

The apocalypse of objects

Degradation, redemption and transcendence in the world of consumer goods

David Graeber

2012

Contents

Cosmologies have consequences	3
On the significance of the prefix 'eco-'	6
Back to recycling	10
References	11

Death's invisibility enhances its terror. *Philippe Ariès*

'Have you ever seen someone die, David?'

I still remember the first time I was asked that, by the grave, very Christian old matriarch of a household in Antananarivo where I had been staying while working in the Malagasy National Archives. It wasn't the last time I'd be asked during my two years in Madagascar. Many of the people I came to know seemed to feel one of the most exotic things about Europeans was that many had never witnessed death. Not accidental or violent death – that was considered just as bruising and horrific in Madagascar as anywhere – but normal, peaceful death, the kind anyone would be expected to aspire to as the culmination of a successful life, in bed, surrounded by children, grandchildren and loving neighbours and well-wishers.

That the North Atlantic societies that gave birth to modern social theory were somewhat unusual in this respect we have been aware of at least since Philippe Ariès's *The Hour of Our Death* (1982). Death is hidden away. But so is childbirth. Both the beginning and end of human life are felt to be properly relegated to antiseptic sanctuaries far from the public eye; it's significant, for instance, that birth and death are both acts that one is not legally allowed to show on American television. The reason that Lutheran missionaries in Minnesota have access to medical supplies to donate to Malagasy people (as discussed in Halvorson's chapter) is that illness and death have been separated into a multibillion-dollar industry that allows for the easy recuperation and redistribution of healing artefacts to ... wherever.

This attitude toward death seems to have really taken hold only around the time of the birth of industrial civilization, and it's likely that's no coincidence. If nothing else there is a curious homology here. We don't like to have to see, or think too much about, the moment when living organisms come into existence, or dissolve away out of it. It's the same with animals. It's the same with commodities. The factory floor and incinerator are considered just as properly kept out of sight as the hospital ward and crematorium. This in turn makes it easier to imagine manufactured goods, which then become the paradigm for all material goods, or human beings, as discrete, free-standing, self-identical entities, that just sort of leap into being and disappear again – rather than as themselves ongoing processes, patterns of change, fundamentally entangled in the world around them. As nouns instead of verbs. The world is full of things (to which we give names) rather than being a jumble of processes of growth and decay, crumbling and assembly, fermentation, preservation, quiescence, explosion, contamination, one where what might at times seem discrete objects usually disposed to melt into one another, where humans are always transforming everything around them, and where maintaining things in more or less the same form often requires even more attentive labour than transforming them. The notion that there is some fixed, usually immaterial, essence, to people and objects, existing on an abstract plane that is somehow prior to, but also higher and purer than, materiality, would appear to come directly out of the habit of looking at the world which eventually drove us to hide death and childbirth out of sight.

Cosmologies have consequences

What follows is a brief sketch, really only a series of preliminary reflections, on the relation of the peculiar cosmology underlying industrial civilization and the general question of recycling addressed in this volume – and by extension, the very notion of ecological sustainability on

which it rests. I should emphasize right away – I wish I didn't have to – that I am not doing so in order to undermine the idea of ecological sustainability itself. No one in their right mind (I hope) would not wish to see the world move towards an economic system that did not threaten to visit ecological catastrophe on the planet, as the present one surely threatens to do. What I would like to do, instead, is to examine some of the reasons why existing efforts in this regard have been so woefully inadequate. We live, after all, at an extraordinary moment, when rapidly advancing climate change has made it utterly apparent that the global industrial system is already causing global destruction on an unprecedented scale, and existing institutions of global governance have proved absolutely incapable of addressing the situation. It's hard to imagine such a failure of such colossal proportions. It's hard to imagine this is a simple question of political deadlock; or, for that matter, of the interference of corporate CEOs, who after all do themselves have a certain interest in the continued habitability of the planet. Something about the ways we have been framing these issues must be profoundly flawed.

In this context, trying to map out the underlying principles about what might be termed industrial cosmology might well be a useful first step.

