Recycling Modernity: Waste and Environmental History
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Abstract
In this article, I discuss some of the questions that arise for environmental historians from recent historical and theoretical studies of waste. This article is not an attempt to methodically review the entire corpus of work on waste within the social sciences and humanities. Rather I seek to draw attention to the ways in which waste constitutes an important problem for environmental history in particular. The article is in four sections. The first two deal with conceptual approaches to waste that are presently popular and draws an analytical distinction between waste and dirt, terms that are often collapsed into one another but which, when kept distinct, can do more useful work. The third and fourth sections discuss present historical treatments of waste, their capacities and limitations, before I mark out possible ways in which historians can take seriously the analytical distinctiveness of ‘waste’.

Introduction
As Mark Levene has recently noted, facing the catastrophic potential consequences of global climate change has done strange things to our sense of time and history.1 How should historians respond to the sudden (and distinctly unwelcome) proximity of yet another ‘End of History’. In some ways, we are unfortunate that the prospective terminus of human species time arrived so soon after the declaration that history itself had ceased in the deserts of neoliberalism.2 Perhaps climate chaos is simply the twist in the tail of the end of historical time? On the other hand the proximity of a climatological ‘End of History’ might be a signal that, after the long dominance of piecemeal revisionism, historians need to return to questions of totality. Viewed from the perspective of a generation that must find a means of traversing the many possible paths through the ‘End of History’ and emerge capable of handing to our descendents the prospect of a meaningful human future, we are rightly thrown back upon the resources of historical analysis. The question ‘How did it come to this?’ must be answered before we can meaningfully ask ‘What is to be done?’ This is the pressing responsibility of contemporary environmental history in the present moment.

It may seem incongruous to move from this totalising perspective to the more mundane analysis of the social theory of waste that this article addresses, but these two themes intimately inform one another. Only an environmental history informed by historical materialism can ultimately supply us with meaningful responses to our present predicament. The narrow scope of this article, then, is an attempt to illustrate the role that the social theory of waste can play in environmental history.3 More than this, however, I seek to elaborate an analytical distinction between the often conflated categories of ‘waste’ and ‘dirt’. Much, I believe, rests on the capacity of these terms to do different analytical work, with very different implications for historical analysis. I shall argue that, despite appearances to the contrary, waste has been relatively neglected in historical and
theoretical study, and that it is by turning our attention towards waste as an ideological category of capital that we can see in operation one of the means by which the constant production and reproduction of nature, in order to valorise capital, has been produced and legitimated. This historical materialist turn is, I would claim, an essential prerequisite to making environmental history genuinely relevant to contemporary struggles for environmental justice.

The Limits of Dirt

To begin I want to elaborate some of the conceptual distinctions that I believe exist between ‘waste’ and ‘dirt’, and some of the limitations of the latter category in particular. There is, of course, already a well-established tradition of critical engagement with dirt, which emerged in the wake of Mary Douglas’ classic anthropological study *Purity and Danger.* For anthropology in general and Douglas in particular, dirt has come to be seen as ‘matter out of place’. It is implicated in social practices which serve to establish distinctions of inside–outside, clean and unclean, as Douglas comments: ‘As we know it, dirt is essentially disorder … Dirt offends against order. Eliminating it is not a negative movement, but a positive effort to organise the environment’. The binary between dirty and clean is critical to establishing an idea of social order, and through practices of hygiene it not only constitutes communities on the basis of who and what is excluded from them, but also operates to order those communities internally. Dirt serves as a category of abjection produced by hierarchical social relations. In her analysis of ritual cleansing, the movement between ‘dirty’ and ‘clean’ becomes a dynamic process of identification whose ultimate end is the complete loss of dirt’s identity in the processes of decomposition. Dirt ultimately always returns to the cycles of matter, becoming once more undifferentiated.

