Recycling modernity: towards a global environmental history of waste?

Introduction

In both academic and popular literature 'waste' has recently become a subject of remarkable fascination.[1] A number of books and articles have been published which seek to investigate waste as a material and cultural phenomenon that can sheds light on the nature of modernity. This fascination is, of course, partly a consequence of the centrality of waste in environmental discourse. There is, however, more to waste than the post-modern concern with the environmental impact of consumerism. Waste is not simply a *product* of material and intellectual progress, but is in fact foundational to the practices of modernization. It is the category of 'waste' that makes possible the imaginary elimination of the 'useless' or 'inefficient'. Anything, once named as waste, becomes subject to whatever practices of disposal or recuperation may be deemed appropriate. For example, global ecological transformation in the interests of capitalist development was made possible in the first instance by the Enlightenment imagination of the non-European world as a fecund but waste space. This authorized any number of human interventions in the environment from colonization itself to the transplantation of new plant and animals species, and ultimately the manipulation of plant and animal life to make existing environments more productive. From enclosure to the technological appropriation of nature's products, the assumption that the world was full of unused or decaying matter made operative the expansive, transformational ideology of capitalistic improvement. Waste, therefore, presents the environmental historian in particular with far more than just the rubbish we choose to throw away (although it is this too); it is central to the modern imagination.

In this paper, I shall discuss what I think are some of the most pertinent issues arising from recent discussion of waste, and suggest some of the questions and problems that emerge for them for environmental history. This paper is not an attempt to methodically review the corpus of work on waste, a task for a much longer contribution, rather it seeks to highlight why waste constitutes an urgent historical problem, not just for environmental historians but for the discipline in general. Firstly, I will look at work that studies the meaning of 'waste' and raise some of the important conceptual distinctions that I believe make the category analytically useful. Secondly, I shall address the work of authors who had looked at the disciplinary operations that have surrounded the idea of waste, and particularly its disposal, which have particular relevance to our understanding of environmental politics. Finally, I wish to point to the possibilities which new theoretical understandings of waste offer for the development of a critical historiography of the global environment.

[1] R. Girling, *Rubbish: dirt on our hands and the crisis ahead* (London, 2005); H. Rogers, *Gone tomorrow: the hidden life of garbage* (New York, 2005); T. Stuart, *Waste: uncovering the global food scandal (*London, 2009)

Waste or Dirt?

It is important to elaborate the, perhaps obvious, but often ignored, conceptual distinctions that exist between 'waste' and 'dirt'. These have become more and more apparent from the evolving state of the critical literature on 'waste', but have generally been insufficiently articulated. There is an established tradition of analytical and critical engagement with the categories of dirt, filth, refuse and shit, following from M. Douglas's classic text *Purity and Danger.*[2] Waste has, however, only recently begun to receive a similar intensity of interest. Consequently it remains too easy to conflate waste and refuse. Despite their apparent analytical proximity, dirt and waste are firmly separate categories providing the conditions of possibility for distinct thoughts and practices. For Douglas, the dirt, or 'matter out of place', encompassed a multitude of social bordering practices which serve establish inside-outside distinctions between the clean and unclean. Famously, Douglas asserted that the binary between clean and unclean, between pollution and taboo, was a means of establishing social order. In her anthropological work, pollution and taboo was shown not only to order communities on the basis of who was excluded from them, but also to operate internally to discipline those communities. For Douglas, then, dirt serves as a category of abjection, and this is how it has usually been understood since even when embraced subversively, as in the case of Dominque Laporte's *History of Shit* which emphasises the prior presence of filth in order to effectively reduce all 'civilizing' practices to acts of refuse disposal, in the process demythologizing and exposing European history as a history of the sewer.[3]

The influences of Douglas and Laporte's anthropological and psycho-analytical approaches to dirt have been profound. A recent excellent collection of essays *Filth: Dirt Disgust and Modern Life* (2005) is strongly influenced by these approaches; the contributors employ dirt and cleansing in a range of Victorian contexts to illustrate the dirty character of modernity.[4] However, waste is rather ironically absent from these discussions of filth. In the 'Introduction' to *Filth*, Cohen and Johnson remark on the double-sided character of filth as inhabiting both the 'unregenerate' but, *when thought of as waste*, becoming 'conceivably productive'.[5] But, the apparently janus-faced nature of 'filth' is, I would argue, only apparent. In reality refuse, it is in being thought about as waste that filth is pulled from the realm of the abject and brought into the real of value. It is at this moment of revalorization that a historicised understanding of the distinctive qualities of the category of waste become crucial. 'Waste' is the product of Anglo-European practices of valorisation. The dirt or filth that is put aside through hygienic practices might be seen, following Douglass, as a geographically and historically universal set of social practices. 'Waste', on the