If nothing else, it's hard to understand the concept of 'recycling' without it. Here I think we have to begin with two questions:

1. Why is the trajectory of manufactured objects, from factory floor to market to domestic or commercial use, seen as similar to the human life-course?
2. Why are both trajectories imagined as circular, as 'cycles'?

The first seems to be our starting point: this is why production and disposal are to be pushed out of sight in much the same way as birth and death. The resemblance seems especially salient when a product nears the time of its disposal: it's then especially we hear about 'product life', or 'end of life products'.

The second is already presumed in the very term 'recycling'. To 'recycle' literally means to 'cycle again'. But why do we imagine the history of a manufactured product as cyclical in the first place? Presumably it is by analogy with a human life, but it's not clear in what way the course of a human life is in any way circular either. We grow up, but we don't really grow down again. It's true that we tend to gain in social prestige and power over the first two-thirds or three-quarters of our lives, and (often) decline fairly abruptly towards the end of it. But this is hardly a matter of coming around full circle; if there's a shape, it's more like a long ascending arc with a final crash; and anyway, dotage is not really a 'second childhood'. We can only imagine lives as circular if we concentrate solely on the fact that we end up in the same place that we began – in nothingness – which flows directly from the way that beginning and end are both seen as being fundamentally unknowable.

It's the same, too, with manufactured objects. They are imagined as having magically appeared, proceeding to 'circulate' (note that word again), and then, finally, disappear into that same abyss from whence they came.

Marxist philosophers from Georg Lukács (1968) to John Holloway (2003) have noted that our conception of the world, which starts from the existence of self-identical objects, 'the thing in itself', and only then asks how things change and come into relation to each other, seems to be a direct result of the market system. The idea that objects are intrinsically separate and self-identical seems to fly in the face of all common sense. Why then do we insist on maintaining

the fantasy? Most obviously, because if what we take to be objects are really more like interlocking processes, it's very hard to see how one could buy and sell them. Many of our most basic philosophical conundrums ultimately derive from this contradiction between the need to apply clear property rights, and hence to define discrete units existing in some sense outside of time, to which they can apply, and the observed realities of actual physical existence. What, after all, is the easiest way to see something as moving and changing, yet ultimately remaining exactly the same? Obviously, to say that it is moving in a circle. The cycle is ultimately our way of imagining stasis, the steady state, the condition in which an object might be said to be in motion but still remains nothing but itself, just as in each daily or seasonal cycle, the nature of each day or year can be seen as exactly the same as any other.

Of course, all these cycles are artificial constructs; humans and objects do not simply appear and disappear again; as poets and philosophers spend much of their time reminding us. Everything is recycled in one form or another; in fact, almost everything around us contains (among many other things) elements of the decay and destruction of past human beings.

HAMLET: To what base uses we may return, Horatio! Why may not imagination trace the noble dust of Alexander till he find it stopping a bung-hole?

HORATIO: 'Twere to consider too curiously, to consider so.

HAMLET: No, faith, not a jot; but to follow him thither with modesty enough, and likelihood to lead it; as thus: Alexander died, Alexander was buried, Alexander returneth into dust; the dust is earth; of earth we make loam; and why of that loam (whereto he was converted) might they not stop a beer barrel?¹

The conjuncture between human remains, pottery and alcoholic beverages (inert matter themselves imbued with a kind of 'spirit') is a particularly common poetic theme. Fitzgerald's Omar Khayyam, written, depending on how you look at it, some centuries before, or some centuries after, Shakespeare, had conversations with his cup, whose clay, he estimated, must surely be composed of materials drawn from the lips of former generations. But the overall image of the world as a series of interlocking cycles can always be salvaged in some way – for instance, by insisting that all this means is that the smaller cycles we usually think about are ultimately part of larger cycles, whereby all matter is recycled as part of some grander, cosmic unity.

