

# From salvage to recycling – new agendas or same old rubbish?

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*Recent years have seen increased attention paid by geographers to the phenomenon of household waste recycling. Much of this attention by geographers has focused on contemporary recycling, especially contemporary policy and behaviour. This article takes a wider temporal perspective and considers the antecedent 'National Salvage Campaign' of the Second World War. It considers the conceptual lessons from this recycling campaign, drawing out the importance of themes of scale, relatedness, civic duty and positive identity. The article explores the socially constructed boundaries that attempt to find an 'appropriate' place for waste and how such boundaries are constantly reconsidered and redefined.*

**Key words:** waste, recycling, disposal, salvage, Second World War, consumption

We are at the cusp of a recycling revolution. We know what we can recycle, we know how we can recycle – now it is time to recycle that recycling awareness into recycling action. (Elliott Morely 2004)<sup>1</sup>

## Introduction

In recent years geographical research has increasingly engaged with the phenomenon of household waste recycling (see Barr 2002 2004; Robinson and Read 2005). This research has paralleled the movement of recycling up the political agenda and the burgeoning fixation with waste in the popular media. As Municipal Solid Waste (MSW) production from UK households exceeds 28 million tonnes annually (Defra 2006), recycling is central to waste management policy with targets to increase the amount of household waste recycled to 30 per cent (DETR 2000).<sup>2</sup> The hyperbolic opening quote, which came at the launch of the UK's 'national recycling week' in 2004, embodies this current agenda for recycling within the UK and highlights two important issues for its study. First is the belief that recycling technology is sufficiently high to extirpate

waste problems and that the only barrier to this success is its adoption on the ground.<sup>3</sup> Accordingly much recent attention has focused on individual recycling schemes, their participation rates, and the characteristics and attitudes of recyclers (e.g. Barr 2002; Environment Agency 2002). Second, reference to a recycling *revolution* assumes that we are embarking on an entirely new historical phase within waste management, and that there is something new and unprecedented about current efforts to encourage recycling.

While there have been a few studies considering the historical aspects of activities such as sewage disposal and reuse (Sheail 1996), and the technical and social aspects of waste disposal (Strasser 2000), the discussion of household waste recycling has arguably taken place in a temporal vacuum with Goddard conceding that most scholars, and geographers in particular, 'have in general given little attention to past problems of waste disposal' (1996, 275). This presentism within the discussion of recycling is illustrated in the language of recent policy documents that point to the need for this new, unprecedented, activity to 'take root' (Defra 2002, 11) and scholars

arguing that 'New behaviours will need to be stimulated amongst some of the population, and those behaviours must then be maintained' (Tucker and Speirs 2003, 289; emphasis added). Within this narrow purview the genealogy of recycling tends to extend no further back than recycling schemes developed in the 1980s, and specifically the government's 1990 white paper *This Common Inheritance* (DoE 1990).

This article contributes to the discussion of recycling by taking a wider temporal purview – paying attention to the historical recycling antecedent of the National Salvage Campaign (NSC) of the Second World War, a period in which millions of tonnes of household waste were recycled and large proportions of the population undertook related recycling activities.<sup>4</sup> In taking a comparative focus the article aims to uncover key distinctions and similarities between the two periods of recycling interest both in terms of their practical approach to, and conceptualisation of, the waste 'problem'. In considering these issues the paper wishes to pay attention to, and develop upon, recent suggestions from within geography that waste disposal is more than physical acts involving material things but is socially imbued (Hetherington 2004), highlighting how waste management behaviour may be seen as socially and culturally contingent and highlight the moral geographies relating to recycling and recycling behaviour.

The paper is drawn from an AHRC-sponsored research project entitled 'The management of household waste in Britain'.<sup>5</sup> The overall rationale of the project was, through exploration of documentary evidence and archival materials, to explore the social, economic, technical and political factors behind changing methods of waste disposal and collection. The first section explores the way 'waste' is conceptualised as the first point of comparison between the two periods, then moves on to explore the factors important in mobilising recyclers during the NSC. It then explores the importance of civic duty, moral obligation and scale in promoting recycling activity before moving on to consider the processes of defining the 'appropriate' place of waste and the linkages and differences between the NSC and contemporary recycling.

