaningful infrastructures of energy and resource provision [Authors]. Furthermore, it highlights some of the deeper yet less tangible interdependencies associated with these more contemporary flows- in particular the waste elements they produce and dependence on landfill disposal, artificial nutrients and animal feed and distant sources of energy generation they entail. Constituted outside the more tangible practices from which Pat draws reference, such systems contribute to the sense of unease, dislocation or loss which permeate the above extracts from her interview.

3.4. 'It basically connects people to their key resources': skills and re-making connections

The idea of waste as generated by the loss of, or disconnection from wider energy and resource systems, can in part be read as an emotional response to the severing of links to what Adam & Groves (2007, p. 198) term 'lived futures'. Comprising relationships and narratives of care, lived futures provide orientation to the people, elements and practices that will continue to matter in uncertain futures- domesticating uncertainty by making tangible the future relations that may be priorities or subject to risks (Adam & Groves, 2011; Henwood &

Pidgeon, 2013). The loss we perceive when reading accounts such as Pat's, stems in part from her disconnection from past interdependencies that allowed her to make sense of her identity and place in wider social systems. However, disconnection or surrender to perceived wastefulness were not always passively received. A sizeable minority of participants described strategies for re-connecting with the non-human world, creating new lived futures by articulating new relationships between themselves their families and the material flows they engage with.

Several participants across case sites spoke of their efforts to develop new competencies and material assemblages to reconnect with these systems. Discussing the 'vulnerability' he perceives in dependence on national energy infrastructures, Jonathan (Peterston) extensively narrated the home alterations he has made in the past and would like to make in the future. Ranging from the development of capacities to cook and preserve food without depending on external infrastructures to installing a water-meter to monitor consumption and waste, he narrated a desire to make tangible connections to human and natural resource systems and experience their textures in more rewarding ways. In other cases efforts to re-connect included installing solar panels, meters for monitoring electricity consumption, and the maintenance of various DIY skills. Participants described these skills and assemblages as means of facilitating more careful and resourceful management of systematic interdependencies, in contrast to wasteful dependence upon them.

However, it was at Lammas where efforts to re-establish embodied interdependencies and attachments to wider resource systems appeared most vividly. Arising from purposeful but disruptive transitions to low impact 'off-grid' living, the following extracts from Peter exemplify the sense of interdependency Lammas residents seek to engender in their new identities and lifestyles:

‘...you know when people have some kind of direct relationship with their resources that’s the best way that I conceive of cultivating responsibility, and in many ways that is what Lammas is about; it basically connects people to their key resources be it water, fuel, food, air, soil and thus engenders a sense of responsibility. And micro-generation I think is a step in the right direction.’

Peter constructs living off-grid as a means of fostering a more direct relationship between people and the resource systems on which they depend. The terminological choice, ‘cultivating responsibility’, places his discussion within a horticulturalist discourse whereby interdependency requires effortful working with local resources and environments. His reference to ‘responsibility’ textures such practices as mindful and aware in contrast with the wastefulness he associates with less tangible resource systems. For many Lammas residents, connectedness took the character of connection to land and a sense of mutual flourishing encompassing humans and crops engendered by growing one’s own food (for a fuller discussion see [Authors]). In these accounts various ‘waste’ or by-products, take on characteristics and values associated with permaculture and its reduced reliance on external chemical and economic inputs (Suh, 2014).

For others, including Peter, connectedness was shaped via the physical construction and management of off-grid domestic energy generation:

‘And then see that rig outside? So we’ve got 500 watts of PV there again to an independent battery unit which connects to our sockets so that’s the main limiting factor and so we’ve got a fairly good idea of how much electricity we can use without sort of taking the voltage levels too low. And the kids have as well and that is a sort of hard thing to put your finger on, there are read-outs, we’re just so used to checking the readouts we kind of know now and it makes a massive difference whether it’s sunny or not so we know that if its sunny Harry can play his music full blast and you know it’s not a problem he can play his music all day and into the evening and if it’s been gloomy like today for three or four days we know that we’ll probably need to check before turning on the computer for a film you know, or whether we watch a film on Faye’s little small laptop or whether we use Harry’s big LCD screen you know so I think all of us are really good at conserving power and that is one of the massive advantages of being off-grid.’