The English word 'recycling' is first documented in 1926, originally employed as a technical term in oil refining and related industrial procedures. It took on its contemporary sense, of gathering reusable items of domestic trash for reuse, only in the 1960s – as part of a broader ecological awakening, a growing consciousness of the wastefulness and destructiveness of consumer economy, and a moral commitment to moving towards an industrial system based on principles of ecological sustainability. But it's significant, too, that in becoming a moral imperative, rather than a technical term, the word also moved away from its earlier reference to industrial practices to refer to the behaviour of individual consumers. And this despite the fact that consumers produce only a tiny proportion of the world's waste. As Luna Glucksberg (n.d.) observes:

According to different estimates, the amount of waste produced in the UK that can be traced back to individuals varied between 4% to 9%. Even using the highest available

¹ *Hamlet*, Act V, Scene 1.

data of 9%, that means not even a tenth of what goes to landfill is attributable to the behaviour of individual households. The current highest targets to recycle up to half of all household waste would still, in fact, only divert from landfill up to 5% of total waste arising: this would be a very optimistic estimate.

Yet when people speak of recycling, they now refer almost exclusively to domestic waste, or consumer goods thrown away in public places (plastic bottles at the mall, that sort of thing) rather than the principal sources of the waste products that fill our landfills: the largest single share of which is created by the construction industry, and after that by industrial production. It would appear in fact that if UK property developers simply stopped ripping down old structures and building new ones, and instead limited themselves to refurbishing existing buildings, this in itself would have twice the effect of that which would be obtained if every family in the country were somehow able to recycle, compost or otherwise divert every single ounce of garbage their household produces.

‘It is reasonable’, Glucksberg concludes, ‘to ask why an activity that has, on the whole, a rather limited impact on the amount of materials that end up in landfills or incinerators is invested with so much value.’ Indeed. In her own analysis, she follows O’Brien (2007) and Luke (1993), in suggesting that what we are seeing is a combination of a habit of treating moral questions as matters of individual conscience, and political expedience – it is much easier to appeal to the personal conscience of consumers than to create the kind of mass social movements it would take to seriously change the modus operandi of powerful capitalist firms.

We are used to finding a profound morality in anything having to do with waste, as the editors of this volume so astutely point out: the language we use to speak of such matters slips easily from a technical language of efficiency and expedience to one of degradation and redemption. Just as the classic media image of economic catastrophe is the sight of formerly middle-class housewives picking through garbage heaps for food, it’s also hard not to ask, ‘Why, when so many are so desperate, are there people throwing away edible products to begin with?’ As is demonstrated throughout this book, particularly in the chapters by Bear, Faulk and Millar, to refuse the sin of waste, to turn waste into something valuable, is also to rise from degradation to a sort of redemption.

The question is why this morality has such a stubborn tendency to attach itself only to personal, or household, consumption. Is it just a tendency to view all moral questions from an individual perspective? Or do we need to begin thinking more carefully about the household itself?

On the significance of the prefix ‘eco-’

To map out everything that has contributed to our sense that household waste is a privileged locus of moral transformation would be a complicated business. We would have to consider medieval Christianity, with its strange combination of redemptive messianic religion, and an Indo-European-style caste system. It can hardly be a coincidence that, after the collapse of the great Axial Age empires across Eurasia, we see the gradual re-emergence of empires in China and the Middle East, and instead the emergence of a much more chaotic, decentralized system based on caste hierarchies in precisely those areas where Indo-European languages predominated: a four-part system (priests, warriors, merchants and farmers) in India, and a three-part system (without the merchants) in Europe. In each case, too, there was a residual category composed of groups

who performed what were seen as especially polluting professions, especially those involved in the disposal of waste: in Europe these included, according to Jacques Le Goff, fullers, dyers, laundrerers, bathhouse-keepers, leatherworkers, barbers, butchers and tripe-sellers, and even pastry chefs (Le Goff 1990: 47–8).² There was a profound tension, of course, between this overall hierarchical organization of society, with clerics at the top, and the fact that these same clerics acted in the name of a Redeemer who had lived, who by his own words continued to live, above all among the lowliest members of society, and who provided the promise of universal salvation.

All this is complicated enough. But lingering behind our moral debates on the relation of economy and ecology lies, I think, a third factor, equally important: the ancient ideal of the *oikos*, the self-sufficient household.