### Maintaining order: recycling past and present

The seminal work of Douglas (1984) provides a useful theoretical lens to articulate the key distinctions

and similarities between contemporary and wartime recycling. In her analysis she highlights the importance of social classifications and categories that are maintained spatially, with waste, 'dirt' or 'pollutants' categorised as anything which transgresses this social order. Douglas sees waste as 'matter out of place' – not necessarily harmful or unhealthy in itself, but something which contravenes cultural categorisations. Douglas (1984, 39–40) moves on to show how these 'anomalies and ambiguities' are controlled by removal or rules of avoidance, which may be more strongly enforced by defining them as threatening or dangerous. Positioning waste (matter out of place) as dangerous and threatening can be seen as central to both contemporary and wartime recycling efforts as the notion of 'crisis' is mobilised with reference to 'the need to tackle the UK's mounting waste crisis' (Friends of the Earth 2002), and common reference during the Second World War to 'managing our waste in this time of crisis' (Shultz 1946, 459).

The way in which this waste 'crisis' is defined and mobilised offers the first point of comparison between the two periods. Three issues, which arguably revolve around the maintenance of such boundaries and order, underpin contemporary household waste management crisis and the recourse to recycling. While landfill historically ensures that 'the spectre of garbage is kept at bay' (Scanlan 2005, 12), research has revealed how their secondary effects, such as the contribution to global warming through methane gas emissions, come to haunt, challenge and destabilise established ecological orders, such that the EU landfill directive (1993/31/WC) was introduced in an attempt to re-establish this order (Okeke and Armour 2000). Here an important caveat to Douglas' discussion is that waste is not disposed of forever, merely moved on, leaving the possibility that it may come back and haunt in another form. Secondly, social boundaries have been defended and contested as communities have questioned the close proximity of ever expanding landfill sites to their homes, and the metaphorical boundaries between themselves and that which is disposed of (Robinson and Bond 2003). Thirdly, the ability to, in the parlance of Douglas (1984), render the anomaly of waste invisible through committing to landfill is increasingly problematic as sites suitable for landfill are exhausted (see Gray 1997). In response to these stimuli the government published the *Waste Strategy* (DETR 2000), which has been radical in setting targets and agendas for shifting the emphasis

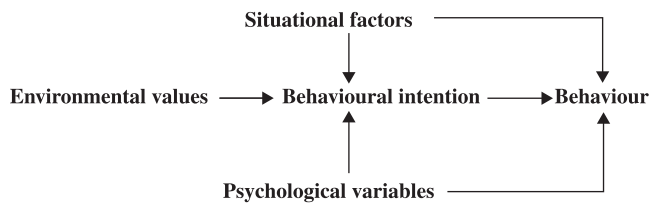


Figure 1 Conceptual framework of recycling behaviour

away from landfill towards reduction, re-use and recycling. Politically therefore contemporary recycling is seen as a viable, and more important socially acceptable, approach to tackling the waste crisis.

The maintenance of material as well as symbolic boundaries was also paramount in the discussion of waste disposal and the promotion of recycling in the Second World War. Here the threat to boundaries and social order was more starkly literal, with Hitler's invasion conjoined with the need to recycle as the public were encouraged to 'help put the lid on Hitler' (Figure 2). Central to this call to recycling, Shultz writing at the time argued, was the notion of fear:

over the past 6 years . . . what it was more than anything else which gave the nation the will and drive to achieve what they did in the field of salvage. The answer is fear. Fear of personal loss, fear for life, and fear that should we fail everything would be lost – freedom, home life and happiness. (Shultz 1946, 459)

This fear related not to the haunting effects of waste, but the fear of wasting *per se*. That is, fear of wasting the potential value from waste in light of threats to the import of virgin resources. In order to redress this problem, and to attempt to persuade the public into recycling, a controller of salvage was appointed to the Ministry of Supply in 1939, who was to build on the work of the National Salvage Council, which had originally been formed in the First World War and chaired by Lord Derby (Secretary of State for War) (Halpern 1942). A 'salvage circular' was sent to 2000 local authorities requesting that they modify their refuse collection practices to facilitate the collection of recyclable goods such as paper, metals, rags, as well as foodstuffs (*The Times* 1939a). To reach the wider public the salvage council initiated numerous publicity campaigns which used posters, broadcasts, press notices, leaflets and films, as well as the appointment of dedicated 'salvage stewards' to encourage members of the public to participate in

salvage schemes by pre-separating waste products (Dawes 1942a).