Douglas’ work has been immensely influential in both sociological and literary study, as well as within anthropology. Its insistence upon dirt as a category produced in social relations has had particular influence on the post-structural analyses of dirt. Dominique Laporte’s *History of Shit,* for example, takes the role of dirt in ordering social life and applies it to the particular workings of European civilisation. For Laporte, the effort to colonise and control the social procedures of dirt identification becomes entirely associated with the emergence of the European state and the colonial project. The source of legitimacy of the European state system was its claim to create a cleansed social vision in which ‘civilisation’ lies. These procedures find their most ruthless and cruel apotheosis in the totalitarian state, as incongruous human identities that cannot be reduced to purity, such as ‘blackness’ conflict with the state’s claim to able to order. By bringing dirt into European narratives of progress and improvement Laporte is seeking to emphasise the prior presence of filth in the production of European civilisation. Laporte reduces all so-called ‘civilising’ practices to acts of refuse disposal, demythologising and exposing European history in the process, representing it as a history of the sewer. ‘Surely’, Laporte writes, ‘the State is the Sewer. Not just because it spews divine law from its ravenous mouth, but because it reigns as the law of cleanliness above its sewers’.

The forms of analysis pioneered by Douglas and Laporte have found a place in the history of the nineteenth-century urban environment, particularly amongst historians who see the cleansing of the European city as a key moment in the emergence of urban liberalism. Challenging narratives of technological progress and urban improvement, Chris Otter and Patrick Joyce in particular have represented the history of attempts to order human relations with dirt as an essential part of the disciplining of the urban working class and the making of liberal subjectivity. Others like Chris Hamlin and Michelle
Allen have emphasised the elements of class conflict and ideological contradiction which emerged around the discourses of public hygiene in the Victorian era. Hamlin and Marald have both demonstrated how nineteenth-century concern with the cycles of matter encouraged a politics of urban waste which suggested the urgency of recycling urban wastes back to the countryside, with important consequences in terms of critiques of and emendations to Chadwickian public cleansing theory.

There are, however, important limitations with the analytical deployment of dirt and hygiene. The first is temporal. Dirt and hygiene, as presented to us by these perspectives, risk becoming universalised means of imposing social hierarchies. It is unclear what, in terms of social process, divides the analysis of European bourgeois cleansing practices (Laporte, Otter) from the world of Leviticus (Douglas). Second, as a social category dirt’s ecological placement is surprisingly uncertain. As a product of social relations it becomes indistinct and invisible once returned to the status of mere matter. Ultimately, dirt’s need to remain uncomfortably close to the human body undermines its capacity to engage with the wider questions of ecological transformation, unequal material flows or the social metabolism. In other words there is a lack of ability to account for the structures of material flows, and the ways in which they might change, within these forms of analysis. Third, the marginalisation of social conflict which often occurs in the application of dirt is troublesome. Otter in particular tends to represent the imposition of disciplinary technologies in a linear fashion, assuming that they successfully negate resistances as a dirty urban working class falls compliantly into line with bourgeois hygiene. The city as a site of conflict, especially conflict over access to environmental ‘goods’, is thus reduced to a machine for the making of ‘clean’ subjects. Hamlin and Allen, both provide histories which demonstrate that the cleansing of the urban environment was a contested process at both the ideological and political levels, but the possibility of dirt becoming a one-dimensional analysis of ‘discipline’ is a problem that it is as well to be aware of.

There are moments though when dirt as a category of analysis threatens to break down under these limitations, and these often revolve around the problem of dirt as waste. In Filth: Dirt, Disgust and Modern Life (2005), the contributors employ dirt along the lines of Laporte to illustrate the essentially dirty character of Victorian modernity. Although, the essays cover a diverse range of material, they remain for the most part concerned with the body, sensory experience and dirt’s role in ordering the social imaginary. When waste emerges as a theme it is either as ‘waste disposal’ or as a synonym for dirt. However, in their introduction to the volume the editors suggestively outline a different possible uses of waste. They remark that dirt is both the ‘unregenerate’ but, when thought of as waste, becomes ‘conceivably productive’. This observation is not really followed through by the contributions to the edition, but I would agree that waste ultimately pulls dirt out of the realm of the abject and forces it into the realm of the circulation of value. The ultimate end of dirt, does not have to be a disintegration into non-identity, but can instead be a remaking as value. The implication of this is also that something not initially categorised as dirt can still be waste, decisively separating the operation of waste as a category from that of dirt. It is at the moment of valorisation therefore that a properly historicised understanding of the distinctive qualities of the category of waste becomes urgently necessary.

