Waste, marginal property practices, and the Circular Economy

*Purpose*

An examination of the effect of circular economy’s ending of waste on marginal property practices.

*Design/methodology/approach*

Theoretical legal analysis.

*Findings*

The current legalistic conception of waste depends on control and value. The indeterminate status of waste as goods at the margins of consumption attracts attention from legal regimes. This process is evidenced by a commercialised treatment of goods at the margins of consumption, limiting the scope of radical marginal property practices such as freeganism (taking goods abandoned by others, in order to use such goods)

*Social implications*

The circular economy aims to end waste. Restriction, and ultimately elimination, of marginal property practices is necessary for circular economy. Freegans will be limited to acting in a “challenge” role, identifying breaches of commercial commodification processes. Control over the use (including disposal) of goods reduces the spaces available for marginal property practices, which in turn raises problematic normative implications for “normal” consumption practices involving waste.

*Originality/value*

This is the first examination of the impact of circular economy on freeganism. It is also the first sustained application of marginal property theory (van der Walt, 2009) in a legal analysis of circular economy and waste.

*Keywords:* Circular Economy; Waste; Property; Freegan; Marginality

*Article Type*: Research paper

# Introduction

This article examines the organizing and patterning effect of law’s treatment of individuals who deal with waste, against the background of circular economy (CE) thought which rests on the necessity of commercialised control of the use and disposal of goods in order to end waste. The generation, treatment and disposal of waste are live topics in general, and with the most recent waste strategy for England notably including specific engagement with CE (DEFRA, December 2018) it becomes essential to analyse critically the relationship between waste and CE. There is growing legal literature examining waste and CE (Dalhammar, 2015; de Römph, 2016; Backes, 2017; Thomas, 2019; Burger, 2019; Mak and Lujinovic, 2019), as well as particular aspects such as plastics waste and CE (de Römph, and Van Calster, 2018; LEAD, 2019). However, despite some exceptions (Steenmans, Marriott and Malcolm, 2017; Maitre-Ekern and Dalhammar, 2019) it remains under-theorised. This article thus addresses our understanding of the social implications of altering legal frameworks and socio-economic institutions that deal with waste to take into account moves to a CE.

 This article avoids focusing on specific types of waste. The enveloping holism of CE justifies a wider analysis of waste, which in turn allows a broader critical perspective. Because society itself may just be simply ‘organized patterns of collective activity for managing waste’ (O’Brien, 2007, p. 1), this broad approach to waste is necessary. Furthermore, recognising that waste reveals imbricate relationships between individuals, organisations, and institutions (Davies, 2008) enables novel theorising about waste practices (Foote and Mazzolini, 2012). Such theorising can focus on individuals, operating at the edges of consumption. Drawing on van der Walt’s path-breaking *Property in the Margins*, this article accepts the

possibility of opening up theoretical space where justice-inspired changes to (or transformation of) the extant property regime can be imagined and discussed more or less fruitfully from an unusual perspective, namely the effect that enforcement of strong property rights has on marginalised property holders and users … [Therefore] the perspective from the margins is valuable. (van der Walt, 2009, pp. ix-x)

However, this article goes further, by considering goods (as opposed van der Walt’s focus on land). This article uses the marginal property practice of freeganism, which involves the taking of waste goods for (re)-use, to examine closely the control opportunities for law. Marginal property practices involving goods attract attention from legal regimes (Gutberlet, 2008), which utilise the uncertain status of marginal consumption acts as a means of social control. CE’s necessary restriction, and ultimately elimination, of marginal property practices fits neatly with this broader social control. This is to some extent merely a replication of the fact that ‘governance societies have long created rules about the regulation of waste within communities’ (Davies, 2008, p. 9). However, CE has the potential to further reduce the spaces available for marginal property practices, which in turn raises problematic normative implications for “normal” consumption practices involving waste.

# Waste in the Circular Economy

CE, a relatively novel ideology gaining considerable traction within academic and policy circles, focuses on minimum input and output costs. This involves, inter alia, better use of raw materials, better product design, and more effective reuse and recycling of end-products. The need for economy in exposition militates against a comprehensive explanation of CE.[[1]](#footnote-1) Instead, the implications for marginal property practices (and by extension, normal property practices) concerning waste that can be inferred from the approach to waste in CE ideas will be identified.

The Ellen MacArthur Foundation, a major force behind modern developments in this area, states that CE ‘provides multiple value creation mechanisms that are decoupled from the consumption of finite resources’, and rests on three principles of preservation, optimisation, and system efficiency.[[2]](#footnote-2) These principles have ‘fundamental characteristics [that] describe a pure circular economy’, the first of which is ‘Design out waste’.[[3]](#footnote-3) More recently, the UK Waste Strategy 2018 states

The ‘lifecycle’ approach complements the circular economy model. It requires us to focus not just on managing waste responsibly, but on preventing its creation in the first place. It means taking into account how decisions taken during the design stage – at the start of the lifecycle – affect how a product is used and then disposed of by the consumer. At every stage of a product’s lifecycle there is scope for people to do all they can to maximise resource value and minimise waste. (DEFRA, December 2018, p. 26)

Throughout this article, the key characteristic for analysis is that of “thinking in systems”, as that concerns how individual elements influence the whole and vice versa, ‘in relation to their environmental and social contexts.’[[4]](#footnote-4) This social contextualisation must go beyond mere doctrinal or regulatory definitions of waste, yet CE literature from think-tank and governmental sources appears to perceive waste either as simply a consequence of linear economies (and thus it will not exist within CE) (Backes, 2017, p. 15), or, perhaps more importantly, as merely a commodity (Lacy and Rutqvist, 2015). The commodification perception of waste is intrinsically linked to requirements for commercial/corporate control of waste within the CE literature. A key element will be the practice of reacquiring waste, with consumers being persuaded to change behaviour, alongside use of commercial agreements limiting disposition of property rights. Corporate competition for ‘dead products’ will result in greater commercial engagement with waste (Lacy and Rutqvist, 2015, pp. 52-53), with ‘primary suppliers … increasingly interested in tapping second-, third-, and fourth-life markets’ (Lacy and Rutqvist, 2015, p. 71). This may require the exclusion of non-commercial waste practices; at the least ‘[d]esigning waste out of the system is a collective effort that calls for close communication between every function of a product’s lifecycle: from the designers who summon it to life to the waste-handlers who manage resources at its end-of-use stage.’ (Lacy and Rutqvist, 2015, pp. 66-67) This communication will no doubt be enhanced by technological advances in identification and tracking, enabling trace and return systems that extend control over goods far into their life-cycle.[[5]](#footnote-5) Such messages will enable identification of value. This is of fundamental importance, as that then enables demand for products and the generation and extension of commercial interest, and the associated data aids other mechanisms of control, such as extended producer responsibility and “pre-cycling”. This commercialisation and corporatisation of waste requires critical examination.