Following Douglas' conceptualisation, it can be seen that similar patterns exist between the two periods with waste management framed as an issue of 'crisis' and formal structures put in place to persuade members of the public to participate. Fundamentally different geographies can, however, be seen between the periods with more contemporary schemes revolving around the maintenances of a particular order to avoid the haunting spectre of garbage, whilst during the war the failure to offer goods for recycling was seen as a failure of social order – with waste conjoined, physically and metaphorically, to the war effort and a failure to recycle seen as a failure of duty to this war effort.

### 'Are you doing your bit?' – Motivating the masses to recycle

As the opening quote of Elliot Morely suggests, persuading individuals into participation is one of the key challenges for recycling schemes. Recent research has paid attention to the variety of factors thought to influence these behaviours and Barr *et al.* (2005) summarise the interplay between these factors into a conceptual framework (Figure 1). *Situational factors* include contextual and socio-demographic factors (Paraskevopoulos *et al.* 2003) and knowledge and awareness (Read 1998), *environmental factors* include values and attitudes towards the environment (Vining and Ebreo 1990) and *psychological factors* relate to individual, intrinsic motivations, social influences and 'citizenship' beliefs (RRF 2004). So how were people motivated to undertake recycling activities within the Second World War and what, if any, are the lessons that can be learned for contemporary schemes? Three interlinked areas can be seen to be important here: the use of structured and targeted publicity, the receptiveness of the public to this publicity, and the methods



Figure 2 Putting the lid on Hitler (PRO INF 3/203)

and techniques employed in increasing this receptiveness.

In relation to situational factors, recent research has suggested that 'publicity and promotion are vital to the success of recycling schemes' (Robinson and Read 2005, 81), and it is here that the NSC serves as a blueprint. The NSC utilised the mass media, piggybacking the wartime broadcasts from the Ministry of Information which served to 'make the British people more aware of the common cultural heritage for which they were fighting' (Weight 1996, 84). Techniques familiar to those working in the promotion of present-day recycling schemes were enlisted in the NSC such as radio and cinema broadcasts, as well as more direct engagement in the form of 'salvage roadshows' (Institute of Cleansing

Superintendents (ICS) 1942d).<sup>6</sup> Indeed, speaking in the period, Hindle observed that 'the radio did its best and the newspapers not very far behind . . . people of great eminence . . . literally threw themselves into the dustbin' (1942, 13). The mobilisation of prominent individuals in the recycling effort was exemplified by the public broadcast of the Queen visiting a salvage centre in Southeast London to observe the recycling efforts of the public (ITN Archive 1941).

Commenting on the use of publicity and communications in contemporary recycling schemes, Evison and Read (2001, 291) state that a 'simple, single message that appeals to all of the public' is paramount to scheme success. It is here that the NSC was particularly successful through appealing to,

and fostering, positive identities associated with recycling. Such moral geographies can be seen to have two main strands: the appeal to a sense of civic duty and the promotion and fostering of both new and pre-existing positive identities associated with recycling. While recent geographical and sociological analyses have paid attention to the ideas of membership and identity within consumption activities (Valentine 1999), Hetherington (2004) has moved on to argue that similar themes may also be applied to the issue of disposal. On one level this idea of membership during the NSC focused around pre-existing groups and organisations through targeted information and appeals to schools, youth organisations and women's meetings (Barker 1942). At a practical level these groups were enrolled not only as part of the dissemination of information on recycling, but also in carrying out actual recycling duties. Significant here was the Women's Voluntary Service (WVS) who were deployed in many local authorities to carry out a number of the practical activities associated with recycling.<sup>7</sup> As a result of labour shortages in Dundee for example, members of the WVS were employed to recover waste in waste separation plants similar to those which have been successfully utilised in Leeds (ICS 1942e). In other local authorities the WVS acted as 'salvage stewards', who both spread publicity material, as well as the sorting of recyclable waste products through door-to-door visits, while in more rural districts, where refuse collection was sporadic and *ad hoc*, the WVS operated salvage depots which acted as collection points for salvageable material before its movement into urban centres (Barker 1942).

