



Waste

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From plastics in the oceans, to the export of toxic materials, waste is an issue that increasingly attracts public attention as well as demands for political and environmental action. Within the social sciences, writing on waste has clustered around the emergent and growing sub-discipline known as 'discard studies'. This entry looks at how anthropologists have broached the issue of waste, from a long-standing interest in pollution, to more recent explorations of how humans and waste constitute one another. It is divided into three main anthropological approaches to waste: a symbolic-structuralist approach focused on the relations between order/disorder and the sacred/profane; an economic-materialist approach that is more concerned with waste, value, and the connections and flows between local and global scales; and intersubjective-posthuman approaches that focus on how waste makes people as well as how people make waste. Through fine-grained ethnographies of engagements with waste and theoretical contributions, the anthropology of discards highlights how diverse waste's materialities and representations really are, and helps to challenge taken-for-granted associations between waste, stigma, and an absence of value.

Introduction ¹

Just as ever-growing quantities of waste have increasingly attracted the attention of governments, activists and communities, the issue of waste at a global scale has risen rapidly up political and research agendas since the turn of the millennium. Shocking photographs and videos that make visible the harm that wasting causes, such as those of the North Atlantic garbage patch (estimated to measure hundreds of kilometres) and the plastic-filled bird carcasses of photographer Chris Jordan, have captured the public imagination around the topic of plastic waste in the oceans. At the same time, waste has become an issue of international diplomacy and scandal, as a series of countries in the Global South have begun sending contaminated waste back to its sources in the Global North (see the ongoing dispute between the Philippines and Canada, Choi 2019). The initial classification of our current age as the Anthropocene by geologists was based in part on the fact that signs of human activity and wasting – plastics, metals, radionuclides – could be observed deep into the Earth's crust (Zalasiewicz & Waters 2015). Indeed, global warming, which places human, animal, and plant life as we know it in mortal peril, is caused by a form of waste: the release of carbon emissions as petroleum deposits are consumed.

In tandem with these broader developments, research into waste has escalated both in anthropology, and across the social sciences and humanities more generally, giving rise to the interdisciplinary subfield of 'discard studies'. Yet do we necessarily know what waste is? As the popular expression 'one man's trash is another man's treasure' hints at, rubbish can very often be in the eye of the beholder. This encyclopaedia

entry explores three analytic approaches to waste taken by anthropologists, as set out and discussed by Alexander and O'Hare (2020): symbolic-structuralist; economic-materialist; and intersubjective-posthuman.

In a symbolic-structuralist approach (e.g. Douglas 2002 [1966]; Leach 1989 [1964]), waste can be understood as what emerges through interactions between the sacred and profane, which are structurally bound to one another, a focus that can be traced back to the work of Emile Durkheim (1915), a founding father of social anthropology and sociology. In this perspective, waste is usually considered to be social and relational rather than an objective quality or categorization of phenomena in the world. The second analytical approach, heralded by Michael Thompson's (1979) *Rubbish theory*, launched an economic-materialist approach to understanding the circulation of materials between different regimes of value. Within this approach, an increasing number of scholars (e.g. Gille 2007; O'Brien 2008) have focused on the materiality of waste within broader political and economic structures that act to shape how and where it appears. A third approach to the study of waste can be called 'posthuman-intersubjective'. It has been gathering strength since the 2010s and concentrates on the subjects that waste and various forms of waste-work engender. This includes workers whose identities are tightly bound up with waste – such as waste-pickers (Millar 2018) – as well as the more general encounters with discarded materials that happen as we separate out our recyclables (c.f. Hawkins 2006), or unexpectedly meet with a tangle of trash in the street (c.f. Bennett 2009). Waste in these perspectives is given varying degrees of agency: it is seen as acting and acting upon us in ways that are outside our conscious control.