## Legal Reactions to Circular Economy

Currently the major role legal systems play in relation to moves towards CE is in exhortatory (as opposed to mandatory) regulation of waste-disposal and reuse and recycling. The first example of this was the CE Promotion Law of the People’s Republic of China (promulgated August 2008; in force January 2009),[[6]](#footnote-6) described as ‘largely exhortatory and contain[ing] few enforceable provisions’ (Ryan, 2014, pp. 189-190). More recently the EU has provided Action Plans and other putative regulatory responses (EC, 2015; Gordeeva, 2016; EC, 2017; Porcelli and Martinez, 2018). This has been followed in the UK, where similar expressions of vague intentions and limited state interventions and directions have been proposed (DEFRA, October 2015; DEFRA, November 2015). Whilst the recent consultation on the waste sector failed to mention the CE (DEFRA, January 2018), the 2018 Waste Strategy was explicit in its reference to and acceptance of CE (DEFRA, December 2018).

Central to these frameworks is expansion of the contractual sphere as the primary mechanism for attaining the broad political aims, which entwines with CE thinking (noted above). The limited substantive change effected so far is no doubt a consequence of the complexity and breadth of the challenge (in contrast to the simplicity of the underlying idea) presented by the inevitably radical systemic, institutional, and technical challenges that arise from attempts to realise CE (Backes, 2017). There are also more theoretical questions that arise when examining CE (Gregson et al, 2015). Here it is asked whether a legal regime supporting circular economics would constrict the boundaries of waste practices.

# Waste: Legal and Social Meanings

Waste management concerns the ‘whole cycle of waste creation, transport, storage, treatment and recovery’ (Cheyne and Purdue, 1995, p. 151); thus regulatory control of waste can (and arguably must) be directed to all stages of that cycle. Unsurprisingly, the breadth of methods for managing waste, the lack of clarity over the meaning of “waste”, and the imbrication of domestic, European and international legislative frameworks on waste, render the topic one of confusion (Adshead, 2008). A comprehensive account of the definition of waste is beyond the scope of this paper (see generally Lee and Stokes, 2008).[[7]](#footnote-7) There will thus not be any waste taxonomy presented (cf Pongrácz and Pohjola, 2004), not least because ‘[t]here are probably few concepts in modern times that have attracted a greater variety of interpretations than waste’ (Trentmann, 2016, p. 627). Instead, a brief outline, within the broad context of UK and EU law, is provided.

The basic regulatory framework for waste is provided by the Waste Directive 2008, but that Directive suffered from the flaw of ambition (Scotford, 2009), resulting in an overly broad definition of waste as ‘any substance or object which the holder discards or intends or is required to discard’ (Waste Directive 2008, Art. 3(1)), and waste holders as ‘the waste producer or the natural or legal person who is in possession of the waste’ (Waste Directive 2008, Art. 3(2). Essentially, four broad points can thus be made:

(1) a broadly objective approach is taken to assessing whether something is waste (*The Environment Agency v Short* [1999] J.P.L. 263; *Long* *v Brooke* [1980] Crim. L. Rev. 109), and the act of discarding remains key; (Scotford, 2009);

(2) reuse of waste is neither automatically protected nor is it intrinsically necessary;

(3) assessing whether waste ceases to be waste is at least partly focused on a market-exchange assessment (Waste Directive 2008, Art. 6(1)(b); *R. (OSS Group Ltd) v Environment Agency* [2007] E.W.C.A. Civ. 611; [2007] Bus. L.R. 1732; *R. v. Ezeemo* [2012] E.W.C.A. Crim. 2064; [2013] 4 All E.R. 1016); and

(4) waste regulation focuses on the control of goods (Tromans, 2001).

The control of goods, and the valuation and thus the commodification of goods, are thus central to the legal regulation of waste, and ‘[s]mart and proportionate regulation, effectively enforced, is essential in managing waste’ (DEFRA, January 2018, p. 2). There is a considerable parallel here with circular economic thought on waste, shown above. Nevertheless, it must be recognised that the Waste Directive regulatory framework does not promote a CE, and claims to adherence towards CE principles were not accepted as sufficient to overturn obligations set by the Waste Directive 2008 in *AS Tallinna Vesi v Keskkonnaamet* [2019] Environmental Law Review 30. The EU essentially acknowledged this in its most recent Waste Directive (Directive (EU) 2018/851 of the European Parliament and of the Council of 30 May 2018 amending Directive 2008/98/EC on waste), yet even such steps have rightly been criticised for focusing only on the reintegration of waste rather than addressing broader CE issues (Mélon, 2019), for failing to provide a meaningful definition of EC (Lingl and Marcó, 2019). Moreover, an overarching market-based regulatory framework is not the only way to deal with waste. Law, as a social institution in general, and property regimes in particular, are very capable of restricting and controlling waste and the marginal property practices that engage with waste, even if such (jurisdictionally restricted) regimes are not accounted for in broader supranational regulatory frameworks (for criticism of the EU’s approach, see Thomas, 2020 forthcoming).

Waste has always been part of society, yet wasting is often subject to moralistic denunciation (Strasser, 2000; Scanlan 2005; Pye, 2010; Miller, 2012, ch. 3; Trentman, 2016, ch. 17). This is probably because waste can be simultaneously good and bad. Waste can be deliberately unseen, or, if it is observed, its causes can be obscured by the ‘intense negativity’ wasting evokes (Cortez, 2012, p. 277; Douglas, 1966). It has been suggested that our negative views on waste come about because wasting reveals things about us, as individuals and societies, that we would otherwise want kept hidden (Pye, 2010; Fennetaux, Junqua and Vasset, 2015). Wasting has thus, unsurprisingly, been called ‘a contested social process’ and ‘a regulated exchange of value between objects’ (O’Brien, 1999, p. 270-271), though in this context ‘regulated exchange of value’ is not primarily a commercial construct; wasting does not rest solely on value. This is especially where the disponors are people, where the act of disposal is a spectrum of highly contested practices (Gregson, Metcalfe, and Crewe, 2007; O’Brien, 2007; Gregson, 2007; Gregson and Crewe, 2003).