Nicholas (1996) has reported how the success of wartime media communications and propaganda was due in no small part to the heightened sense of civic duty and common purpose among the population – a sense capitalised on by the NSC, with controller of salvage J.C. Dawes arguing:

there is quite a large section of the public that does possess a strong sense of civic responsibility, whose active cooperation can be secured by a sympathetic and common sense approach. In these times it is probable that this characteristic is or can be, intensified when these people are given to understand that their civic sense now has a wider horizon. (1940, 206)

It is here that a fundamental distinction can be drawn between the NSC and more recent recycling campaigns. While recent studies have made tentative

suggestions relating to the importance of 'community' (see Tonglet *et al.* 2004) and a recognition that motivation may come from 'we-ness', that is 'a form of group identification wherein a person feels a behavioural congruence with others . . . that generates and motivates group action' (Granzin and Olsen 1991, 5), the NSC campaign was able to develop a particular moral geography through drawing upon and overlaying a pre-existing and well formulated sense of community and common purpose. Mee *et al.* (2004) suggest that people may feel a 'moral obligation' to recycle when members of their community undertake recycling (Terry *et al.* 1999) and during the NSC this obligation to recycle was conflated with the moral obligation citizens held towards soldiers on the front line. This was seen most starkly in the appeals made to religious groups by salvage campaigners, who conflated the salvaging of materials with religious duties. Pronounced here were the appeals of Sir James Marchant, representing the directorate of salvage and recovery, who conducted a national educational campaign in Scotland. Speaking at St George's West (Church of Scotland) and St Mary's (Episcopal) Edinburgh, he proclaimed

the day of reckoning, after generations of wastefulness has now come. If I dare to change the words, but not the meaning of the sacred text, I would say whatsoever a man wastes that shall he lose, and he shall lose more than he wastes. . . . People have been brought to realise the awful catalogue of waste accumulated for several generations by the red glow on the faces of drowning British Seamen as their ship went down with a cargo of bones they had been compelled to convoy, through our distressing failure to provide them from our own cupboards. . . . let us [be] purged of every evidence of waste. (ICS 1942b, 24)

Here material, religious and cultural categorisations were brought together, with the public urged to 'purge' themselves of the evil of wasting. Maintaining the order of waste was presented as an extension of religious duty, with the congregation of Glasgow cathedral urged to 'offer yourselves as salvage stewards wherever they are needed, I repeat as a religious duty' (ICS 1942c, 28). The NSC therefore provides clear evidence from the past that, as Hetherington has recently proposed, disposal is 'thoroughly constitutive of social and indeed ethical activity' (2004, 158). Demonstrated is the way that successful recycling schemes need to be postulated as a socially acceptable and beneficial activity and,

as the next section of this article will consider, which is helped significantly by setting this alongside a positive identity.

### **Right up your street: thinking globally, acting locally?**

Central to the geography of contemporary recycling schemes is the issue of scale, with the slogan 'think globally, act locally' reinforcing the view that small acts in the home can contribute to extirpating wider global crises (Barr 2004). This crucial link between (inter)national concerns and localised action was articulated within the NSC through a special focus on the housewife. The role of women in new and conventional roles during the war, such as the women's land army, munitions work and the women's voluntary service, has been reviewed elsewhere, but the NSC put a new emphasis on the conventional role of the housewife – an importance noted by J.C. Dawes, who argued:

the need for salvage is greater today than at any time. The housewife is just as important as the girl who makes the shell is just as important as the man who fires it, but unfortunately many have not yet realised it. (Dawes 1942b, 28)

Hetherington (2004) has suggested social categories and memberships may be strengthened by acts of disposal, and more empirical studies looking specifically at recycling have observed that 'differentiated collection and refuse disposal may become much more widespread if the identity associated with this behaviour becomes a prestigious one' (Mannetti *et al.* 2004, 235). The housewife became posited as one such identity, allowing notions of the 'home front' and 'keeping the home fires burning' to be fostered, and offering a way of linking the importance of local action to the wider activities on the front line.