By emphasising some aspects of human-waste relations while neglecting others, each approach – symbolic-structuralist, economic-materialist, and posthuman-intersubjective – captures a part of but not the whole picture. Thus, anthropological work on waste generally foregrounds the different epistemological consequences that specific representations of waste can have, including the removal of agency from so-called 'wasted lives' and value created from territories depicted as 'waste-lands'. Far from being a load of rubbish, the anthropology of waste also brings cultural perspectives into conversation with questions of power, class, religion, materiality, and economics that are at the heart of contemporary society.

Symbolic-structuralist approaches

The anthropology of waste per se is quite recent. The relatively small societies that anthropologists traditionally studied did not generate levels of waste on the scale of today's consumer societies, and whilst materials (i.e. food waste) were inevitably discarded, such practices do not appear to have been deemed worthy of serious attention. ⁴ A relevant precursor, however, is the study of purity and pollution. Pollution in anthropological discourse has had a specific meaning: a stigma linked to people or substances – generally as a result of a mixing or conflation of things that should be kept pure.

The social anthropologist most associated with the study of purity and pollution is Mary Douglas, known for

classifying dirt as 'matter out of place'. Douglas was an English social anthropologist who conducted fieldwork with the Lele ethnic group who live in the modern Democratic Republic of Congo (DRC), but her social theories were influential beyond African anthropology. In particular, her most well-known book, *Purity and danger* (1968), shares with structuralists like Claude Lévi-Strauss the idea that prohibitions, taboos, and attachments have very little to do with the concrete thing that is prohibited, and much more to do with an interplay of symbols that reflect deeper organising principles of society. Douglas argued that the prohibition of pork in Leviticus, for example, could not be explained by the 'dirtiness' of the animal but lay instead in the way that pigs confounded the religious classifications of animals (hoofed/ non-hoofed; cud-chewing/ non-cud-chewing, etc.)

For Douglas, the human mind is an ordering mind, and rituals of pollution and purity tend to cluster around the anomalies that confound cultural systems of classification. In other words, cultural classification comes first, and determines ideas of pollution. Those who take for their area of enquiry matters of pollution, dirt, and waste engage with her ideas in part because the 'matter out of place' phrasing so succinctly defamiliarises us from the notion that what constitutes waste should be obvious and universally accepted. Rather than waste, however, she was primarily interested in the symbolism of ritual pollution in religious and what she called 'primitive' classificatory systems. This, as Martin O'Brien notes, makes Douglas a somewhat awkward fit for discussions of the billions of tons of municipal solid waste that arrive daily at the world's landfills (2008: 128).

Pollution as a traditional anthropological concept is different from contemporary, everyday understandings of environmental pollution embodied in car exhaust fumes, smoking industrial chimneys, and frothing, chemically-polluted rivers. Its characteristic areas of study include menstruation – since menstruating women are viewed as polluted in many societies and are, therefore, quarantined (c.f. Kristeva 1982) – and death, where those working with or touching the dead are considered polluted and thus to be avoided or approached with ritualised caution (Parry 1994). Nevertheless, looking to some of the early approaches to pollution can help us understand the roots of the first anthropological analyses of waste.

Early anthropologists (e.g. James Frazer) exhibited two tendencies regarding pollution (c.f. Forth 2018). One was to locate pollution in the properties of substances and things as opposed to the relations between people and categories. A second was to differentiate between forms of pollution aversion that exemplified either 'primitive' hygiene measures or reflected religious ideas of the sacred and profane. However, these studies tended to centre on polluted people rather than the things that polluted them, whether these were menstruating women, Indian untouchables, or stigmatised gravediggers (Jewkes & Wood 1999). Where there was an interest in things, these were often substances ejected or detached from the body, including menstrual blood, nail clippings, and excrement. This focus on bodily substance was later taken up by Michael Thompson (1986: 1) to argue for the culturally relative nature of waste. That there is nothing intrinsically polluting about blood, hair, or snot indicates that there is no 'waste in nature', he argues,

explaining that these might be valued, feared, or treated with indifference by different cultures or indeed classes.