Following from a longer description of the electricity-generating systems he has installed in his family’s home, here Peter describes the changeable ways in which connection to the

non-human world serves to designate waste. In times of abundance higher levels of consumption can be justified. However when batteries run low, otherwise justifiable consumption practices become wasteful. In addition he outlines the means through which the family is developing new competencies in the construction of off-grid electricity generation, and in the interpretation of its numerous read outs and weather patterns to judge resource availability. Peter constructs these competencies, as making tangible and manageable resources, which before his move to Lammas, were experienced as highly mediated abstract systems. The physical experience of building, exposure to the elements and resource constraint provide residents with a greater appreciation of interdependencies between themselves and their physical environment.

Peter's detailed description of his electrical interdependencies and the attentive practice of observing read-outs and the weather, speak to a relationship of care and interdependency he and other Lammas residents found meaningful and rewarding. This caring relationship is further underscored in the weight he accords it in relation his children and wider family. In positioning conservation and familial activities as interdependent with their environment, the maintenance of that connection becomes intertwined with the family's collective enjoyment of watching films or listening to music. The transition to off-grid life thus becomes a means of constructing and enhancing the emotional attachments through shared participation in a range of interconnected practices linking the intersubjective experiences of the family to their management of shared resources. Within this assemblage of devices, intersubjective relationships and natural resources, activities such as watching an LCD TV become enactments of interdependency tying the family to each-other and the non-human system in which they are embedded.

Some aspects of this narrative were mirrored in accounts from Peterston and Ely; in particular mention of energy monitors, as a technology voluntarily brought into the home to better understand and manage energy consumption and waste. In mainstream sites the integration of energy monitors was often seen as a way of rendering ‘wasteful’ consumption visible, prompting personal and familial renegotiations (sometimes described as ‘nagging’) around energy use. While this marked one means of making the experience of waste more tangible, at Lammas monitors operated as a means of interpreting a more holistic connection to and relationship with the environment that also included experiences of bodily warmth, quality of light and physical exertion. For Peter and others at Lammas, ‘being off-grid’ is not merely a statement of position in a physical infrastructure, it is an active form of identification with a more tangible complex of interdependencies that were often defined in opposition to ‘wasteful’ consumer culture.

In providing detailed descriptions of their assemblages for electricity production, attendance to batteries, meters, crops and soil, Lammas residents described waste by talking about experiences of physical, inter-subjective and socio-cultural relationships. Rather than experiencing waste as mediated by abstract norms, materialised in bills or unhelpful objects cluttering their homes, some forms of waste became re-textured as elements vital to cooking, food production, heating and leisure practices. Such deployments are only possible in and through the development of new competencies, which allow for the management of interdependencies formerly surrendered to abstract systems. Indeed Pat would likely recognise these more tangible interdependencies as requiring the re-acquisition of old skills and ways of doing, something not lost on many Lammas residents themselves.

The desire for more tangible interdependencies with one’s environment is was not unique to Lammas residents. The desire for a sense of control and self-efficacy has been recognised

as a key means through which loyalty to a particular practice is maintained (Shove, et al., 2012). Similarly psycho-social concepts of a secure (though flexible) holding environment or transitional space in which subjects develop skills to anticipate future events and respond to them has long been viewed as essential in generating a sense of effective agency, identity and security (Groves, 2015; Marris, 1996; Winnicott, 2005). While Suzanna and Jack seek security within their immediate relational and object environments, efforts to recover more tangible forms of interdependency echo Kenneth Shockley's (2014) suggestion that facing the uncertainty of climate change, we must identify new sources for societal flourishing by (re)developing our capabilities.

4. CONCLUSION

This paper has reconsidered waste as material flow and as activities, emphasising the role of attachment in shaping how waste is constructed through participation in practices. It has highlighted the role of practice in constituting attachments, while also detailing how embodied and affective relationships texture the meaning of waste in everyday life. By presenting a broader textural analysis, we have been able to explore experience and practice, and some of the ways in which they come together, as physically and emotionally vital elements of embodied relationships that are part of everyday life within wider systems.