Nowadays, ‘eco’ has become a sort of shorthand abbreviation for everything associated with environmental politics. We thus speak of ‘eco-consciousness’, ‘eco-friendly’, ‘eco-tourism’, ‘eco-activists’, or even ‘eco-terrorists’ and ‘eco-freaks’. Ecological imperatives are, generally speaking, seen as directly opposed to the maximizing, growth-oriented, productivist ethos enshrined in economics. It’s thus all the more confusing to recognize that, etymologically, ‘economy’ and ‘ecology’ are very close to the same word. In either case the ‘eco’ derives from the Greek word *oikos*, the household, which was also assumed in pretty much all ancient discussions of the subject to be what we would now call both an economic and an ecological unit, the family farm. ‘Economics’ is, in Greek, simply the regulation or management of this family estate; ‘ecology’ technically means the study of this same *oikos*.

Scholars from Max Weber (1998 [1908]) to Moses Finley (1974) have emphasized that all ancient economic literature is driven not by anything we would now recognize as economic imperatives, but rather on a moral imperative that a free man should not be dependent on anyone else. A man’s holdings should, ideally, provide him with everything he needs. This is not to say that profit was not a motive. It just meant that it only came into the picture after those needs were completely provided. ‘The paterfamilias’, as Cato put it, ‘should be a seller and not a buyer.’ As a result economics was the art of managing one’s holdings, and employing one’s wife, children, slaves and other dependants in such a way that all physical needs (food, clothing, etc.) were to be obtained from within one’s own estate, rather than having to be purchased, leaving the master of the household a fully autonomous being, free to engage in the political life of the city – but also, ideally, in a position to sell a surplus to others, so as to acquire money, which was also useful for all sorts of political purposes. Economics was thus the timeless domain of cycles, human and biological reproduction, birth and death, planting and harvest, to which women and dependants were relegated, while the political sphere it made possible was the male domain of rationality and history.

The critical thing for present purposes, though, is that this conception of the *oikos*, from the beginning, contained both a notion of self-contained, self-sustaining equilibrium with nature, and of maximizing production and hence profits, *at the same time*.

The discipline we now refer to as ‘economics’ derives from what in the seventeenth century began to be referred to as ‘political economy’, the idea that it should be possible to manage political units – kingdoms – according to the same principles as an ancient household, as materially

² Obviously in South Asia the system became far more formalized, and the priestly caste there was endogamous, rather than being drawn largely from the younger sons of the warrior caste, but otherwise similarities are striking, and strangely unremarked on.

self-sufficient units that would thus not be dependent on foreign imports, but which would still produce a surplus to export, for cash, to the residents of other kingdoms. For that tradition, which culminated in the mid-eighteenth-century Physiocrats, the basic economic unit was still the agricultural household; only the task of administration was now to encourage interdependency between households so as to increase overall yields. The discipline began to take its contemporary form only with the Industrial Revolution, once the household came to be imagined not as a unit of production at all, but rather of consumption, and 'the economy' could be conceived as an autonomous domain of human activity wherein commodities travelled through a kind of life cycle, from production (a word which originally just meant 'putting out') in factories, farms or other workplaces, through the marketplace, to their ultimate destination in the hands of consumers – the English word 'consumption', significantly, originally meaning 'to burn, waste, or utterly destroy' (see Graeber 2011a).

As many have remarked, this conception of economic life as a cycle of creation and destruction sits rather oddly with much of how we actually treat our houses, books, furniture, appliances, and so forth, but it's certainly true that consumer economies have increasingly encouraged us to see material objects as disposable, or to create them in such a way that they do break down and need to be disposed of, in order to answer the need to continually expand production. The ecological movement was to a large degree motivated by a need to address the pernicious effects of this constant expansion of both production and destruction.

But what of the term 'ecology' itself?