In discussing recycling policy Barr (2004) has shown that 'localisation', or as he terms it the 'relatedness' of environmental action to everyday life, can have a significant impact on the perceptions of, and responses to, policy measures. In relation to specific schemes, Tucker and Speirs (2003, 305) conclude that this relatedness may, in part, be an 'awareness of consequences' with the success of schemes positively correlated with the extent to which participants can see what happens to the material they offer for recycling. Attending to this

theme of relatedness was a key facet of the NSC and this can be seen to have drawn strongly on key social relations and moral geographies. In addition to appealing to the heightened sense of civic duty referred to earlier, the recycling activity of the housewife was portrayed as critical, and directly linked, to the front line. A poster from the period by Cyril Kenneth Bird for example (Figure 3) depicted the collection of housewives striding in unison with their materials to be salvaged being, like many other members of the public, 'exhorted to think of themselves as front-line troops' (McLaine 1979, 2). Here the familial and kinship connections between soldiers on the front line and those at home were played upon with recycled goods 'offered' in the same way as food packages and good wishes from home.

The poster illustrates how those offering goods for recycling were made aware of how their waste was put to use, or referring back to Douglas put 'in place'. Publicity campaigns and posters described how salvaged material could be recycled into goods for the fight on the front line, with metal made into tanks, paper into munitions, rubber into tyres and bones into planes (McLauchlan 1942).<sup>8</sup> This relatedness between offering goods for recycling and helping the wider war effort was also seen at the more local scale. Here local authorities introduced schemes for the use of ashes, for example, in road building and brick making, illustrating to respondents 'how waste can be put to good use in your street' (*The Times* 1939b). Such programmes, with a clear connection between the recycler and recycled goods, were central, it was reported, to the successful acceptance of salvage activities, allowing participants to make 'clear links between what they throw away and what can help the war effort' (Peacock 1943). Clearly, therefore, the proximity to waste was central to the salvage campaign, both physically in allowing an appreciation of what happens to waste and morally in terms of seeing recycling activities benefit the war effort. As Cooper (2007) has argued, the particular circumstances of the war, including rationing and threats to imported goods, also led to a 'rediscovery' of recycling at the individual level. Significant here is the culture of recycling that predominated until the more formalised system of refuse collection from the early twentieth century.<sup>9</sup> Part of the success of the NSC, it could be argued, was the ability to tap into a practice fresh in public memory and transfer this personalised activity into one serving national needs and interests.



and taboos and foster attitudinal changes towards the appropriateness of this behaviour.

Appealing again to a sense of civic duty, members of the public were encouraged, in the absence of imported animal feedstuffs, to save food scraps in order to 'save our bacon'.<sup>10</sup> Groups that had previously worked separately in times of peace were brought together in new coalitions, with Ministry of Supply and the Ministry of Agriculture forming a special salvage advisory sub-committee which drew on the County War Agricultural Executive Committees (CWAECs) to provide figures on the potential of swill as a feed for pigs and the potential for treatment of the swill to prolong its use.<sup>11</sup> The previous distance placed between households and pigs was broken down in the face of war, with 'municipal piggeries' established to utilise waste food, and a relaxation of laws restricting how close pigs could be kept to households.<sup>12</sup>

The example illustrates how what is 'appropriate' is a transient category, with new urgencies rendering previously unacceptable transgressions acceptable. The dynamism of this (re)definition of practices associated with waste is hinted at by Gilg and Barr (2005, 595), who overlay recycling on the Gilg-Selman spectrum from exhortation (including the use campaigns and practical demonstrations) through to the last resort of prohibition. They suggest that recyclers may be 'tipped' from one category to another, and the NSC offers a blueprint for how such a movement may proceed. Both periods of recycling being at the voluntary end of this spectrum 'by appealing to our altruistic instincts but also raising certain fears about the future' (Gilg and Barr 2005, 615). The publicity of the NSC helped position the existing system as unsuitable, but provides a case study of how the acceptability of recycling was constantly in negotiation. As early as 1940, the Minister of Supply responded to a questioning of whether volunteerism would be sufficient to secure waste material, stating that he 'wanted to see how far they would get through cooperation' and later that 'I am not yet satisfied the time has yet arrived for the introduction of legislation'.<sup>13</sup> Suggestions persisted that 'Voluntarism has an excellent opportunity of proving its effectiveness. It has only partially succeeded' (Turner 1940, 63) and salvage and waste material orders were put in place, under which the public were forbidden to destroy, throw away or mix materials, especially refuse, paper and cardboard (Halpern 1942). In a lesson to contemporary schemes there was a targeted policing of these new

policies, with action taken against individuals guilty of undertaking wasteful activities.<sup>14</sup>