Responding to constructions of waste as material flows which reflect abstracted notions of inefficiency, habit, values or norms, we have illustrated how everyday articulations of waste are contingent upon the practical enactment of social, material and cultural interdependencies. In examining how elements of these interdependencies become stitched together, we have paid particular attention to ambivalences, areas where old attachments, identities and practice relationships undergo rupture. By analysing narratives of socio-cultural shifts and articulations of waste and value, we have been able to show how subjects manage

these ambivalences by recovering, re-configuring and re-stitching tangible and emotional interdependencies as part of what tangibly makes a life worth living now, and as part of efforts to ‘tame’ uncertainty about the future.

This paper thus raises questions for research and policy efforts that aim to reduce waste and promote pro-environmental behaviour. We have shown how the meaning of ‘waste’ can be textured by attachments, shared relationships, meanings and object relations. Experienced both subjectively and intersubjectively, such relationships may undergo ruptures and re-attachments over time. This may help explain the puzzle in pro-environmental behaviour literature as to why identifying with particular value statements can nonetheless be associated with contradictory environmentally significant behaviours (DEFRA, 2008, p. 7; Collingwood & Darnton, 2010). While policy may never be capable of catering to individual biographies and transitions in the way this study has, by signposting embodied and emotional relationships and interdependencies between social, cultural and practice identities, we have identified key mechanisms through which subjects articulate the preconditions for present and future flourishing. Further research is required into the psycho-social and practical dimensions of these relationships in order to develop more nuanced, socially and affectively aware models for pro-environmental interventions into everyday life. More significantly, by identifying tangible interdependencies as key elements in the construction of waste reducing practices, we might begin to question policy approaches focussed on information provision and systemic efficiency. To the extent such measures seek to bypass practice and its meanings in favour of ‘nudging’ and infrastructural transitions towards more sustainable practices, they may further undermine the identities, competencies and attachments subjects require to engage in alternate waste reducing practices.

REFERENCES

- Adam, B. and C. Groves. 2011. 'Futures Tended: Care and Future-Oriented Responsibility'. *Bulletin of Science, Technology & Society* 31 (1):17-27.
- Adam, B. and C. Groves. 2007. *Future matters: Action, Knowledge, Ethics*. Leiden: Brill.
- Ajzen, I. 1991. 'The Theory of Planned Behaviour'. *Organisational Behaviour and Human Decision Processes* 50 (2):179-211.
- Anderson, B. 2006. *Imagined communities: Reflections on the origin and spread of nationalism (Rev. Ed)*. London: Verso.
- Barr, S. 2007. 'Factors Influencing Environmental Attitudes and Behaviors: a UK Case Study of Household Waste Management'. *Environment and Behavior* 39 (4):435-473.
- Borgmann, A. 1993. *Crossing the Postmodern Divide*. Chicago: University of Chicago.
- Bretherton, I. 1992. 'The Origins of Attachment Theory: Jon Bowlby and Mary Ainsworth'. *Developmental Psychology* 28 (5):759-775.
- Collingwood, P. and A. Darnton. 2010. Motivations for pro-environmental behaviour: a report to the Department for Environment, Food and Rural Affairs by RESOLVE. London: DEFRA.
- Corraliza, J., and J. Berenguer. 2000. 'Environmental Values, Beliefs, and Actions: a Situational Approach'. *Environment and Behaviour* 32 (6):832-848.
- DECC. 2011. *The Carbon Plan: Delivering Our Low Carbon Future*. London.
- DECC. 2015. *Smart Metering Early Learning Project: Synthesis report*. London.
- DEFRA. 2008. *A Framework for Pro-Environmental Behaviour*. London.
- Douglas, M. 2005. *Purity and Danger: An Analysis of Concept of Pollution and Taboo*. Abingdon: Routledge.
- Ellen MacArthur Foundation. 2013. *Towards the Circular Economy: Economic and business rationale for an accelerated transition*. Ellen MacArthur Foundation.
- Finn, M. and K. Henwood. 2009. 'Exploring Masculinities Within Men's Identificatory Imaginings of First-Time Fatherhood'. *British Journal of Social Psychology* 48 (3):547-562.
- Gee, S. 2010. *Making Waste: Leftovers and the Eighteenth-Century Imagination*. New Jersey: Princeton University Press.
- Gregson, N., A. Metcalfe, and L. Crewe. 2007. 'Moving things along: the conduits and practices of divestment in consumption'. *Transactions of the Institute of British Geographers* 32 (2):187-200.
- Groves, C. 2015. 'The Bomb in my Backyard, the Serpent in my House: Environmental Justice, Risk, and the Colonisation of Attachment'. *Environmental Politics* 24 (6):853-873.
- Hall, S. 1996. 'Introduction: Who Needs Identity?' In *Questions of Cultural Identity*, edited by Stewart Hall and Paul Du Gay, 1-17. London: Sage Publications.
- Hannis, M. 2015. 'The Virtues of Acknowledged Ecological Dependence: Sustainability, Autonomy and Human Flourishing'. *Environmental Values* 24 (2):145-164.
- Hards, S. 2011. 'Social Practice and the Evolution of Personal Environmental Values'. *Environmental Values* 20:23-42.
- Hards, S. 2012. 'Tales of Transformation: The Potential of a Narrative Approach'. *Geoforum* 43 (4):760-771.
- Henwood, K. and N. Pidgeon. 2013. *Future Identities: Changing Identities in the UK- the next 10 years: DR17*. London: Government Office for Science.
- Hird, M. 2012. 'Knowing Waste: Towards an Inhuman Epistemology'. *Social Epistemology* 26 (3):453-469.
- HM Government. 2013. *Prevention is Better than Cure: The Role of Waste Prevention in Moving to a More Resource Efficient Economy*. London: DEFRA.