Nevertheless, we need to distinguish morally-infused charges of *wasteful* societies and the reality of *waste* societies (Rathje and Murphy, 1992; O’Brien, 2007; Gregson and Crewe, 2003). Furthermore, because society necessitates waste, criticism of wasting is invariably just a judgement on society, representing ‘the intersections between morality and society’ (O’Brien, 2007, pp. 35-36); more brutally, ‘puritanical moral judgments on our society’ (Thompson, 2017, p. 29). The danger here is ‘the politicization that results from ecological concern and holistic vision, regardless of any explicit intent, must carry totalitarian overtones’ (Thompson, 2017, p. 103). And to a degree we can see this in the way CE necessitates corporate control of goods, under the guise of environmental improvement. Now it may well be that this is simply a balance that needs to be adjusted, such that environmental protection is aided by the removal of waste including the recapture of goods. Nevertheless, the danger of such an approach is that it will affect how we live our lives through the consumption of goods (bearing in mind the need to reduce consumption cannot become the elimination of consumption).

## Marginal Property Practices

What exactly are marginal property practices?[[8]](#footnote-8) For these purposes, something is marginal is if it fails to fit within a commercialised conceptualisation of bilateral or multilateral exchange. It is this “failure to fit” which renders freeganism a marginal property practice. Its unilateral nature distinguishes it from other property practices such as sales of second hand goods, or even of non-sale bilateral or multilateral transactions such as gifts. Thus as much as abandonment can be ‘a unilateral ... ridding oneself of ownership’ (Strahilevitz, 2010, p. 360), then freeganism is a unilateral act of acquiring ownership.

Van der Walt suggests that the transformational setting of post-apartheid South Africa resulted in property discourse being interrupted by ‘otherwise marginal considerations’, with the effect that ‘marginal persons and groups (in the form of those who suffered under the injustices of the discarded regime or whose position must be taken seriously because of the political changes) become more important in a social and political debate that can no longer be dominated by purely technical legal issues.’ (van der Walt, 2009, p. 21) This required explanations and solutions for property issues other than by “normal” methods; ‘solutions that depend upon or only become possible as a result of paradigmatic shifts in the very foundations of what was traditionally accepted as normal or true or valid about property.’ (van der Walt, 2009, p. 22) However, what if the opposite may be the case? Could normal solutions and operative mechanisms of property regimes function perfectly well enough to enable the maintenance of current regimes even where socio-economic structures may alter? What would the consequences be for those operating in the margins in such situations? What is fascinating about waste – including how it is dealt with by property regimes – is that it is simultaneously normal *and* abnormal; central and marginal. This enables analysis of marginal property practices which still draws on van der Walt’s analysis, whilst at the same time expanding into a less considered analytical subject: personal property; and a less considered analytical framework: simultaneity of ab/normality. In doing so though, there is a mirroring of one discursive framework identified by van der Walt: consideration of property ‘from the perspective of persons, relationships and issues that are marginal in relation to – and marginalised by – the “normal” regime of property holdings.’ (van der Walt, 2009, p. 22)

Van der Walt makes three argumentative points about marginality and property:

(i) ‘property as it is experienced by those on the margins of society ... [is an experience which] inherently involves conflict with privileged property positions’; (ii) ‘marginality is therefore a vital element of property as a legal institution’; and (iii) ‘although those on the margins usually hold weak property rights or no property rights at all, marginality in itself does not equal weakness – at least in some cases, marginality reveals a power of its own that is highly relevant for property theory.’ (van der Walt, 2009, p. 24)

This article examines something quite different: interactions with waste as actions deemed marginal but only in certain non-commercial contexts. This marginalisation is a combination of property regime framing,[[9]](#footnote-9) and self-marginalisation by those interacting with waste. The unilateral nature of freeganism is distinct to the circumstances of transformation that van der Walt was concerned with, enabling an additional argumentative point: personal property regimes will negatively respond to and deal with marginal property practices and will do so successfully. The effect of this is exemplified in Ferrell’s *Empire of Scrounge*, where those who pick over waste have to ‘stay one stealthy step ahead of those official agencies of collection, sanitation, and disposal’ and thus ‘the work of these illicit trash scroungers remains marginal’ (Ferrell, 2006, p. 3) The competitive tension between the marginal and the official causing ‘ongoing ambiguities of marginality and illegality’ (Ferrell, 2006, pp. 6-7) allows for law to be inserted into (or generated within) the gaps and holes such conflicts generate.

### The Legal Treatment of Marginal Property Practices

Property regimes reflect predominant social practices concerning the transformation of products to waste and back again, and due to the manner by which such transformations are ‘police[d]’ they help maintain ‘systems of value and hierarchy’ that might otherwise be challenged by the production of ‘alternative systems of counter-value’ by those ‘on the margins of a social system’ (Reno, 2017, p. xiii). Interventions in such policed systems create such tension as to require structural responses such as criminalisation of such practices. The legal marginalisation of certain property practices, and their problematization as counters to the systemic logics of personal property regimes and thus necessitating subjection to control, must then be considered as a powerful tool in stabilising a specific sort of society; a commercial society (Thompson and Bruce Beck, 2017, p. 232).

Non-conforming property practices are unsurprisingly often treated negatively in societies: any development of legal authority (or, indeed, its absence) will invariably involve ‘the marginalisation, suppression, qualification or consolidation of pre-existing social relations’ (Sugarman and Rubin, 1984, p. 112). Anti-consumption is a ‘heretical attitude’ (Cherrier, 2009, p. 181), and individuals who take alternative approaches to the creation, acquisition, disposition or destruction of material objects are either shunned or stigmatized (Nguyen, Chen and Mukherjee, 2014), subject to limitations or preventative action (Strahilevitz, 2010), criminalised (Thomas, 2010; Tidwell, 2015), or deemed (if not actually treated) as medically/psychologically pathological (Yaagur, 2015). Even when waste is valorised in a museum context, such actions, and their otherwise (culturally) central locales, are themselves marginalized (Windmüller, 2010).