[2] M. Douglas, *Purity and danger and analysis of the concepts of pollution and taboo* (London, 1966)
[3] D. Laporte, *History of shit* (Cambridge MA, 2000 edn.)
[4] W.A Cohen and R. Johnson, *Filth: dirt, disgust and modern life* (Minnesota, 2005)
[5] Cohen and Johnson, *Filth*, x.

other hand, is distinctly European. The word itself has roots in the latin *vastum* or *wastum*, and was applied in the early mediaeval period (in the English context in pipe rolls of the Royal Exchequer) to describe devastated land from which no tax revenues could be expected.[6] It also acquired the meaning of the uncultivated lands surrounding the cultivated spaces of the manorial village. These village wastes served a very particular purpose for the tenants and labourers of village society. The early meanings accorded to waste were thus bound up with the ecology of pre-modern agricultural production, and there is a very distinct difference between pre-modern waste and the breadth of meaning possible to its modern equivalent.

The Meaning of Waste

The essential starting-point for any effort to address the changing meaning of waste historically should be J. Scanlan's *On Garbage*. Scanlan establishes many of the parameters for a meaningful engagement with waste as a category at the heart of modernity. Throughout the book waste presents us with the inescapable remainder of processes of modernisation. The Enlightenment project of producing a improved knowledge, and, subsequently, the attempt to capture and improve the waste spaces of the natural world inscribes a binary between 'waste' and 'value' that over-determines subsequent thought and practice. Hence, for Scanlan, modernity ultimately becomes not only a great waste disposal system, but an unsurpassed technology for the creation of waste within which the ideas of 'progress' and 'improvement' are embedded.

One of the most compelling of Scanlan's contentions is that the modern understanding of 'waste' is bound up with an Enlightenment 'moral economy'.

> Clearly, then, the meaning of 'waste' carries force because of the way in which it symbolises an idea of improper use, and therefore operates within a more or less moral economy of the right, the good, the proper, their opposites and all values in between. In other words, all talk about waste – as we shall see – generally foregrounds a concern with ends, outcomes or consequences, and the recognition of waste indicates a need for attention to what usually remains unknown.

Scanlan moves towards explaining the way in which the waste operates, and hints at the political and contested nature of its symbolism. For the historian, of course, it is the making of this moral economy of waste that is of interest. Scanlan argues that the modern meaning of waste was established by the scientific revolution of the seventeenth-century and the emergence of the accounting methods of early political economy. An account that sits neatly C. Merchant's narrative of the gendered redefinition of 'nature' during the scientific revolution as an unruly

[6] A.E. Amt, 'The Meaning of Waste in the Early Pipe Rolls of Henry II', *Economic History Review* 44, 2 (1991), pp. 240–248.

female object to be mastered through scientific practice.[7] Scanlan establishes that 'waste' changed its meaning in the sixteenth and seventeenth centuries becoming the much richer and ambiguous linguistic system of valuation of the late seventeenth to eighteenth centuries. However, he does not address the contested emergence of new meanings to waste, something that may perhaps account for a somewhat fatalistic conclusion that ultimately we cannot transcend the modern impulse to waste, merely seek to understand it. As I will suggest below, a sensitivity to the contested meanings of waste offers more positive hope for breaking the bounds of the modernist conception of waste with its implications of domination and the transformation of nature.

In a subsequent, and important essay, Scanlan's focus moves from the moral economy of waste, and its philosophical and aesthetic consequences, to an investigation of the temporality of waste. He finds his subject in the work of Henry Mayhew on the nineteenth-century London poor. Mayhew's interest in poverty and dirt demonstrated the continuing presence of 'the leftover and elusive, the filth and waste, as well as the people places and phenomena that seemed to have escaped the rational time of modernity'.[8] The world of the 'idle' nineteenth-century poor of the metropolis is here at odds with the temporality of bourgeois reason, establishing 'an exclusion zone that became a kind of dump for failures, defects and the dead'. For Scanlan, Mayhew's fascination with the 'wasted' explores the temporal and teleological dimensions of the devalued, and reveals the ways in which a bourgeois telos enabled projects of exclusion and abjection. Simultaneously, the continuing presence of forces of decay and decadence, the 'lasting-on' of waste, negated bourgeois promises of progress and improvement. It is apparent in this essay that waste has becomes a site of struggle and contest between competing systems of value. Waste and the crisis of modernity are consequently never far apart.