The Meaning of Waste

The etymology of the word ‘waste’ can be traced to the mediaeval latin vastum or wastum, which was applied from the twelfth century to describe land that had been devastated by
the consequences of war or disease and from which reduced tax revenues could be expected. In Middle English the term came to signify the uncultivated lands surrounding the cultivated spaces of the manorial estates, which were the property of the manorial lord but also often the subject of common rights. These common wastes had particular ecological uses for the commoners, providing access to fuel, building materials and plants and animals which expanded the dietary possibilities of the commoners. This early history of the meaning of waste is significant, as it is suggestive of the ways in which meaning of waste has altered historically. The earliest meanings accorded to ‘waste’ in English were closely allied with the particular ‘social-ecology’ of pre-capitalist agricultural production. ‘Waste’ in its earliest form was productive of a certain form of environment, and a certain form of hierarchically ordered society. This is a key point, for the meaning of ‘waste’ subsequently showed a tendency to co-evolve alongside socio-ecological transformations, and the contestation of those transformations. These transformations of meaning eventually became bound up in the evolution of capitalist ideas of value and nature. The ideological contest over the meaning of waste has played a historically crucial part in enabling the production of a capitalistically organised nature. How ‘waste’ attained its distinctively modern meaning as neglected value, or unrealised productive force, therefore becomes a critical question.

The essential starting point for any effort to address this problem is John Scanlan’s *On Garbage*. Unlike the universalised dirt of the anthropologists, Scanlan sees waste as the inescapable remainder of processes of modernisation. The Enlightenment, whose objective was the production of an improved knowledge progressively cleansed of error, is constructed through and produced by the attempt to capture and improve waste. The Enlightenment therefore produces a binary between ‘waste’ and ‘value’. Although this binary structure is similar to that which exists between the dirty and the clean, it is historically specific. For Scanlan, the very processes of Enlightenment progress become themselves productive of waste. Odds and ends that cannot ultimately be incorporated into the single homogenous rational picture of western knowledge and practice cause the waste-value binary to collapse. Waste becomes a negation of Enlightenment. Scanlan argues that we should therefore regard waste not simply as a binary or cyclical system like ‘dirt’ but as a ‘moral economy’ with a linear, entropic temporality:

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 indicates the need for a historicised understanding of the ways in which this moral economy of waste is historically produced, and hints at the politicised, contested nature of this production. A glimpse of the history of this ‘moral economy’ of waste is provided when he traces the modern meaning of waste from the scientific revolution of the seventeenth century through to the emergence of the ‘waste-book’ in the accounting methods of early political economy. Scanlan also points out the importance of Locke in remaking waste as a metaphysical category in which the entire globe is rendered not abundant, but waste, demanding active intervention either by divine or human hand to order and valorise it.

In a subsequent essay, Scanlan’s focus moves even more explicitly towards the historical investigation of waste. Investigating temporality in the work of Henry Mayhew and Mayhew’s interest in the relations between poverty and waste, Scanlan demonstrates the
continuing presence of ‘the leftover and elusive, the filthy and waste, as well as the people places and phenomena that seemed to have escaped the rational time of modernity’. Mayhew reveals the world of the ‘idle’ poor of the Victorian metropolis as at odds with the temporality of bourgeois reason, establishing ‘an exclusion zone that became a kind of dump for failures, defects and the dead’. Mayhew’s fascination with a wasted (rather than dirty) humanity explores the temporal dimension of the devalued, revealing how the bourgeois telos requires projects of exclusion and abjection. Simultaneously, the presence of forces of decay and decadence, Scanlan’s ‘lasting-on’ of waste, threatens to negate bourgeois promises of progress and improvement. The very temporality of waste thus becomes a site of contradiction and conflict between competing moral economies and temporalities of value.