- Hobson, K. 2006. 'Bins, Bulbs, and Shower Timers: on the Techno-Ethics' of Sustainable Living'. *Ethics, Place and Environment* 9 (3):317-336.
- Jensen, J.O. 2008. 'Measuring consumption in households: Interpretations and Strategies'. *Ecological Economics* 68:353-361.
- Kennedy, G. 2007. *An Ontology of Trash: The Disposable and its Problematic Nature*. New York: Suny Press.
- Kollmuss, A. and J. Agyeman. 2002. 'Mind the Gap: Why do People Act Environmentally and What are the Barriers to Pro-Environmental Behavior?' *Environmental Education Research* 8 (3):239-260.
- Lane, R. and M. Watson. 2012. 'Stewardship of things: The radical potential of product stewardship for re-framing responsibilities and relationships to products and materials'. *Geoforum*:1254-1265.
- Maller, C. and Y. Strengers. 2013. 'The Global Migration of Everyday Life: Investigating the Practice Memories of Australian Migrants'. *Geoforum* 44:243-252.
- Marris, P. 1996. *The Politics of Uncertainty: Attachment in Private and Public Life*. London: Routledge.
- Nigbur, D., E. Lyons, and D. Uzzell. 2010. 'Attitudes, Norms, Identity and Environmental Behaviour: Using an Expanded Theory of Planned Behaviour to Predict Participation in a Kerbside Recycling Programme'. *British Journal of Social Psychology* 49:259-284.
- Parnell, R. and O. Larsen. 2005. 'Informing the Development of Domestic Energy Efficiency Initiatives: An Everyday Householder-Centered Framework' *Environment and Behavior* 37 (6):787-807.
- Pink, S. and K. Mackley. 2012. 'Video and a Sense of the Invisible: Approaching Domestic Energy Consumption Through the Sensory Home'. *Sociological Research Online* 17 (1):3.
- Quested, T.E, E. Marsh, D. Stunell, and A.D Parry. 2013. 'Spaghetti soup: The complex world of food waste behaviours'. *Resources, Conservation and Recycling* 79:43-51.
- Reckwitz, A. 2002. 'Toward a Theory of Social Practices: a Development in Culturalist Theorizing'. *European Journal of Social Theory* 5 (2):243-263.
- Rettie, R., K. Burchell, and C. Bernham. 2014. 'Social Normalisation: Using Marketing to Make Green Normal'. *Journal of Consumer Behaviour* 13 (1):9-17.
- Rootes, C. 2009. 'Environmental Movements, Waste and Waste Infrastructure: an Introduction'. *Environmental Politics* 18 (6):817-834.
- Scanlan, J. 2005. *On Garbage*. London: Reaktion.
- Scannell, L. and R. Gifford. 2010. 'Defining Place Attachment: a Tripartite Organizing Framework'. *Journal of Environmental Psychology*, 30 (1):1-10.
- Schatzki, T.R. 2003. 'A New Societist Social Ontology'. *Philosophy of the Social Sciences* 33 (2):174-202.
- Shockley, K. 2014. 'Sourcing Stability in a Time of Climate Change'. *Environmental Values* 23:199-217.
- Shove, E. 2003. *Comfort, cleanliness and convenience: the social organization of normality*. Oxford: Berg Publishers.
- Shove, E. and M. Pantzar. 2007. 'Recruitment and Reproduction: The Careers and Carriers of Digital Photography and Floorball'. *Human Affairs* 17 (2):154-167.
- Shove, E., M. Pantzar and M. Watson. 2012. *The Dynamics of Social Practice: Everyday Life and How it Changes*. London: Sage.
- Spaargaren, G. 2011. 'Theories of Practices: Agency, Technology, and Culture: Exploring the Relevance of Practice Theories for the Governance of Sustainable Consumption Practices in the New World-Order'. *Global Environmental Change* 21 (3):813-822.