McLauchlan reported on the wider reception of these interjections by suggesting

the average Britisher [*sic*] under normal circumstances strongly depreciates any interference with his liberties and privileges, [the minister] must have been very agreeably surprised to find [. . .] paper wastage has ceased over night. (1942, 368)

Critical within this statement is the notion that this cooperation takes place in the context of the unusual, abnormal and special circumstances of the war. This network was held together by the peculiarities of the situation and its precarious existence is highlighted by the waning interest in recycling as the war progressed and an almost complete cessation as the war ended. The cleansing superintendent for Tottenham reported 'public apathy' towards recycling as a 'natural reaction after six weary years of war' and identified the primary reason as 'the removal of the impetus of fear' (ICS 1946, 459). Without this impending fear, it was noted that publicity campaigns, which had previously been so successful, were less readily received by a blasé public (ICS 1947).

The key lesson from the war here is that the network which defines the appropriateness (and frames the associated receptiveness) of recycling schemes are held in place by the 'inappropriateness' of the preceding schemes. As the war drew to a close and the associated fear that had driven the NSC subsided, previous systems of disposal no longer remained inappropriate and the public, as Public Cleansing Inspectors reported, 'got back to their wasteful ways' (ICS 1947). Indeed as Strasser (2000) has suggested, the end of the war arguably gave rise to a system which celebrated the process of 'garbaging' as disposable goods, and the disposal of goods became a symbol not just of affluence, but hygiene and freedom in the move to modernity.

## Concluding discussion

The NSC offers a clear example of an antecedent recycling campaign, providing evidence of the social geographies surrounding recycling and recycling behaviour. There are a number of themes which offer contrast and comparison to contemporary recycling efforts. Conceptually it can be seen that the 'crisis' of waste relates to its (mis)placement. Whilst under the conceptual framework of



contemporary recycling referred to earlier, impetus for recycling relates to the transgression of boundaries through the secondary, environmental, effects of waste, during the NSC concern revolved around wasting *per se* – that is avoiding the loss of the value of waste and keeping waste in an ‘appropriate’ place. In this regard, looking across these two time horizons of waste shows that the war arguably acted as a watershed event, changing the level of (dis)connection of householders and waste. Considering Barr *et al.*'s (2005) conceptual framework, it can be seen that evolving situational factors, in particular technical and legislative changes, have helped to shape and change intrinsic factors. Most obviously, legislative changes have impacted on the composition, management and associated opinions of waste management. The 1939 Public Health Act, temporarily relaxed during the Second World War, stopped the reuse of foodscraps, whilst legislation such as the Clean Air Act of 1959 had the implicit impact of reducing the proportion of cinders and dust in waste which went from over 55 per cent in 1935 to less than 2 per cent in 2002.<sup>15</sup>

The NSC offers a blueprint to contemporary policymakers of the intricate links between external, structural factors and intrinsic motivations in delivering successful recycling schemes. Whilst Barr *et al.* (2005) have unpacked the multiplicity of motivating factors amongst contemporary recyclers, the imperative of war, and the associated desire to retrieve the value from waste, provided a single ‘overarching imperative’ (Dawes 1942a 1942b). The example reinforces Ebreo *et al.*'s (1999) suggestion that a single, coherent message is needed in this publicity material and also sheds light on the social aspects and moral geographies of waste. Innovation-diffusion research on recycling suggests that schemes are more successful when associated with a positive identity, although such a ‘follow-the-leader’ mentality may take some time to develop (Mannetti *et al.* 2004). The NSC, through successfully harnessing an association with *pre-existing* positive identities, complements the assertion that successful promotional material should be set in the context of wider notions of good citizenship (Barr 2004).