The term is in fact quite late: it was coined by a German biologist named Ernst Haeckel in 1866, as *Ökology*, 'the investigation of the total relations of the animal both to its inorganic and to its organic environment' – as a scientific area of study meant to cover the same ground as the earlier term, documented from at least the sixteenth century, 'the economy of nature'.³ *Oikos* was, again, a direct reference to the old Graeco-Roman family farm, as a place where ideally nothing is wasted, nothing should have to be brought in from the outside, where perfection is the attainment of a perfect equilibrium – though one which, somewhat paradoxically, yields a profitable surplus at the same time.⁴

Haeckel himself was a confusing and contradictory character, who tried to bring together virtually all the emerging intellectual currents of his day. He began as a classic liberal, a pacifist enthusiast for the free market, who saw his new science of ecology as a kind of combination of the insights of Darwin with the then emerging discipline of economics; but enfolding both within a variety of Spinozan monism that saw all of the material elements of the natural world as imbued with psychic qualities. A fervent opponent of all forms of Christianity, Haeckel ultimately dreamed of replacing the Church with a scientific, but at the same time mystical, religion of nature. By the end of his life this drove him in an increasingly conservative and nationalistic direction, and he abandoned his earlier egalitarianism, arguing instead that the study of biology demonstrated the inevitability of a dominant elite. This makes him a decidedly peculiar ances-

³ 'The ecology of organisms, the knowledge of the sum of the relation of organisms to the surrounding outer world, to organic and inorganic conditions of existence; the so-called "economy of nature", the correlations between all organisms living together in one and the same locality, their adaptation to their surroundings, their modifications in the struggle for existence, especially the circumstances of parasitism, etc.' (Haeckel's 1868 definition, cited in Acot and Müller 1998: 672).

⁴ Needless to say it isn't really because ancient households were dependent on slave labour that had to be imported, at the very least from other households, usually from abroad.

tor for the current ecological movement, but the tensions within Haeckel's thought were just a reflection of the intellectual tensions of his day.

What I would stress instead are two points: first of all, that as recent commentators have remarked (e.g. Kleeberg 2007), for all his opposition to organized religion, Haeckel was largely just reproducing the natural theology of his day, and secondly, that, partly for this very reason, ecology and economy emerged alongside one another, sharing very similar basic assumptions. The very notion of the 'economy of nature' was, originally, theological – essentially, based on the principle that God manages the entire natural world as if it were an *oikos*. But here again, we find the same internal tension. Consider here the following reflection on the work of Carl Linnaeus, who wrote his *Specimen academicum de oeconomia naturae* in 1749:

By economy of nature, he meant the very wise disposal of natural organisms instituted by the Sovereign Creator according to which these organisms had common ends and reciprocal functions ... The economy of nature (otherwise called Divine Economy or Divine Wisdom) was essentially a concept according to which the interactions between natural bodies resulted in an *intangible equilibrium* that maintained itself throughout the ages. (Lévêque 2003: 205, emphasis added)

God was economical in the sense that he ensured that nothing was wasted, that the systems he created were self-sustaining. This balance of nature was often held out as proof of God's existence – as it was by Linnaeus himself. But at the same time, Linnaeus argued, nature was also 'designed by Providence to maximize production' (in Sideris 2003: 23)! It not only maintained itself as an equilibrium system, it was also capable of producing an endlessly increasing bounty to serve the purposes of man, who was assumed to be constituted over and above the natural world in much the same way the ancient male householder and his political sphere were constituted over and above the world of domestic production.

That tension – between a self-contained, self-reproducing system that remains in stasis, and a system of endless productivity, with both being simultaneously seen as moral values in themselves – continues to haunt both economic and ecological discourse as, in the nineteenth century, the two become secularized. The emphasis tends to shift back and forth. Hence productivism of early political economy (echoed in Marx) was soon followed by a turn to equilibrium models, under authors like Marshall and Walras, writing at almost exactly the same time as Haeckel was developing his own notions of ecological balance.⁵

The idea of markets as generalized equilibrium systems was to come to define neoclassical economics, and, indeed, to become the key to its moral power (markets know best). Yet at the same time, as Paul Worster (1977) has so clearly documented, the science of ecology, which drew freely on economic concepts, was by the middle of the twentieth century able to use its own equilibrium models to make if anything even greater moral claims, or at least the only ones capable of seriously challenging economic ones: becoming, as Worster was later to put it (1990: 3), 'a program of moral enlightenment – of "conservation" in the sense of a restored equilibrium between humans and nature'.