This clustering of ideas of pollution and purity around substances emanating from the body has nevertheless given rise to quite different theoretical approaches, including those inclined to a universalist rather than relativist nature. Exemplary of the latter approach is Julia Kristeva's (1982) psycho-analytical theorisation of abjection, which draws on the work of Douglas. For Kristeva, threats to the preservation of the integral subject inspire pollution beliefs, so that a body that leaks wastes and fluids - externalising what should be inside - violates an important inside/outside boundary and risks the dissolution of the self into the other. One example that she gives is the instinctive, visceral reaction she has to the thin film that forms on milk and that the body repels: once this has entered the mouth, and mixed with saliva, one is essentially expelling a part of oneself.

Within anthropology, Valerio Valeri (2000) draws on Kristeva and fieldwork with a small group of hunter-gatherers in Eastern Indonesia to make broader theoretical claims, ultimately arguing that 'the embodied subject's fear of disintegration through the body and by the body is the ultimate basis for the notion of pollution' (2000: 111). Valeri objects to the way that Douglas treats pollution as a secondary phenomenon resulting from processes of classification. By exploring pollution beliefs around bodies, substances, and animals, he shows that not all things considered polluting are classificatory anomalies, nor all classificatory anomalies regarded as polluting. Douglas's legacy has persisted over time and extended beyond anthropology. Take the work of a student of Douglas, Laurence Douny, on domestic waste among the Dogon, an ethnic group in Mali numbering roughly half a million people. In Douny's analysis,

"[Dogon] categories of waste enact a conceptual ordering of daily life that allows them to set up and to maintain their socio-cultural and symbolic boundaries. It appears that through the naming of rubbish, Dogon take control over the fuzzy reality of the matter." (2007: 313)

For example, the Dogon praise certain forms of dirt - food left on pots, sweat, and smoke - as signs of a lively, busy, and prosperous household, while people who are always clean are thought to be work-shy. Negative forms of dirt include the highly ritually polluting - menstrual blood and body solids - and the simply bothersome, such as daily sweepings and tourist trash. This description of order imposed on an assumedly formless world through the cultural imposition of different categories and classifications resembles a symbolic-structuralist approach. Yet Douny is careful to note a relative fluidity and dynamism in categorisation processes, explaining that "the local classification of refuse is versatile, being a daily practice that constantly redefines and generates new categories of waste with which differing world-views are associated" (2007: 313). Plastic waste brought by outside visitors, for example, might be assimilated into existing waste categories but can also be recovered as a resource that can be fashioned into craftwork sold back to tourists.

Despite its plentiful insights, Douglas's approach is not the primary framework that guides the contemporary social science of waste. Contributing factors have been its binary nature; her lack of focus on waste per se; and the theoretical consideration of only one side of a 'primitive'/'civilized' binary that itself has long been discarded. To theorise the ever-greater flows of waste across the planet it would be necessary to develop approaches that attended to politics, economics, and the material stuff of waste itself.

Economic-materialist approaches

If earlier anthropological engagements with 'rubbish' in the religious sphere were concerned with the sacred/profane and pure/polluted dichotomies, economic anthropology brought in another important binary: waste and value. These are critical categories for Thompson's recently reissued *Rubbish theory* (2017 [1979]), whose theoretical ambitions, Josh Reno argues, go 'far beyond anything heretofore attempted by anyone in discard studies' (Thompson 2017: xi). Against the binaries of symbolic-structuralist models, Thompson introduces a tripartite schema to help understand how objects, from houses to antiques, can undergo radical transformations in value. He starts out with two categories of goods common to economics: transient and durable. A classic example of a transient good is a car, which decreases in value from the moment that it is purchased until it is reduced to scrap, while durables, such as certain antiques, 'increase in value over time and have (ideally) infinite life-spans' (2017: 25). Thompson's initial interest is in how an object can cross over from one category to the other, as they do in the case of 'vintage' cars, re-valued pieces of furniture, and works of art. The question precipitates a new third category for goods that are neither decreasing nor increasing in value but are of no value at all: rubbish.