Over time, marginal, alternative or radical property practices attracted legal control (Sugarman and Rubin, 1984), with gleaning (King, 1992; King, 2006), pilfering (Styles, 1983), and foraging (Lee and Garikipati, 2011) all illustrating the restriction of individual activity at the margins of property practices. Recently, there has been a proliferation of regulatory criminalisation of waste activities (DEFRA, January 2018), though sometimes archaic laws are also used (Thomas, 2014). The socio-legal pattern identified here – the complicated nature of such practices; the imbricated relationships of law and social behaviour; the increasing volume and scope of legal regulation – are indicative of the broad trend of restricting and where possible eliminating marginal property practices. The elimination of marginal property practices should not be confused with their eradication (thus foraging and gleaning continue, and even pilfering is clearly part of social life (Henry, 1978)); what can be said is that ‘even marginal property at the periphery – was [is?] put to productive use’ (Lee and Garikipati, 2011, p. 422). What was the case for the agricultural commons was part of a broader trend towards property in general, aided by lawyers formulating structural boundaries of acceptable property behaviour (Sugarman 1983; Tigar and Levy, 2000). It has also been suggested that the way English property law deals with abandoned goods results in a form of commercialisation of waste practices. Through a combination of doctrinal rules and principles the English property regime effects the reintegration of goods back into the ownership cascade (Thomas, 2019; Grinlinton, 2017; Scotford and Walsh, 2013). At the heart of this is a tendency in property law to embed ‘a “hidden” political agenda that privileges property owning parties over less- or un-propertied parties’ (Fox O’Mahony, 2014, p. 8). As much as Gray and Gray memorably critiqued the rhetoric of reality (Gray and Gray, 2003), we can thus see here a *prose of personality* – marginal property practices involving goods are restricted because the participants at the margins do not speak (at least not fluently) the language of acceptable, commercial, activity.

### Freeganism in the Circular Economy

Freeganism is a dynamic and complex social phenomenon. Whilst there is no consensus about what a freegan is, Thomas suggests it ‘is an alternative consumption strategy which involves taking goods that appear abandoned, without paying for them’ (Thomas, 2010, p. 98). Freegans acquire goods by taking possession without engaging in an exchange process (whether informal or formal; barter, gift or contract). The unilateral nature of the acquisition put freeganism on the margins of social acceptability (Gross, 2009; Pentina and Amos, 2011); combined with the relatively limited ex post commercial activity freegans undertake with their booty (Edwards and Mercer, 2007; Barnard, 2016a; Roux and Guillard, 2016), it becomes clear that the radicalness and marginality of freeganism is considerably greater than scavenging behaviour in other contexts. Whereas scavengers in history or in less developed countries would be much more integrated with wider commercial flows (Hulme, 2015), freegans act as a resistor in such commercial circuits. This much can be understood from a deeper exploration of freegan practice.

It is tentatively suggested that choice is core to freeganism (Nguyen, Chen and Mukherjee, 2014, pp. 1881-1882). It is accepted that some freegans may claim, accurately, that they are neither choosing nor being forced into freeganism (Barnard, 2016a, p.5). What is suggested is a distinction between freeganism and (for want of a better term) precarious scavenging (Edwards and Mercer, 2007, p. 282; Strahilevitz, 2010, p. 357; Vinegar, Parker, and Mccourt, 2016; Barnard, 2016b; Samson, 2017). Freeganism is about *waste* politics, rather than *poverty* alleviation. Whilst there may be some evidence of a split between political gleaning of (waste) food and freeganising of non-food items, however, to place much emphasis on this would be misguided (Edwards and Mercer, 2007; Vingear, Parker, and Mccourt, 2016; Roux and Guillard, 2016), and thus the variety of freegan practice, going beyond the common (and media-friendly) illustration of bin-diving for waste food (Thomas, 2010, pp 99-103), can be explored. Freegans do not restrict themselves to food: other goods, such as furniture, electronics and white goods, bikes, or clothing, are all attractive to freegans (Portwood-Stacer, 2012, pp. 93-94; Barnard, 2016a). It is this very wide potential scope for freegan activity which raises the problems with waste within the context of the CE, given how in both contexts (freeganism and CE) waste is much more than a single type of product.

Even though it seems that freegans are ‘ideologically heterogeneous’ (Barnard, 2016b, p. 1019), there is some evidence that freegans have some collective identity, focused on radical consumer resistance and market-mediated anti-consumption along a spectrum of perspectives (Pentina and Amos, 2011; Ferrell, 2006). Further research suggests freegans construct reverse stigma, by reframing consumption as destructive and spurious, consumers as ‘cultural dupes’ and by negotiating the paradoxes of freegan practices in a world of engrained capitalist consumption (Nguyen, Chen and Mukherjee, 2014; Savio, 2017). This differentiation process can however create positive portrayals of freeganism (Barnard, 2011). Nevertheless, it is often the case that freegans “other” themselves, deliberately so, and they can do this especially in the context of freeganising food which raises issues of hygiene and disgust; areas of special concern in post-modern consumption (Barnard, 2011; Thomas, 2010, pp. 120-121).

By dramatizing ‘the unsustainability and excesses of mass consumerism’ (Barnard, 2016b, p. 1019), freeganism moves into fields of ‘“anti-consumerist” activities’ (Edwards and Mercer, 2007, p. 281), but the inevitability of consumption in material life suggests freeganism is perhaps better conceptualised as broader action of ‘political gleaning’ (Mercer, 2007, p.281-282; Portwood-Stacer, 2012); a practice of anti-corporatism or anti-capitalism. It is in this context that self-marginalizing status of freeganism becomes particularly pointed, and sets freeganism against “normal” consumption behaviour involving waste to such a violent extent that its challenge to the social ordering of waste products and related practices requires a systematic reaction. Moreover, it is for this reason also that freeganism in CE will struggle.

Freegans, operating in the margins of consumption by virtue of dealings with waste, deal with goods in two ways. First: freegans revert goods into the consumption process (Edwards and Mercer, 2013, p. 179: they ‘rescue – and, in the process, revalue’), and give goods a new social life (Appadurai, 1986). Second: freeganism’s potential to operate at all stages in the consumption process (and for all types of goods) must be contextualised by the property regime itself, which takes for itself the capacity to affect the transmissibility of goods. Combined, these effects transform waste into material suitable for manipulation by means of contract or regulation (Cavé, 2014, pp. 818-819; Gutberlet, 2008, p. 29), even if freegans only barter or exchange their freeganised wares ‘occasionally’, let alone engaging in sale (Vinegar, Parker, and Mccourt, 2016, p.247).[[10]](#footnote-10) By institutional design (the doctrinal triptych of relative title, possessory title, and abandonment) property regimes provide rights to finders and thus close up the gaps, resolving ownership and use-claims in a way which produces the foundations for potential future commoditisation of the goods (Thomas, 2019, pp. 77-83). This has an oddly paradoxical effect: ‘the Freegan movement continues to engage with specific legal structures that serve to enhance the symbolic meaning of trash … Freeganism may also reduce its own capacity for large-scale change through its own, partially, radical behavior.’ (Coyne, 2009, p. 23) Freegans may not actually care about the relative possessory (and thus proprietary) title they obtain by their acquisition of goods, but that is what they get whether they want it or not; this title then means that the technical problem of un-owned goods is side-stepped and more importantly (for CE purposes in particular) the goods are now reverted back into commercial life.