‘Refuse Revolutions’ and ‘Waste Regimes’

Scanlan’s work directs our attention to a crucial point in the constitution of waste, the point of disposal. Disposal is the point at which the category ‘waste’ becomes embodied in the material practices associated with the production and valorisation of nature. Disposal is the site of greatest political contestation over waste and its environmental impact, and the point at which contradictions between waste as dirt and waste as neglected value are most evident. These contradictions are the subject of urban environmental history and industrial ecology, where waste is investigated as an effect of the absorption of nature into capital. Raw materials are concentrated in the city as objects in the processes of production and consumption waste becomes a point of contradiction within the capitalist social metabolism. The capitalist process simultaneously vindicates and celebrates its domination and transformation of nature in the industrial metropolis only to see this triumph turn to dust in its hands as the terrifying abject contents of our sewers and dust-bins.

The politics of waste becomes more and more prominent as the absorption of nature’s products into the social metabolism intensifies. In the late-nineteenth century the changing politics of waste was partly reflected in a professionalisation of waste disposal that radically transformed the way in which capitalist societies dealt with urban refuse, the ‘Refuse Revolution’ in Bill Luckin’s telling terminology. Waste disposal in Britain underwent a significant transformation after the Public Health Act of 1875, and post-consumption waste became a social and political question among urban reformers in ways that it had not been before. But we should avoid establishing a teleology. The contradictory nature of technological interventions in environmental problems has been attested in the work of historians of technology like J. A. Tarr and M. Melosi. And as recent work by John Clark has suggested the ‘Refuse Revolution’ remained a contested and incomplete phenomenon.

Indeed, the production of disposability is perhaps as important a process for capital as the production of waste. New disposal technologies in the nineteenth and twentieth centuries, landfill and incineration for instance, were as much about producing disposability and expanding the velocity of capital’s valorisation process as about solving the pragmatic problem of what to do with garbage. Nowhere is this more evident than in Susan Strasser’s *Waste and Want: A Social History of Trash*. Investigating the ways in which the uses of waste have changed since the early nineteenth century, Strasser locates a key point of transition in the shift from a domestic culture of handicraft (with its focus on recycling, craft and *bricolage*) to a culture of consumption founded on advertising, the supermarket and disposability. For Strasser, the key to the transformation of America’s relationship with waste is the changing nature of capitalism itself and the emergence of the consumer...
society in particular. Strasser argues that older traditions of reuse were deliberately destroyed through the intervention of capitalist propaganda and the cultural production of disposability. The consequence was the substitution of long-established female domestic skills and creativity by the consumption of disposable objects for the domestic sphere produced by male-dominated technoscience.

One of the most ambitious attempts to delineate the historical production of waste through disposal has been made by Zsuzsa Gille. Gille’s compelling study of the evolution of waste production, recycling and disposal through the various economic and political transitions of twentieth-century Hungary is embedded in the historicity of the practices of waste disposal. Gille’s major contribution to analysis of waste disposal is the concept of the ‘waste regime’:

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 mobilised 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 mobilised 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.

For Gille, the ‘waste regime’ is a social and political constellation which both demands the production of certain kinds of waste by producing a certain kind of disposal. It seeks to discipline producers and consumers alike to certain ways of making waste to reproduce its modes of disposal. However, in contrast to post-structuralism’s somewhat linear, and one-dimensional, readings of dirt, waste regimes are determined by multiple material and non-material forces acting on one another producing different constellations at different times and places. Waste regimes are contested, crisis-prone and evolve historically. Gille’s concept of the waste regime deserves to be a crucial category for future environmental historians.