Scanlan's work establishes key points of departure which are suggestive of the urgent need for historical engagement with waste. Although in some respects waste is presented by Scanlan as epiphenomenal - a residue of improvement – it makes the idea of progress operative, and therefore surely has a foundational identity. On the one-hand progress produces waste, yet on the other one cannot contemplate progress without waste or wasting. There must be an object that is first rendered 'useless', otherwise the notion of 'improvement' is unthinkable. The idea of 'waste' should therefore be seen as a dialectical symbolic process in which there is a simultaneous *production* of that which must be eliminated or *disposed of*. The legitimation of radical ecological transformations was far easier if the natural world could be seen as an over-productive space that needed to be ordered and disciplined. However, it is also apparent that the very ordering and production of productive spaces created new wastes. The detritus of consumption, the scarred

[7] C. Merchant, *The Death of Nature; Women Ecology and the Sicentific Revolution* (1989 edn)
[8] J. Scanlan, 'In deadly time: the lasting on of waste in Mayhew's London', *Time and Society* 16, 189 (2007), p. 190.

and depleted landscapes of a man-made world, and the consumption of human life were all constitutive of productive spaces.

'Refuse Revolutions' or 'Waste Regimes'?

Although, as I have indicated, dirt and waste are distinct categories, waste and *disposal* remained tightly bound together. Indeed, the category of waste may be said to logically infer disposal, either in the most literal sense of throwing something away, or in the sense of redistributing or reorganising something in order to revalorize it. Disposal, therefore, remain a key part of the symbolic ordering of waste. Disposal is the point at which the category of waste becomes embodied in practice. In this next section I wish to look at some of the ways in which our understanding of disposal has been advanced recently, and the implications of this for a politics of waste.

Bill Luckin has argued that late nineteenth century Britain saw the beginnings of a process of professionalisation of waste disposal that ultimately radically transformed the way in which government dealt with urban refuse disposal. He has termed this process the 'Refuse Revolution'.[9] The processes of waste disposal in Britain were certainly changing after the Public Health Act of 1875. Urban household waste, in particular, was becoming a social and political question among urban reformers as it had not been before. But there are also problems with the progressive teleology underlying the idea of a professionalisation of waste disposal. The contradictory nature of technological interventions in environmental problems is well attested in the work of historians of technology like J.A. Tarr and M. Melosi.[10] Often attempts to solve urban environmental problems through the application of one technology led to unforeseen consequences or the mere displacement of pollution to new areas. Recent work by J.F.M. Clark and T. Cooper has also suggested that the 'Refuse Revolution', if that is the right term, remained a contested and incomplete phenomenon.[11] The introduction of incinerators in early twentieth century Britain, when seen in terms of environmental justice, for example, was uneven. The technologies applied to waste disposal were subject to constant transformation within changing economic, political and scientific contexts. This questions the idea of the 'Refuse Revolution' as a single transformational even in the history of policy efforts to combat pollution and suggests a much more contested, contingent and open-ended process.

[9] B. Luckin, 'Pollution in the City', in *Cambridge Urban History*, iii, 207-28, p. 221.
[10] J.A. Tarr, *Search for the Ultimate Sink: Urban Pollution in Historical Perspective* (Akron OH, 1996); M. Melosi, *The Sanitary City: Urban Infrastructure in the American City from Colonial Times to the Present* (Johns Hopkins, 2000).
[11] J.F.M. Clark, 'The incineration of refuse is beautiful': Torquay and the introduction of municipal refuse destructors' *Urban History* 34, 2 (2007), pp. 255-277; T. Cooper, 'Challenging the 'refuse revolution': war, waste and the rediscovery of recycling' *Historical Research*, 81, 214, pp. 710-732.

As I have already suggested, there is a crucial difference to be drawn between the disciplinary functioning of the categories of 'dirt' and 'waste'. One of the most instructive attempts to delineate the disciplinary functioning of waste in the context of its disposal or recycling has been made by Zsuzsa Gille.[12] Like Scanlan, Gille emphasises the symbolic morality involved in the production of waste. She rejects definitions of waste that take no account of the socio-spatial contest of its production, and is particularly concerned to deal with the 'material agency' of waste as matter that is resistant to human intervention. Like Scanlan, Gille is interested in the temporality of waste, but this temporality is strongly historicised. Her study of the evolution of waste production, recycling and disposal through the various economic transitions Hungary has made between capitalist and socialist state are embedded in a sense of the historicity of waste production. To give coherence to the changing meanings and materialities of waste she develops the idea of the 'waste regime'. The waste regime is a social and political constellation which enables the production of certain kinds of material waste and pursues the recycling and disposal of that waste through distinct modes disciplining producers and consumers:

> Waste regimes differ from each other according to the production, representation and politics of waste. In studying the production of waste, we are asking questions such as what social relations determine waste production and what is the material composition of wastes. When we inquire into the representation of waste, we are asking which side of the key dichotomies waste has been identified with, how and why waste's materiality has been misunderstood, and with what consequences. Also to be investigated here are the key bodies of knowledge and expertise that are mobilized in dealing with wastes. In researching the politics of waste, we are first of all asking whether or to what extent waste issues are a subject of public discourse, what is a taboo, what are the tools of policy, who is mobilized to deal with waste issues, and what non-waste goals do such political instruments serve. Finally no waste regime is static, thus we must study them dynamically, as they unfold, as they develop unintended consequences and crises.

The concept of the waste regime provides an excellent dynamic model for the study of modern systems of waste disposal and their political constitution, and suggests was of approaching the *political* history of waste. However, Gille's move to open up the social and political production of waste, on the one hand, involves a closure of meaning on the other. For Gille waste is narrowly the material product of processes of production. Perhaps one can see in this closure, the emergence of a distinctly post-modern meaning of waste. In a world completely given over to a 'second nature' the most obvious meaning of waste is that of post-consumption discard. This move can already be traced through early twentieth-century attempts to get to grips with the urban refuse problem.

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[12] Z. Gille, *From the Cult of Waste to the Trash Heap of History: The politics of waste in Socialist and Post-socialist Hungary* (2007)

To some extent, Susan Strasser's *Waste and Want, A Social History of Trash*, already contains such a history of the transformation of waste regimes. Investigating how social responses to the uses of waste have changed since the early nineteenth century, Strasser identifies a key change during the nineteenth century in the shift from a domestic cultures of handicraft, with a focus on recycling and *bricolage*, to a culture of consumption founded on advertising the supermarket and the hygienic merits of disposability. For Strasser the key to the transformation of a 'waste regime' is the changing nature of capitalism itself and the emergence of the consumer society. Strasser's history complements the picture provided by Gille of communist and post-communist waste regimes in Eastern Europe. Again, what is apparent is the contestability of these regimes. Strasser is clear that older traditions of reuse had to be contested through the intervention of capitalist propaganda efforts. The construction of a clean, dirt free subject, whose self-disciplining became bound up with the consumption of certain types of hygiene, the sanitary towel provides a key example here. The gendered nature of exposure to waste is also highlighted by Strasser, who is interests in domestic wastes, overwhelmingly a problem for women. She is observes the progressive sidelining of female domestic skill by they consumption of objects produced by male techno-science.

Waste: A Critical Project?

As a discipline, environmental history appears to be constantly troubled. As P. Warde and S. Soerlin have recently observed in an extensive review of the field there is such a diversity of historical work stretching from historical ecology to geography that environmental history has struggled to find an identity and define a problematic. Warde and Soerlin suggest the need for environmental history to recognise how closely allied it is with standard historical research in political and social history. They argue that a fuller engagement with political and social theory in a way that recognises that 'Society's nature is a political product' should be part of the next phase in the development of environmental history.[13] While agreeing with this, I wish to suggest that if environmental history is to respond meaningfully to the politically constructed character of 'social natures' it needs to do more than adapt itself to social theory. It also needs to develop the kind of self-consciously critical edge presently informing contemporary environmental studies in other fields.[14] This critical edge must itself go beyond recognition of the culturally constructed nature of scientific knowledge's and social understandings of nature, and seek to address the practices of ecological and social transformation that are enabled by certain imposed patterns of thought.

[13] S. Soerlin and P. Warde, 'The Problem of the Problem of Environmental History: A Re-reading of the Field and its Purpose', *Environmental History,* 12, 1 (2007) pp. 107-130.
[14] A. Agrawal, *Environmentality: technologies of government and the making of subjects* (Duke 2005)