However, freegan practice may continue as a form of a radical property practice of opposition: ‘Gleaning as an informal economy also challenges the Western assumption that neoliberalism is the only viable global economic option’ (Edwards and Mercer, 2007, p. 290). Consuming without paying weakens the system (Portwood-Stacer, 2012) and disrupts its operation of commodity circulation (Coyne, 2009). Freegans reject the automatic and certain nature of systematic regulatory and contractual consumption, and take advantage of instances of breakdown, rupture and blockage in supply chains. Anticipation and opportunism are utilised as forms of protest against a deterministic system. Yet even this form of resistance may be futile. As Barnard notes, his experience of freeganism involved

an ongoing conflict between those who wanted to call attention to waste in order to grow the movement and those who wanted to keep it hidden in order to ensure their ability to maintain themselves on the system’s margins. … Paradoxically, the nature of freegans’ resource base … meant that freegans’ political actions threatened to deprive them of the very objects they used to prove to themselves that they were living naturally. (Barnard, 2016b, p. 1036-1037)

Similar difficulties of paradox and contradiction have been identified in the specific context of food: ‘there is no escaping the webs of capitalism. Freegans … cannot sustain themselves without the overproduction of the industrialized agrifood system that ends up both in dumpsters and in the emergency food system’ (Gross, 2009, p. 74). Nevertheless, the underlying principle clearly has broader application beyond food supply (not least because the problem of food waste requires specific and separate analysis (Bradshaw, 2018; Bradshaw, 2020; Parker and Johnson, 2019)). In CE there is a form of industrialized commodification; for good or for bad masquerading (or accurately representing) a drive towards a more ecologically friendly system of consumption, which needs to prevent the radical practices of (re-)using goods disposed of (or ending up at) at the margins for its own full systemic performance (Sbicca, 2014). CE may well ‘limit the possibility to express critical consideration’ (Ferrando, 2016).

So, whilst ‘freegans seek out the intensity of feeling that comes when their access to food is unmediated by a series of middlemen’ (Gross, 2009, p. 75), circularity in economy necessitates middlemen as much as any other participant. Arguably, consumers must be simultaneously middleman for they will be at the end reintroducing whatever waste they generate back into the CE. In the special context of freegans, the same logic will apply: the only form of consumption that likely escapes this net is that of immediate permanent consumption of perishables, with the eating of waste food being the clearest example.

However, when matters get down to the very basic level of freeganism, a further perceptual shift occurs, as between the relative exchange-value and use-value of freeganised goods. The increased focus on the use-possibilities of objects that have such limited exchange-value that they get abandoned as rubbish has the potential, but nothing more, to raise up exchange-value (Thompson, 2017). Yet what is more likely to be the case with the development of CE is a closer examination, by commercial as well as non-commercial actors, at the use-value of waste. There is, in this sense, a possibility of dividing between whole-use-value and component-exchange-value. Technological developments at both design stages and recovery stages of creation and consumption mean that not only are components more valuable, but that they retain sufficient amount of their original value (or the costs of accessing that value are reduced in sufficient amounts) to be commercially viable products for further utilisation. Moreover, this intrinsic value is more likely to be recognised and tracked long before the disposal of the objects. Whether goods will even be allowed to enter into the scope of freegans will be pre-determined. This is likely to contrast with the whole-use-vale approach of freegans. Their capacity to use goods otherwise disposed of means that such cast-offs cannot be reintegrated. Those with the technological capacity and commercial interest to get at the component-exchange-value are merely engaged with recirculation of matter; their success depends on their capacity to ‘delay the transfer of an item from the transient to the rubbish category’ (Thompson, 2017, p. 115). Such delaying tactics, acceptable at the end of chains of consumption (even rendered necessary in light of the brittleness and consequent fracturing of the end of long global supply chains (Hulme, 2015)), contrasts with the resist and revitalise tactics of the freegan. This in turn means that there could be competition, between freegans and those with commercial interests in such waste products. On one hand this could mean a reduction of waste per se, but it is also likely to lead to increases in the commercialised (valorised) treatment of waste products (Cavé, 2014). The commercialisation of waste places freegans in a contradictory situation. At this stage it is worth considering an alternative. Instead of freegans being understood as resistors within the commercial circuits of material flow that construct a CE, could freegans be openly and deliberately provided with some special status and a role within a CE? Freeganism’s survival as a marginal property practice may depend on it being accepted as a social mechanism for identifying breakdowns in supply chains. Given that freegans seem to actively argue against engagement with the world of corporatized commercial consumption, this is highly unlikely. Even if there is some sort of acceptance of this sort of marginal property practice, it will only be accepted as contingent on the absence of a stronger “call” on the goods concerned, from prior owners and users of the goods. This call on the goods may, as suggested above, be a call on the components of goods rather than the goods themselves. Technological developments, and commercial interests, increase the volume and authority of such calls. With regard to technological developments, the increasing capacity to track goods (especially though not exclusively electronic goods), along with the ability to connect potential future disposers with potential future acquirers and users of goods (or components thereof), makes it more likely that such calls will be demonstrable and viable, such that they have a greater volume than any competing call by marginal property practitioners. When combined with the policy aims of CE this call could become sufficient to pre-empt marginal, that is non-commercial, acquisitive property practices.