Whilst at first glance Thompson appears to be discussing something that fits with normative ideas of waste, his 'rubbish' category is in fact quite specific. Although he explicitly describes the rubbish stage as denoting a value-less state, the examples he uses - which later move into the category of durables - never seem to attain the state of zero value. Stevengraphs⁴⁴, for example, steadily decreased in value throughout the first half of the twentieth century before reaching relatively astronomical prices from the 1960s onwards. Yet even at the Stevengraphs' point of lowest value, Thompson quotes a source noting that there were still probably 'a few discerning people quietly collecting them for their decorative charm' (44). Thompson's rubbish category is thus restricted to a class of objects that still have owners, have depreciated in value, but have not been disposed of. This constitutes a restricted category of rubbish, excluding what most would think of as waste and the discarding practice that others would regard as the key moment when objects pass into a waste category. Drawing on Douglas's assertion that 'dirt is simply matter out of place', Thompson is not particularly interested in the lowly objects that do not attract attention because they are widely regarded to be in the right place: the dustbin or landfill. His concern lies in radical value transfers as a source of social transformation.

Nevertheless, the aspiration to understand material flows and the creation and destruction of value in British society arguably laid the foundations for more recent social science studies into globalised flows of discards and their connection to domestic waste practices (Alexander and O'Hare, 2020). This scholarship is interested in the question of value but not necessarily as the polar opposite of waste, with attention directed towards the political economy and government of waste, and how these are impacted by contemporary knowledge about waste and its effects. Gille's concept of 'waste regimes', for instance, includes the idea that at particular historical conjunctures, one kind of waste and its treatment can be taken symptomatically or even synecdochally by the state to stand for all generated waste. This is neatly illustrated by the 1950s Hungarian state emphasis on collecting scrap metal, what Gille calls the 'metallic regime' of post-war recovery communism. While metal can be easily stored, the stockpiling of toxic chemicals, ignoring their unique chemical composition, meant that often barrels rapidly corroded and leaked, opening the way for subsequent waste regimes that were more centred on questions of safety. Here we see a focus on materiality, the state, cultural representations, and the political economy of waste replacing the idea of unique 'cultural' approaches to waste.

Historical works (e.g. Strasser 1999, Zimring 2005, Thorsheim 2015) have shown the long lineage of domestic practices of material recovery and re-use. Recently attention has turned to the global nature of the recycling industry and how this links domestic practices to transnational flows of stuff. Thus, Catherine Alexander and Joshua Reno's collection, *Economies of Recycling* (2012), mobilised economic anthropology and a focus on how people use, consume, and engage with objects (material culture studies) to destabilise conventional understandings of household and global economies. Contributors analysed the profoundly unequal global flows of waste materials – textiles, ships, electronics, uranium, medical discards – in terms of their location of production and recycling – concerns also taken up by *The Waste of the World* project and its subsequent publications.¹⁴ The collection also highlighted how various forms of waste labour and waste processing have been cast as redemptive, drawing on a Protestant-inflected language of salvation. Britt Halvorson's (2012) 'No Junk for Jesus' chapter, for example, examines the flow of medical discards between Lutheran churches in the United States and Madagascar, where the sorting of waste from viable donation constitutes a form of religious service. One of the key benefits of this global approach was to highlight that, for all the focus on consumer and domestic recycling practices, household waste accounts for only a fraction of the waste stream.¹⁵

Construction waste, for example, makes up a large percentage of urban waste streams and it has served as a useful lens through which anthropologists have studied wider questions of land speculation, urban development, and dispossession. Gastón Gordillo (2014) analyses how the rubble of different rural development schemes in northern Argentina, from Jesuit agricultural collectives to soy production, can provide clues to changing socio-economic forces. Across the world, Erik Harms' (2016) study of two

housing developments in Saigón is 'more concerned with the conversion of wastelands than with waste material per se' (Alexander and O'Hare, 2020). Yet a link to Gordillo's work can be found in Harms' exploration of the ways in which existing productive uses of land (in his case, smallholder farming) are ignored whilst urban development is championed, through a dominant Vietnamese trope of 'civilising the southern wasteland'. In both cases, it is not symbols, but the materiality of rubble, bricks, building plans, and maps that tell us something about societies and the utopias that transfigure and disfigure landscapes at distinct moments in time.