Some, perhaps most, environmental historians would reject the idea that current environmental history has lost its critical edge. However, much current environmental history certainly appears suspicious of the avowedly critical approaches that distinguished early work in the field, such as D. Worster's *Rivers of Empire* and C. Merchant's *The Death of Nature*.[15] However, the trend away from such critical environmental history is perhaps most apparent in the interdisciplinary turn in environmental history, which has tended to emphasize a kind of eclecticism of approach to the detriment of critical focus. Mark Carey has recently argued that an interdisciplinary perspective has the potential to bring new perspectives from areas such as Science Studies to bear on the historical study of the environment. He sees this as a means of transcending 'traditional' concerns with capitalism, colonialism and conservation, and of introducing consumption, cultural landscapes, narrative, critical science studies and social history into the picture.[16] Few could object to this, but in reality the disciplines which have pioneered the areas he sees as 'interdisciplinary', have done so in the context of precisely tghe 'traditional' concerns with colonialism and capitalistic exploitation that he wishes to transcend. In reality, environmental history over the past decade has already moved alignment with social-constructivism in the history of science. This kind of appeal to 'interdiscipliniarity' in reality continues the move away from material explanation in the historical and social sciences and the general flattening of methodological approaches in favour of 'culturalism' that has occurred across the disciplines.

Gregg Mitman has recently argued that we need approaches to past environmental change which pay careful attention to the social and material *practices* of people in environments, and the dynamic ways in which space is produced.[17] He notes that the recent revival of interest in materiality, particularly but not exclusively in recent history of science, offers an opportunity for environmental history to reinvigorate its account of material practices in the making of nature and ideas about the natural world. Again, there is much to agree with here, but the real problem for environmental history is not one of the *methods* of study. Few could disagree that there ought to plenty of space for a range of approaches. Rather the issue is what the object of study of environmental history should be. As Mitman suggests, the return to analysis of capitalistic interventions in the environment perhaps offers the best prospect of a distinctive project for environmental history.

[15] D. Worster, *Rivers of Empire: Water Aridity and the Growth of the American West* (Oxford, 1985); C. Merchant, *The Death of Nature: Women, Ecology and the Scientific Revolution* (1989 edn.) See also, M. Davis's *Late-Victorian Holocausts: El Nino Famines and the Making of the Third World* (London, 2001).
[16] M. Carey, 'Latin American Environmental History: Current Trends, Interdisciplinary Insights, and Future Directs', *Environmental History*, 14, 2 (2009), pp. 221-252.
[17] G. Mitmann, 'Where, Ecology, nature and Politcs Mett: Reclaiming the Death of Nature', *Isis*, 97 (2006), 496-504.

Waste offer one way of effecting a return to critical interrogation of the making of a capitalistic nature. It offers a means of capturing critically two key ideological movements in the earliest phases of capitalistic ecological transformation. It has long been clear that 'improvement' and 'progress' were crucial concepts in the armoury of a range of people arguing for the rationalisation of nature, especially in the nineteenth century.[18] However, what has not generally been made clear is the way in which such ideas were made operative. It is generally just assumed that such discourse were important. However, the insights of thinkers like Scanlan suggest that the way in which a valueless nature is constructed as an object of legitimate transformation is more problematic and complex than this. Investigating how the category of waste enabled the transformation of an existing set of ecological practices presents far more than a mere chronicling of the impact of European imperialism on global ecologies. It also means asking how it was possible for European ideas to produce a system of ecological transformation that convinced peoples at both core an periphery to engage in the disposal of old forms of nature for new ones.

The secondly way in which waste can contribute to reinvigorating environmental history's object of study, is that it requires us to take seriously as contested *political* phenomena the means of waste disposal. The means of disciplining responses to ecological transformation and to the experience of excess become crucial questions. As we have seen waste matter might be thought of as having agency in the sense that it generates a negation of progressive improvement ideology. Excess waste matter necessarily required reabsorption within the Enlightenment ideology of waste. However, as an increasingly consumed natural world cames to infest the city, it required increasingly discipline responses to this. This was the hidden issue involved in the emergence of professionalised waste disposal. It only came to the surface as an openly contested political question in the concerns of late modern environmentalism with waste and recycling. Ultimately, therefore, waste played a crucial role in the making of western environmental politics, a fact quickly apparent in any analysis of the importance of waste in environmental discourses.

Waste then offers an opening for environmental to develop a critical historiographical project that is capable of exposing the way in which modernist categories operate to re-inscribe instrumentalist logics at the heart of our social relations with nature. The study of waste thus becomes an explicitly political project committed to something more than simply demonstrating how past societies dealt with their refuse. It should work to expose the ways in which our concern with waste and a certain process of valuation can work to prevent the establishment of different possible social relations with nature. These processes of valuation are contested, but

[18] R. Drayton, *Nature's Government: Science, Imperial Britain, and the 'Improvement' of the World* (Yale, 2000)

they are also hegemonic, and can be found embedded even in the more radical forms of environmental politics. Only a historical political ecology can offer to expose the working of waste and the practices embedded within it and offer a way beyond a world worried about waste.