This pre-emption might also go together with a form of de-marginalising freeganism as a property practice, by expanding the more central property practices to encapsulate the acquisitive and reusing aspect of freeganism. This would be an expression of CE policy in the form of non-freegan consumers developing attitudes and practicing behaviours which mirror those of freegans, and thus being more engaged in the reuse of products that others dispose of. Would this impact on the marginalisation of freeganism? Would this be a shift in the boundary – the margins – of consumption such that freegans could no longer be considered marginal, because normal (non-marginal) consumption acts will be expanded to cover the reuse of things abandoned by others? The key to understanding here must be the notion of control: how goods can be controlled down a chain of transactions. This notion of control of goods is central to CE ideology, policy and practice. And it is also the notion of the control of goods which distinguishes marginal property practices, because it is the controlling of (personal) property which the prose of personality requires. Those that do engage in planned and ordered CE-compliant reuse of waste will be communicating in one form of symbolic language – of ownership and control within institutional property regimes which have the forms and ideological capacity to give foundations to CE practices. Freegans will remain marginalised because even if CE practices and their accompanying legal frameworks and institutions say “we understand you”, because freegans by their very actions and the reasons given for their actions will be saying “we do not understand you”. Whilst the pre-emptive effect of CE intrudes into the freegan world, while world – a world that does not speak fluently the prose of personality – is itself being legally constricted for challenging the property regime.

# Conclusion

The boundaries of property practices are ‘malleable, ambiguous, and continually under construction’ (Ferrell, 2006, p. 175) Freeganism is a specific type of marginal property practice, and as such can be an effective lens for analysing how such boundaries can be challenged, deconstructed, and potentially reconstructed. This reconstruction of boundaries occurs because engagement with waste requires engagement with commerce (Pikner and Jauhiainen, 2014): ‘ragpicking is the ultimate form of capitalism, wringing the last drops of exchange value from material that seems already exhausted.’ (Smith, 2010, p. 119) This entails the ascription of “property-ness”, so to enable effective reintroduction of goods back into commerce; law has a long history of successfully restricting marginal property practices through such ascription of “property-ness”. This raises questions about broader implications of CE policies.

The paradoxical nature of waste means that it is both marginal and central to society. If law’s treatment of marginal property practices is one of restriction and potential elimination, and if “normal” behaviour involves supposedly marginal practices, then the implications of circular economics on “normal” consumption becomes considerable. Normal consumption includes acts that we would otherwise like to consider limited to marginal societal actors. This blindness to our own behaviour leaves us vulnerable. Allowing for legally-enforced restrictions on certain practices create the possibility of expansion of such restrictions into other more socially acceptable practices. Specifically, CE requires for its own success goods to be subject to control, primarily by up-stream parties. In other words: corporate control of down-stream use of goods. Only through such control of use can there be control of waste, and thus achievement of the policy aims of CE.

Our consumption will thus have to meet the requirements and obligations of a policy framework which further shifts the capacity to deal with waste away from those at the edges of the consumption society in which we live. In doing so, the risk arises that this constriction of waste practices will extend further into “normal” property practices concerning goods that are deemed “waste” by parties other than the users of such products. If a commercial entity wishes for a product to be “waste” so as to reclaim it and reintegrate its constituent parts and elements back into CE, then our capacity to refuse that may well be limited. How we live our lives through things may no longer be our own choice.

# References

Adshead, J. (2008), “The Waste Strategy for England 2007: Is It Deliverable?”, *Environmental Law Review*, Vol. 10, pp*.* 46-51.

Appadurai, A., (Ed.), (1986), *The Social Life of Things*, Cambridge University Press, Cambridge.

Backes, C. (2017), *Law for a Circular Economy*, Eleven International Publishing, The Hague.

Barnard, A. V. (2011), “‘Waving the banana’ at capitalism: Political theatre and social movement strategy among New York’s ‘freegan’ dumpster divers”, *Ethnography*, Vol. 12 No. 4, pp. 419-444.

Barnard, A. V. (2016a), *Freegans: Diving in the wealth of food waste in America*, University of Minnesota Press, Minnesota.

Barnard, A. V. (2016b), “Making the City ‘Second Nature’: Freegan ‘Dumpster Divers’ and the Materiality of Morality”, *American Journal of Sociology*, Vol. 121, No. 4, pp. 1017-1050.

Bonciu, F. (2014), “The European Economy: From a Linear to a Circular Economy”, *Romanian Journal of European Affairs*, Vol. 14 No. 4, pp. 78-91.

Bradshaw, C. (2018), “Waste Law and the Value of Food”, *Journal of Environmental Law*, Vol. 30, pp. 311-331.

Bradshaw, C. (2020), “England’s Fresh Approach to Food Waste: Problem Frames in the *Resource and Waste Strategy*”, *Legal Studies*, pp. 1-23, doi: 10.1017/lst.2019.37.

Burger, M. (2019) “Materials Consumption and Solid Waste” in Gerrard, M. B. and Dernbach, J. (Eds.), *Legal Pathways to Deep Decarbonization in the United States*, ELI Books, pp. 183-196.

Cavé, J. (2014), “Who owns urban waste? Appropriation conflicts in emerging countries”, *Waste Management & Research*, Vol. 32 No. 9, pp. 813-821.

Cherrier, H. (2009), “Anti-consumption discourses and consumer-resistant identities”, *Journal of Business Research*,Vol. 62 No. 2, pp. 181-190.

Cheyne., I and Purdue, M. (1995), “Fitting Definition to Purpose: The Search for a Satisfactory Definition of Waste” *Journal of Environmental Law*, Vol. 7 No. 2, pp.149-168.

Cortez, M. (2012), “Time Out of Mind: The Animation of Obsolescence in *The Brave Little Toaster*” in Foote, S. and Mazzolini, E. (Eds.), *Histories of the Dustheap: Waste, Material Cultures, Social Justice*, MIT Press, Cambridge, MA, pp. 227-251.

Dalhammar, C. (2015), “The Application of ‘Life Cycle Thinking’ in European Environmental Law: Theory and Practice”, *Journal of European Environmental & Planning Law*, Vol. 12 No 2, pp. 97-127.

Davies, A. R. (2008), *The Geographies of Garbage Governance: Interventions, Interactions and Outcomes*, Ashgate, Aldershot.

de Römph, T. J. (2016), “Terminological Challenges to the Incorporation of Landfill Mining in EU Waste Law in View of the Circular Economy”, *European Energy and Environmental Law Review*, Vol. 25 No. 4, pp. 106-119.

de Römph, T.J. and Van Calster, G. (2018), “REACH in a circular economy: The obstacles for plastics recyclers and regulators”, *Review of European, Comparative & International Environmental Law*, Vol. 27 No. 3, pp. 267-277.