If proof were required that both these equilibrium models were, essentially, duelling moral projects, one need only consider just how much needs to be pushed out of the picture in order to make it possible, in each case, to argue that we are in the presence of a self-regulating system.

⁵ From Bartelmus (2008: 21).

In the case of markets, one must not only make a series of obviously impossible assumptions (that all actors, for instance, are rational and have perfect information), but also ignore huge swathes of actual economic activity. An image of economies as closed loops can hardly do justice to the continual trade and transformation of electronic wastes (Tong and Wang, this volume), ships (Crang et al.), clothing (Norris) or spent nuclear fuel (Garcier). The case of ecosystems is if anything even more extreme, at least if considered from the perspective of thermodynamics, since all eco-systems are dependent on the constant infusion of new energy from outside the planet entirely – sunlight – without which they would perish almost instantly. They are thus about as much equilibrium systems as a clock plugged into a nearby electric socket. In fact, just as ecosystems could be considered giant processors of solar energy, our current, productivist, industrial system is entirely dependent on coal, gas and oil, is powered by solar energy trapped and processed by now-fossilized remains of plant life of ages past. In the case of the sun, at least we have several billion years before we can anticipate any real problems. The kind of solar energy preserved in the fossil fuels that industrial economies have relied on for the last couple of hundred years is unlikely to last another generation.

Back to recycling

At this point, it's easy to understand what recycling represents. It's the latest in a series of attempts to impose a circular, equilibrium model on a system that is, at least in energy terms, as far from an equilibrium as anything could possibly be.

The idea of recycling is entirely dependent on the logic of property. It is property arrangements, after all, which allow the transfer of rights to objects through commercial transactions, and therefore allow the 'circulation' of objects from the sphere of production to the sphere of consumption in the first place. After all, if we clean a plastic bottle and put some new liquid in it within our households, or decide to print on the other side of old documents, we don't normally refer to this as 'recycling'. That's just reuse. Diverting an object to new use is referred to as recycling only when we abandon our property claims and allow the object to exit the household and have a commercial value once again attributed to it.

Money, of course, is what makes all this possible; it is what propels these objects along on their purportedly circular careers. In fact, in neoclassical economics, money is both the communicative medium that allows for market equilibrium and also (since such economists assumed a gold standard) the ultimate recyclable product. Consumer products might constantly cycle from creation to destruction, but money was always reused; once spent, it was still not spent, in the sense of depleted, but simply passed along to the next stage of the cycle to be spent by someone else. Just as gold was, for the alchemists, the perfect, eternal form of matter, the ideal to which all minerals aspired, so gold in the form of money was the eternal commodity, endlessly recycled, never losing value at any point. The analogy suddenly makes the notorious psychological identification of money and human waste even more poignant. We are still dealing with the dream of turning base matter into gold.

One theme that has cropped up repeatedly in the essays assembled in this book is how communities can themselves organize themselves like households, and at the same time transform themselves into something higher, through the labour of transforming waste into something valuable. The result can be anything from a degrading, exploitative sham – as in Fredericks's

chapter, for example – to what seem to be genuinely hopeful experiments – the main factor in the difference, unsurprisingly, being the degree of autonomous self-organization on the part of the participants. But in order to break out of the cycle and begin to imagine genuinely sustainable economies, I think, we will have to begin by reconfiguring the categories of political economy entirely. This is why I began the essay as I did: with the hiding away of birth and death, production and consumption, so as to render them sites of a kind of sacred power, but at the same time allowing us to imagine the world as self-identical objects and people that somehow, cyclically, come into existence and disappear.