For Harms, waste is evoked in order to open up space for economic and political intervention and value creation through the construction of real estate. This is only one of a number of possible relations between waste and value. As Catherine Alexander and Andrew Sanchez (2018: 3) note, waste can be seen as the antithesis of value, lost value, the enabler of value, or simply another word for resource. Their 2018 volume on indeterminacy, waste, and value echoes the work of Thompson in that they introduce a third term – indeterminacy – to trouble the stubborn binary between waste and value. Rather than proceeding from an analytical definition of indeterminacy, they start from ethnographic examples to highlight different modes of indeterminacy for people and materials. They share with Douglas an interest in the people that fall through the cracks of classificatory systems, suggesting that such systems are by their very nature exclusionary and key to creating discarded populations. Simultaneously, their idea of indeterminacy challenges both Thompson's scheme of distinct value positions (transient, rubbish, durable) and Douglas' framework of single, unified cultural systems of order (2019: 15).

Materialist scholars have gone so far as to criticise Douglas for ignoring the qualities of dirt and its alleged dangers in the study of pollution, as part of an alleged 'rubbish idealism' (O'Brien 2002: 133). For this new generation of anthropologists, with eyes trained on waste's materiality, its odours, and hazards as well as creative potentials, nothing could be further from their position. Economic-materialist analyses of waste in anthropology have tended to highlight how waste's materiality influences its nature and appearance even if it does not determine it fully. They have also thought of new ways in which waste may be extracted from its classification and become re-valued.

Intersubjective and post-human

For symbolic-structuralist approaches, a fundamental question is *why* different things are considered waste in different cultures – and the answer given is their culturally-specific classificatory systems. As Alexander and O'Hare (2020) note, 'economic-materialists shift the question to *how* the dynamics of waste flows link domestic and global industrial scales, and answer it by examining... flows in a globalised schema of reproduced inequalities'. A third thematic concern among anthropologists, which also has to do with the *how*, but often at different scales, is a focus on subjectivity and the kinds of relationships and identities that are created through associations with waste. For scholars such as Gay Hawkins (2006),

creating subjectivities by engaging with waste is at once an ethical process and similar to actor-network theory (ANT) it signals that waste itself has agency. Thereby it acts, and is acted upon. Household recycling, for example, is an everyday ethical act that becomes drummed into the body – embodied – through repetition and practice.

The role of waste and dirt in creating and sustaining oft-unequal subjectivities has a long history of study inside and outside anthropology. In colonial public health policies, for example, we find two interlinked processes: colonial subjects are often portrayed as dirty, backward, and thus in need of a civilising mission, whilst at the same time the most oppressed people are often called upon to carry out the jobs seen as ritually and hygienically polluting, such as waste work. Race, waste, and power often come together to mark out such distinctions. In the American Philippines (Anderson 1995), as in British India, Australia (Bashford 2003), and elsewhere, colonial governments used public health measures such as vaccines, quarantine, and segregation to demarcate physical and racial boundaries and govern unruly populations. These are far from purely historical questions: consider the furore in early 2019 over a Fox News host's comment, echoing similar statements made by Donald Trump, that mass migration made America 'poorer, dirtier, and more divided', an assertion he supported with images purporting to depict garbage and trash left behind by migrants at the US-Mexico border. Indeed, representations of the dirty colonised other have arguably been transferred onto the figure of the immigrant other (c.f. Thorleifsson 2017), although proletariat or lumpenproletariat populations have also often been the target of similar discourse and measures of bio-political governance.