DEFRA, (December 2018), *Our waste, Our Resources: A Strategy for England*, available at [www.gov.uk/government/publications/resources-and-waste-strategy-for-england](http://www.gov.uk/government/publications/resources-and-waste-strategy-for-england) (accessed 5 June 2020).

DEFRA, (January 2018), *A consultation on proposals to tackle crime and poor performance in the waste sector & introduce a new fixed penalty for the waste duty of care*, available at <https://consult.defra.gov.uk/waste/crime-and-poor-performance-in-the-waste-sector/> (accessed 5 June 2020).

DEFRA, (November 2015), *UK response to European Commission consultation of member states on the circular economy*, available at [www.gov.uk/government/publications/circular-economy-and-waste-markets-uk-government-response-to-european-commission-consultations](http://www.gov.uk/government/publications/circular-economy-and-waste-markets-uk-government-response-to-european-commission-consultations) (accessed 5 June 2020).

DEFRA, (October 2015), *UK response to European Commission consultation of member states on the circular economy*, available at [www.gov.uk/government/uploads/system/uploads/attachment\_data/file/475862/circ-economy-eu-consult-uk-response.pdf](http://www.gov.uk/government/uploads/system/uploads/attachment_data/file/475862/circ-economy-eu-consult-uk-response.pdf) (accessed 5 June 2006).

Douglas, M. (1966), *Purity and Danger*, Routledge, London.

EC, (2015), *Closing the loop - An EU action plan for the Circular Economy: Annex I*, COM (2015) 614.

EC, (2017), *Report from the Commission on the Implementation of the Circular Economy Action Plan*, COM (2017) 33.

Edwards, F. and Mercer, D. (2007), “Gleaning from Gluttony: an Australian youth subculture confronts the ethics of waste”, *Australian Geographer*, Vol. 38 No. 3, pp. 279-296.

Edwards, F. and Mercer, D. (2013), “Food waste in Australia: the freegan response”, *The Sociological Review*, Vol. 60 No. S2, pp. 174-191.

Fennetaux, A., Junqua A. and Vasset S. (Eds.), (2015), *The Afterlife of Used Things: Recycling in the Long Eighteenth Century*, Routledge, Abingdon.

Ferrando, T. (2016), “Impolite Conversations around the ‘War on Waste’”, available at <http://criticallegalthinking.com/2016/04/08/impolite-conversations-around-war-waste/> (accessed 5 June 2020).

Ferrell, J. (2006), *Empire of Scrounge: Inside the Urban Underground of Dumpster Diving, Trash Picking, and Street Scavenging*, New York University Press, New York.

Foote, S. and Mazzolini, E. (2012), “Conclusion: Object Lessons”, in Foote, S. and Mazzolini, E., (Eds.), *Histories of the Dustheap: Waste, Material Cultures, Social Justice*, MIT Press, Cambridge, MA., pp. 253-260.

Fox O’Mahony, L. (2014), “Property Outsiders and the Hidden Politics of Doctrinalism”, *Current Legal Problems*, Vol. 64, pp.409-445

Gordeeva, Y. M. (2016), “Recent Developments in EU Environmental Policy and Legislation” *Journal of European Environment & Planning Law*, Vol. 13, pp. 120-129.

Gray, K. J. and Gray, S. F. (2003), “The Rhetoric of Realty”, in Getzler, J., (Ed.), *Rationalising Property, Equity and Trusts: Essays in Honour of Edward Burn*, Butterworths, London, pp. 204-280.

Gregson, N. (2007), *Living With Things: Ridding, Accommodation, Dwelling* (Sean Kingston Publishing, Herefordshire.

Gregson, N. and Crewe, L. (2003), *Second Hand Cultures*, Berg, Oxford.

Gregson, N., Crang, M., Fuller, S. and Holmes, H. (2015), “Interrogating the circular economy: the moral economy of resources recovery in the EU” *Economy and Society*, Vol. 44 No. 2, pp. 218-243.

Gregson, N., Metcalfe, A. and Crewe, L. (2007), “Moving things along: the conduits and practices of divestment in consumption”, *Transactions of the Institute of British Geographers*, Vol. 32 No. 2, pp. 187-200.

Grinlinton, D. (2017), “The Continuing Relevance of Common Law Property Rights and Remedies in Addressing Environmental Challenges”, *McGill Law Journal*, Vol. 62 No. 3, pp. 633-686.

Gross, J. (2009), “Capitalism and Its Discontents: Back-to-the-Lander and Freegan Foodways in Rural Oregon”, *Food and Foodways*, Vol. 17 No. 2, pp.57-79.

Gutberlet, J. (2008), *Recovering Resources – Recycling Citizenship: Urban Poverty Reduction in Latin America*, Ashgate, Aldershot.

Henry, S. (1978), *The Hidden Economy: The context and control of borderline crime*, Martin Robertson, London.

Hulme, A. (2015) *On the Commodity Trail: The Journey of a Bargain Store Product from East to West*, Bloomsbury Academic, London.

King, P. (1992), “Legal Change, Customary Right, and Social Conflict in Late Eighteenth-Century England: The Origins of the Great Gleaning Case of 1788”, *Law and History Review*, Vol. 20 No. 1, pp. 1-31.

King, P. (2006), *Crime and law in England 1750-1840: remaking justice from the margins*, Cambridge University Press, Cambridge.

Lacy, P. and Rutqvist, J. (2015), *Waste to Wealth: The Circular Economy Advantage*, Palgrave MacMillan, London.

Lee, R. and Stokes, R. (2008), “Rehabilitating the Definition of Waste: Is it Fully Recovered?”, in Etty, T. and Somson, H., (Eds.), *Yearbook of European Environmental Law, Vol. 8*., Oxford University Press, Oxford, pp. 162-181.

Lee, J. and Garikipati, S. (2011), “Negotiating the Non-negotiable: British Foraging Law in Theory and Practice”, *Journal of Environmental Law*, Vol. 23 No. 3, pp. 415-430.

Lingl, C.M. and Marcó, R.P. (2019), “First EU attempt of a legal definition of ‘circular economy’”, available at [www.lexology.com/library/detail.aspx?g=6aa8a7d7-abb1-4511-b1e1-c07f05c767be](http://www.lexology.com/library/detail.aspx?g=6aa8a7d7-abb1-4511-b1e1-c07f05c767be) (accessed 5 June 2020).

Mähönen, J. T. (2018) “Financing Sustainable Market Actors in Circular Economy”, University of Oslo Faculty of Law Research Paper No 2018-28, available at [https://ssrn.com/abstract=3273263](https://ssrn.com/abstract%3D3273263) (accessed 5 June 2020).