This is also what makes it possible for us to spend endless hours worrying about the morality of our treatment of domestic waste, without ever noticing that the ecological damage caused by domestic waste is almost negligible when compared with that caused by the construction industry. After all, if there is any form of economic activity that is difficult to reconcile with an image of the economy as the movement of commodities from factories to market to domestic units, it's the process of building and maintaining those factories, markets and domestic units themselves. Taking full account of that, in turn, requires us to rethink the way we think about the value of human labour. Both natural theology and political economy start from the assumption that value is primarily a power of creation; then try to argue that power of creation is held in check, organized, regulated, by some kind of spontaneous equilibrium. In fact, however, only a very small part of the time human beings spend working is spent in producing anything, at least in the sense of bringing new things – shoes, sausages, fluorescent light bulbs, even buildings – into being. Much more is spent adjusting, refashioning, repairing, maintaining, cleaning, rearranging or transporting things. For all the labour we spend transforming material goods, we probably spend even more on keeping them the same. And this is only counting labour that is primarily directed at material objects rather than in educating or caring for other people. It is no coincidence, I think, that the most radical political challenges to the established order documented in this volume are also precisely those (the Soviet and ex-Soviet logic of 'repair', the refurbishing of the Argentine hotel, which so nicely overcomes Locke's creationist assumption that 'mixing one's labour' with an object yields property rights only the first time one does it and never subsequently) that set out from these otherwise largely invisible forms of labour. If it were possible to create – and popularize – a new economics that started, precisely, from those forms of human activity, we might finally begin to overcome the conceptual barriers to creating a genuinely viable system for the maintenance of our lives and physical environments. And in doing so we would, almost inevitably, begin to imagine the natural world, too, in an entirely new light.

References

- Acot, P. and G. Müller (1998) 'The birth of scientific ecology', in P. Acot (ed.), *The European Origins of Scientific Ecology*, London: Routledge, pp. 671–83.
- Ariès, P. (1982) *The Hour of Our Death*, New York: Vintage Books.
- Bartelmus, P. (2008) *Quantitative Eco-nomics: How Sustainable are Our Economies?*, Dordrecht: Springer.
- Finley, M. (1974) *The Ancient Economy*, Berkeley: University of California Press.

- Glucksberg, L. (n.d.) 'Wasting the Inner-city: Waste, Value and Anthropology on the Estates', unpublished dissertation.
- Graeber, D. (2011a) 'Consumption', *Current Anthropology*, 52(4): 489–511.
- (2011b) *Debt: The First Five Thousand Years*, New York: Melville House.
- Holloway, J. (2003) *Change the World without Taking Power: The Meaning of Revolution Today*, London: Pluto Press.
- Kleeberg, B. (2007) 'God-Nature progressing: natural theology in German monism', *Science in Context*, 20: 537–69.
- Le Goff, J. (1990) *Your Money or Your Life: Economy and Religion in the Middle Ages*, New York: Zone Books.
- Lévêque, C. (2003) *Ecology: From Ecosystem to Biosphere*, Enfield: Science Publishers.
- Lukács, G. (1968) 'Reification and the consciousness of the proletariat', in *History and Class Consciousness: Studies in Marxist Dialectics*, Cambridge, MA: MIT Press, pp. 83–222.
- Luke, T. (1993) 'Green consumerism: ecology and the ruse of recycling', in *The Nature of Things: Language, Politics and the Environment*, Minneapolis: University of Minnesota Press.
- O'Brien, M. (2007) *A Crisis of Waste? Understanding the Rubbish Society*, London: Routledge.
- Sideris, L. H. (2003) *Environmental Ethics, Ecological Theology, and Natural Selection*, New York: Columbia University Press.
- Weber, M. (1998 [1908]) *The Agrarian Sociology of Ancient Civilizations*, London: Verso.
- Worster, P. (1977) *Nature's Economy: A History of Ecological Ideas*, New York: Cambridge University Press.
- (1990) 'The ecology of order and chaos', *Environmental History Review*, 14(1/2): 1–18.

The Anarchist Library (Mirror)
Anti-Copyright



David Graeber
The apocalypse of objects
Degradation, redemption and transcendence in the world of consumer goods
2012

Afterword to *Economies of Recycling: The Global Transformation of Materials, Values and Social Relations* (edited by Catherine Alexander and Joshua Reno), pp. 277-290

usa.anarchistlibraries.net