Waste and the Narrative of Environmental History

In this final section, I wish to return to the question of analysing ‘waste’ from the perspective of the socio-ecological totality within which its meaning operates and is contested. Recent interventions by John Foster and James Moore from historical materialist perspectives have suggested a reconstitution of environmental history as a history of capital’s metabolic relations with nature. Their work has demonstrated the relationship between the making of the world economic system and progressive phases of environmental change. Ultimately, these phases of change, which are propelled by the logic of capital’s value system, result in the construction of social ecologies that capitalism must continually seek to revolutionise if it is to transcend the limits they impose. Their work illustrates the operation of James O’Connor’s conception of the ‘second contradiction of capital’ in which capital tends to undermine its own natural base. These interpretations combine Marxist and world-systems theory in an analysis of the ‘metabolic rift’ as a system of social reproduction which capital creates and is thereafter forced to try to sustain or transcend. Within this system, I would argue that waste was a part of the ‘practical
consciousness’ of capital in which the constant transformation of nature is legitimated ideologically. However, it also offers a point around which ecological contradiction comes to focus, and the contradictory uses and occasional remaking of the meaning of waste reflect this.

There are a number of points that I would make in justification of this attempt to understand waste as an important component in the capital’s environmental ideology. The first is that the social theory of waste has already indicated the prior necessity of some foundational conception of nature which enables programmes of environmental transformation. Although waste is presented by Scanlan as epiphenomenal, a residue of enlightenment, it is apparent that waste is double-sided. Modernity produces waste, but without waste on which to operate there is also no modernisation. The idea of ‘waste’ thus involves a dialectical symbolic process in which there is a simultaneous production of that which must be disposed of. Waste is not to be seen, therefore, as merely the material product of industrial development, an expression of monstrous energetic excess.27 It was also bound up with, and enabled, the imaginary elimination of all that was defined under its aegis as either ‘useless’ matter, ‘inefficient’ practice or empty space. Anything, named ‘waste’ becomes potentially subject to practices of disposal, recuperation and revalorisation. This characteristic had vital consequences in terms of the capacity to imagine capital’s infinite penetration, and transformation, of nature. The legitimation of capitalist ecological transformations required that the natural world should be seen as an over-productive waste space that required reordering to redirect nature’s productive capabilities to the construction of civilisation. As Carolyn Merchant demonstrated in the Death of Nature, the redefinition of the common wastes in the seventeenth century as undisciplined and unproductive accompanied the reclamation of these spaces and their transformation into capitalist ecologies.28 David Blackbourn’s recent book The Conquest of Nature similarly demonstrates how the efforts of eighteenth-century German engineers to re-engineer and valorise German rivers were based on a prior conception of these natural systems as waste.29

The attempt to reframe the common wastes as unproductive, an infringement of the moral economy of capital was, of course, a site of intense class conflict. This was evident in the argument between the utopian communism of Gerrard Winstanley and emerging liberal understandings of property and the possessive individual. Winstanley proposed that the English common wastes could be a basis for a democratic, communist form of ‘improvement’. This contrasted with the pursuit of improvement through the extension of private property and a strong state on the model of a Hartlib or Locke.30 Ultimately Winstanley’s vision of an England remade as a land of common wastes was defeated, and enclosure prevailed, but English Radicals in particular continued to critique the improvers’ reconstitution of waste as immoral and requiring elimination. In his Rural Rides (1830), William Cobbett attacked what he saw as the depopulating enclosures of the south of England declaring that ‘these enclosures and buildings are a waste; they are means misapplied; they are proof of national decline and not of prosperity’.31 Waste’s meaning remained a site of class contention into the twentieth century, and the attempt to revalue unproductive spaces was at the heart of modern landscape protection.32