'Waste colonialism' and its sister term 'garbage imperialism' are nowadays primarily used to describe instances or patterns of rich countries dumping their waste on poorer ones. This is to some degree limited by the Basel convention^u and a spectrum of injustice can be detected in such practices, which range from the export of recoverable, non-toxic recyclate to the dumping of contaminated materials. As Reno notes, 'not only waste but also waste regimes have been exported and experimented with abroad through colonial and imperial formations' (2015: 565). Max Liboiron likewise argues that 'waste colonialism goes beyond the export of waste from colonial centres to... peripheries' (2018). Relevant to our discussion of 'rubbished' subjects here is her point that dominant interpretative frameworks of hygiene and cleanliness are still imposed on peoples whose landscapes and means of subsistence have already been rubbished or enclosed. Waste-pickers and scavengers, for example, are often cited as exemplary polluted subjects, the discards of modernity, or as indexing global inequality (Reno 2009: 32).

Anthropologists have been able to get behind the headlines and assumptions about waste work through ethnographies of informal waste labour like Rosalind Fredericks (2018) on Dakar, Minh Nguyen (2018) on Vietnam, Kathleen Millar (2018) on Rio de Janeiro, Jamie Furniss (2017) on Cairo, and my own research on Montevideo (O'Hare 2018). In Montevideo, waste-pickers proudly adopt the term 'classifiers' to signal the

productive and environmentally important nature of their labour and overturn the stigma associated with their previous moniker, 'rummagers'. Similarly, Furniss (2017) describes how Egyptian Christian minority waste-workers downplay both derogatory titles - such as the Zabaleen - and upper-class attempts to focus on the 'environment', emphasising instead their role as cleaners of the city. Nguyen (2018), meanwhile, tracks the complex networks and connections between city and village. In her account, Vietnamese waste traders opt to suffer and even perform stigma in the city in order to amass sufficient capital to build their homes and status in rural villages.

Millar's longitudinal research with Brazilian catadores at Rio's Gramacho landfill is a good example of an ethnography that gets close to waste-picker perspectives and seeks to understand their social worlds. She shares with Reno's (2016) ethnography of an industrial Michigan landfill an attempt to highlight the way that waste work helps to constitute desirable subjectivities, from masculine identities of repair and manual labour to the freedoms of autonomous work outside of waged work. As such, Millar argues that academics should be careful when echoing reactionary commentators by referring to people as surplus or waste even if we simultaneously voice a critique of injustice (cf. Bauman 2003).

While Millar attends to the materiality and plasticity of waste, her focus remains on the human subject. Other approaches, however, also accord agency - and sometimes subjectivity - to waste materials and the non-human animals that co-produce them. Gregson *et al.* (2010), for example, identify an economically performative aspect of asbestos, as its presence intervenes in ship-breaking work in the EU. Undetected asbestos slows down the work of waste removal and complicates contracts given that these are based on asbestos removal estimates gleaned from initial surveys. Hird (2013) meanwhile, emphasises how the inhuman and nonhuman life forms found within waste (e.g. leachate and bacteria) and their physically, biologically, and chemically determined time-frames 'complicate human technocratic attempts to measure, know, and control waste' (Alexander and O'Hare, 2020). The engineering time of landfills, for example, is only a hundred years, whereas the thousands of diverse materials assembled there - chemicals, bacteria, organic matter - will continue to interact and have unpredictable effects long beyond this time period.

Reno (2014) has also drawn attention to the ways in which waste can be considered a 'sign of life' rather than 'matter out of place'. Only with great difficulty could we understand scat (animal faeces) through a symbolic interpretative framework or view it as a human problem. Instead, when scat is encountered in the wild, whether by scientists, hunters, or non-human animals, it constitutes a trace of the animal that has left it behind, "not at all a symbolic classification but a sign of life" (9). This approach is post-human in that it relegates the anthropos to just another animal involved in cross-species interactions; indeed, waste more broadly can be thought about bio-semiotically here, as "the outcome of interactions between the many species that both create, and are created by it" (Alexander and O'Hare, 2020).