Running alongside legislative change, technological developments have irrevocably altered the geographies of waste between the two periods. The widespread use of plastics in packaging has radically altered waste composition, rising to over 10 per cent of average household waste composition. The development of waste management technologies, in particular

incineration, coupled with the formal designation of landfill sites within the 1947 Town and Country Planning Act, saw householders become increasingly dissociated from waste and the commencement of a period of waste being rendered invisible. Such measures helped to change the boundaries of waste by moving its disposal from a domestic issue of reuse and recycling to a technological, public issue.<sup>16</sup> Perhaps more significant than the changing composition of waste between the two periods is the volume of waste produced and a distinct change in attitudes towards ‘wasteful’ activities. The context of war, following economic recessions of the early twentieth century, saw waste as holding value. As these factors were reduced at the end of the war, coupled with increased national affluence and social security in the post-war period, wastefulness became acceptable, ‘Post-consumption waste became the accepted shadow of an ideology of progress that lay at the heart of modernity’ (Clark 2007, 257).

This paper has seen that there is a distinct geography of waste and recycling, which revolves around connection and reconnection. A key lesson from the NSC for stimulating activity is reconnecting recyclers to the cause of recycling concern – as wartime recyclers saw the benefits of their efforts to the frontline war effort, contemporary recyclers should be aware of how their small actions in the home relate to wider, national and global, environmental concerns. At a second level, the particular set of economic and social conditions in the NSC brought a physical connection to waste, and an appreciation of the value of waste by recyclers. Two suggestions can be made from here for contemporary recycling. First, although the threat of war is unlikely to again be an influential driver, placing a value on waste – either through incentive schemes or through financial penalty – may lead to the necessary reconnection and a greater consideration for what is disposed of. Second, interesting findings from recent research into the demographics of recyclers have suggested that older people are an important recycling group (Knussen *et al.* 2004). Such research may, as Barr *et al.* (2005) point out, imply that the culture of ‘waste not–want not’ imbued during the war and the NSC may have survived among small groups of the population. Such a suggestion may offer both a pointer to policymakers as well as open space for future research, taking a wider life course approach to recycling which interrogates the persistence of these values and whether they may be transmitted to younger generations.

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## Notes

- 1 News release from Defra, 18 October 2004.
- 2 Strictly defined 'municipal waste' includes all waste for which local authorities have designated responsibility, 89 per cent of which is household waste.
- 3 Exemplified in the UK 'Are you doing your bit?' campaign (see <http://www.doingyourbit.org.uk/>).
- 4 Figures estimate over 9 million tonnes of material was recovered during the campaign (ICS 1947).
- 5 The project was sponsored as part of the 'Research Centre for Environmental History' (AHRC RC1) at the Universities of Stirling and St Andrews.
- 6 Indeed there are striking parallels with the recent recycling 'roadshows' referred to by Robinson and Read (2005).
- 7 Parliamentary Debates in the House of Commons, 21 February 1940 (1345).
- 8 A poster produced in period by 'Fougasse' gave a visual depiction of the recycled material put out by housewives morphing into products for the front line (IWM PST 3702).
- 9 For an interesting discussion of this longer history of recycling and reuse see Strasser (2000).
- 10 Ministry of Agriculture Announcement, 24 November 1939, no. 20. Pigs Are War Winners – Little Man who can save our bacon (PRO MAF 103).
- 11 PRO MAF 35/539; Parliamentary Debates in the House of Commons, 26 February 1940 (1313).
- 12 Parliamentary Debates in the House of Commons, 14 December 1939 (113).
- 13 Parliamentary Debates in the House of Commons, 15 February 1940 (195) and 18 March 1940 (1635).
- 14 Well-publicised actions were taken against John Henry Conquest of Highbury Hill, London, fined five guineas, at a North London police court for destroying a quantity of waste paper, and J.B. Dunlop in Glasgow who was fined for cutting the string which attached a salvage bag to the stair railing at his home (ICS 1942a).
- 15 Taken from collated figures from <http://www.waste-online.org.uk> which also shows plastics accounting for almost 10 per cent of waste composition in 2002 and kitchen waste rising from 15 per cent to almost 40 per cent of total waste composition between 1935 and 2002.
- 16 There is an interesting discussion emerging around the public outcry against every other week refuse collections and how this has, again, made waste more directly 'visible' to the public.

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