- Steg, L., L. Dreijerink and W. Abrahamse. 2005. 'Factors influencing the acceptability of energy policies: A test of VBN theory'. *Journal of Environmental Psychology* 25 (4):415-425.
- Stern, P.C. 2000. 'Toward a Coherent Theory of Environmentally Significant Behaviour'. *Journal of Social Issues* 56 (3):407-424.
- Stern, P.C., T. Dietz, T. Abel, G.A. Guagnano and L. Kalof. 1999. 'A Value-Belief-Norm Theory of Support for Social Movements: The Case of Environmentalism'. *Human Ecology Review* 6 (2):81-97.
- Strengers, Y. and C. Maller. 2012. 'Materialising Energy and Water Resources in Everyday Practices: Insights for Securing Supply Systems'. *Global Environmental Change* 22 (3):754-763.
- Suh, J. 2014. 'Towards Sustainable Agricultural Stewardship: Evolution and Future Directions of the Permaculture Concept'. *Environmental Values* 23 (1):75-98.
- Thomas, C. and V. Sharp. 2013. 'Understanding the Normalisation of Recycling Behaviour and its Implications for Other Pro-Environmental Behaviours: a Review of Social Norms and Recycling'. *Resources, Conservation and Recycling* 79:11-20.
- Watson, M., H. Bulkeley, and R. Hudson. 2008. 'Unpicking Environmental Policy Integration with Tales from Waste Management'. *Environment and Planning C* 26 (3):481-498.
- Watson, M., and E. Shove. 2008. 'Product, Competence, Project and Practice: DIY and the dynamics of craft consumption'. *Journal of Consumer Culture* 8 (1):69-89.
- Wenger, E. 1998. *Communities of Practise: Learning, Meaning and Identity*. Cambridge: Cambridge University Press.
- Wetherell, M. and N. Edley. 1998. 'Gender Practices: Steps in the Analysis of Men and Masculinity'. In *Standpoints and Differences: Essays in the Practice of Feminist Psychology*, edited by Karen Henwood, Christine Griffin and Ann Phoenix, 156-173. London: Sage.
- Whitmarsh, L. and S. O'Neill. 2010. 'Green Identity, Green Living? The Role of Pro-Environmental Self-Identity in Determining Consistency Across Diverse Pro-Environmental Behaviours'. *Identity, Place, and Environmental Behaviour* 30 (3):305-314.
- Winnicott, D.W. 2005. *Playing and Reality*. New York: Routledge.
- Yates, C. and S. Day Sclater. 2000. 'Culture, Psychology and Transitional Space'. In *Culture in Psychology*, edited by Corrine Squire, 133-146. London: Routledge.