The ideology of waste was globalised in a colonial language of waste. In the colonial context, the idea of waste was applied to render these ecologies legible to the European colonial gaze.33 Complex indigenous landholding systems were reduced to waste which could be mapped, valued, taxed and improved. In India, for example, the colonial state employed waste discursively as a means of managing the indigenous agro-ecological
system to extract a surplus. Waste was also present in the sense of unproductive lands which irrigation engineers sought to dominate and render productive. Global ecological transformation, following European capital’s model of development, was made thinkable in the first instance by the imagination of much of the globe as a fecund, but waste, space. European claims to scientific and technological progress required the ‘waste’ zones of the world to be represented as spaces where free reign could be given to the forces of rational historical development, authorising all manner of human interventions in the environment from colonisation itself to the creation of private property regimes to the transplantation of new plant and animal species.

These ecological transformations, however, created their own contradictions, which forced reconstruction of waste to maintain its effectiveness as ideology. Such a reconfiguration is apparent in the emergence of conservationism, for example. The classic text of conservationism, George Perkins Marsh’s *Man and Nature*, reconstructed nature as scarce, and humanity’s irrational exploitation of natural resources as wasteful. Subsequent studies of the progressive conservation movement, in particular, have demonstrated the relationship between waste, inefficiency and technological rationality in conservation discourse. In conservationist thought and practice waste was reclaimed to signify a failure of ‘civilisation’ rather than over exploitation. As Hays writes:

> The conservationists ‘emphasized expansion, not retrenchment; possibilities, not limitations … Conservationists envisaged, even though they did not realize their aims, a political system guided by the idea of efficiency and dominated by the technicians who could best determine how to achieve it’.

The conservationists’ understanding of waste as a failure of human control over the productive cycles of nature legitimated a reproduction of nature as a product of human productive interventions wholly given over to the production of raw materials to sustain capital’s metabolic requirements.

**Conclusion**

As Paul Warde and Sverker Soerlin have recently observed in an extensive review of the field, environmental history has struggled to find an identity and define a problematic. They argue that a fuller engagement with political and social theory which already recognises that ‘Society’s nature is a political product’ should be part of the next phase in the development of environmental history. Although I agree with much of 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. Current environmental history appears suspicious of the historical materialist approaches that distinguished early work in the field, such as Merchant’s *The Death of Nature* or Donald Worster’s *Rivers of Empire*. The trend away from historical materialism in environmental history is partly reflective of currents of thought in the history of science which have increasingly sought to investigate the particularities of the cultural construction of ‘nature’. Ultimately, however, without a grounding in the material and social transformation of ecologies, and without a totalising perspective on how this story unfolds, environmental history will be able to add very little that is distinctive to this picture. I would argue that our analytical categories and objects of knowledge need to be of a kind that can render us knowledge of a global and systemic environmental transformation. This should not exclude the social construction of nature, but attempt to understand the relationship between ideology and material processes of the capitalistic
production and reproduction of nature. Waste, I would claim offers one fertile area of investigation.

Finally, I should say a few words on the question of ‘What is to be done?’ If waste as ideology has legitimated and structured the capitalist transformation of nature can it be transcended? As I have indicated, one of the attractions of waste as a category is the fact that it has been contested over time. Its meanings are far from fixed. Just as the reconfiguration of waste contributed to the appropriation of the commons it is possible that reclaiming the value of the unproductive can have the opposite effect. Perhaps we need a politics of waste that defends the value of idle time, wasted space and unvalorised nature. The kind of society that can successfully survive and mitigate climate change may perhaps be more tolerant of waste – and dirt too.

Short Biography

The author is lecturer in history at the University of Exeter (Cornwall Campus) where he teaches environmental history and politics. He has published on the history and politics of waste in modern Britain. His most recent work has focused on waste as an ideological category that enables capitalist claims to the right to appropriate and transform nature. He is presently working on a project that looks at popular responses to the development of landfill in early twentieth-century Britain.

Notes

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6. Ibid., 2.
8. Ibid., 56.
13. Ibid., x.
Bibliography