If forms of 'scat' have been around for millions of years, more recent forms of waste material also shape

human life rather than being simple reflections of cultures. The continued work of Gay Hawkins (2006, 2015, 2018) has brought some of these instances to light. In her most recent book, she argues that the plastic water bottle was revolutionary in shifting people's perception of plastic away from ideas of durability towards ideas of disposability and single-use: disposability highlights how things design us. For profitable 'throw-away' economies to succeed, people's habits and customs had to be changed, creating the consumer who only in recent years has begun to rediscover forms of re-use and recycling.

What kinds of subjects might be needed for responsible engagements with waste in the twenty-first century and what can social scientists contribute to this debate? One potential ethical position is that advocated by Jane Bennett (2010), who suggests a re-enchantment with the power of agentive things, waste included. As others have noted, this invitation comes up against the hard reality of certain materials that simply aren't nice for humans to become enchanted with (from asbestos to nuclear waste). Yet perhaps we can learn from the enchantment and pleasure that waste-pickers and dumpster divers experience both from rummaging in the trash and from carrying out socially responsible acts of recovery and cleaning (c.f. Millar 2018, Barnard 2016). More broadly, what the mutual constitution of subjects and their wastes exemplifies is that in a world of rapidly evolving materials, many of which become waste, human beings change our actions, categories, and indeed ourselves according to our responses to these materials. More circular models of production and consumption are certainly part of this story. Yet in redrawing the line of disposal as a virtuous circle, anthropologists can also bring attention to the ways that subjects who have built positive identities and livelihoods out of waste work might be left out the loop.

Conclusion

Waste does not exist in the singular, and indeed it can be the combining of substances and things in particular spaces that leads to their classification as waste, a point highlighted in the early symbolic-structuralist approaches to waste that has continued relevance today. Purity in waste management is important: muddling materials in composite packaging and baled recyclate makes things very difficult to recycle, leading to landfilling, and accusations of 'waste colonialism'. The technical dynamics of transnational waste chains might seem far from relativist understandings of what constitutes waste, but cultural understandings of hygiene and cleanliness continue to play an important role. To give just one example, David Evans (2014) has explored how residents' ideas that food waste caddies are 'out of place' on kitchen counters play a role in limiting the recycling of food waste in the UK.

Similarly, there is no single anthropology of waste, and although the different approaches sketched out here imply a chronological arc, residues of earlier orientations can still be found in the present, often in unexpected places. While anthropologists of waste might still be interested in menstrual pollution and taboo, they increasingly deal with global flows of problematic, indeterminate matter that challenge binaries along the sacred-profane or waste-value axes. Categories such as 'indeterminate' or 'rubbish' indicate some

of the mediating roles that waste plays between the creation and destruction of value, as do ethnographies that highlight how people situate themselves pragmatically with regard to ascriptions of waste. Societal stigmas of being associated with waste still matter, but anthropologists have shown how these can be manipulated and disguised, from respected waste traders in Vietnam, to medical discards that are repackaged as benevolent donations as they travel from the United States to Madagascar. By getting its hands dirty, the anthropology of waste contributes to an epistemology of the ever-more complex and voluminous materials that humans and non-humans produce, consume, discard, and digest in our Anthropocenic present.

Note

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[1] This entry has been updated on April 15th, 2020. If you would like to have access to the original version, please contact us via email.

[2] As an indication of this, the first review article for waste dates from 2015 (Reno).

[3] Silk woven pictures produced through a method developed by Thomas Stevens in the 19th century.

[4] See <https://www.researchcatalogue.esrc.ac.uk/grants/RES-060-23-0007/read/out...>

[5] In the United States, for example, it is estimated that municipal solid waste makes up just 3% of total waste, with the rest composed of industrial waste (see Royte 2007), although this oft-cited figure has recently been called into question (Liboiron 2016).

[6] The Basel Convention, fully the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal, is an international treaty signed by 186 states and the European Union and in place since 1992.