Maitre-Ekern, E. and Dalhammar, C. (2019), “Towards a hierarchy of consumption behaviour in the circular economy”, *Maastricht Journal of European and Comparative Law*, Vol. 26 No. 3, pp. 394-420.

Mak, V. and Lujinovic, E. (2019), “Towards a Circular Economy in EU Consumer Markets – Legal Possibilities and Legal Challenges and the Dutch Example”, *Journal of European Consumer and Market Law*, Vol., 8 No. 1, pp. 4–13.

Mélon, L. (2019) “Is circular economy a move towards or away from sustainability? A short piece on the (ab)use of the concept of circularity”, available at [www.howtocrackanut.com/blog/lela-melon-circular-economy-sustainability](http://www.howtocrackanut.com/blog/lela-melon-circular-economy-sustainability) (accessed 5 June 2020).

Miller, D. (2012), *Consumption and its Consequences*, Polity Press, London.

Nguyen, H. P., Chen, S. and Mukherjee, S., (2014), “Reverse stigma in the Freegan community” *Journal of Business Research*, Vol. 67 No. 9, pp. 1877-1884.

O’Brien, M. (1999), “Rubbish values: Reflections on the political economy of waste”, *Science as Culture*, Vol. 8 No. 3, pp. 269-295.

O’Brien, M. (2007), *A Crisis of Waste? Understanding the Rubbish Society*, Routledge, Abingdon.

Parker, C. and Johnson, H. (2019), “From Food Chains to Food Webs: Regulating Capitalist Production and Consumption in the Food System” *Annual Review of Law and Social Science*, Vol. 15, pp. 205-225.

Pentina, I. and Amos, C. (2011), “The Freegan phenomenon: anti-consumption or consumer resistance?”, *European Journal of Marketing*, Vol. 45 No. 11/12, pp. 1768-1778.

Pikner, T. and Jauhiainen, J. S. (2014), “Dis/appearing waste and afterwards”, *Geoform*, Vol. 54, pp. 39-48.

Pongrácz, E. and Pohjola, V. J. (2004), “De-defining waste, the concept of ownership and the role of waste management” *Resources, Conservation and Recycling*, Vol. 40 No. 2, pp. 141-153.

Porcelli, A.M. and Martinez, A.N. (2018), “Legislative Analysis of the Circular Paradigm Economy”, *DIREITO GV Law Review*, Vol. 14 No. 3, pp. 1067-1105.

Portwood-Stacer, L. (2012), “Anti-consumption as tactical resistance: Anarchists, subculture, and activist strategy”, *Journal of Consumer Culture*, Vol. 12 No. 1, pp.87-105.

Pye, G. (2010), ‘Introduction: Trash as Cultural Category’ in Pye, G., (Ed.), (2010), *Trash Culture: Objects and Obsolescence in Cultural Perspective* (Peter Lang, Bern, pp. 1-14.

Rathje, W. and Murphy, C. (2001), *Rubbish! The Archaeology of Garbage*, The University of Arizona Press, Tucson.

Reno, J. O. (2017), “Foreword”, in Thompson, M., *Rubbish Theory: The Creation and Destruction of Value*, Pluto Press, London.

Roux, D. and Guillard, V. (2016), “Circulation of objects between strangers in public space: An analysis of forms of sociality among disposers and gleaners”, *Recherche et Applications en Marketing*, Vol. 31, No. 4, pp. 28-46

Ryan, E. (2014), “The Elaborate Paper Tiger: Environmental Enforcement and the Rule of Law in China” *Duke Environment Law and Policy Forum*, Vol. 24 No. 1, pp.183-239.

Samson, M. (2017), “The social uses of the law at a Soweto garbage dump: Reclaiming the law and the state in the informal economy”, *Current Sociology*, Vol. 65 No. 2, pp. 222-234.

Savio, G. (2017), “Organization and Stigma Management: A Comparative Study of Dumpster Divers in New York”, *Sociological Perspectives*, Vol. 60 No. 2, pp. 416-430.

Scanlan, J. (2005), *On Garbage*, Reaktion Books, London.

Scotford, E. (2009), “The New Waste Directive - Trying to Do It All...an Early Assessment”, *Environmental Law Review*, Vol. 11, pp. 75-96.

Scotford, E. and Walsh, R. (2013), “The Symbiosis of Property and English Environmental Law – Property Rights in a Public Law Context”, *Modern Law Review*, Vol. 76 No. 6, pp. 1010-1045.

Smith, D. (2010), “Scrapbooks: Recycling the *Lumpen* in Benjamin and Bataille”, in Pye, G. (Ed.), *Trash Culture: Objects and Obsolescence in Cultural Perspective*, Peter Lang, Bern pp 113-128.

Steenmans, K., Marriott J., and Malcolm R. (2017), “Commodification of Waste: Legal and Theoretical Approaches to Industrial Symbiosis as part of a Circular Economy”, University of Oslo Faculty of Law Legal Studies Research Paper Series No 2017-26, available at [https://ssrn.com/abstract=2983631](https://ssrn.com/abstract%3D2983631) (accessed 5 June 2020).

Strahilevitz, J. (2010), “The Right to Abandon”, *University of Pennsylvania Law Review*, Vol 158 No. 2, pp*.* 355-420.

Strasser, S. (2000), *Waste and Want: A Social History of Trash*, Henry Holt, New York NY.

Styles, J. (1983), “Embezzlement, industry and the law in England, 1500-1800”, in Berg, M., Hudson, P. and Sonescher, M., (Eds.), *Manufacture in Town and Country Before the Factory*, Cambridge University Press, Cambridge.

Sugarman, D. (1983), “Law, Economy and the State in England, 1750-1914: Some Major Issues”, in Sugarman, D., (Ed.), *Legality, Ideology and The State*, Academic Press, London, pp. 213-266.

Sugarman, D. and Rubin, G. R. (1984), “Towards a New History of Law and Material Society in England, 1750-1914”, in Rubin, G. R. and Sugarman, D., (Eds), *Law, Economy and Society, 1750–1914: Essays in the History of English Law*, Butterworths, London, pp.1-186.

Thomas, S. (2014), “Iceland bin “thieves” should have had their day in court”, available at <http://theconversation.com/iceland-bin-thieves-should-have-had-their-day-in-court-22567> (accessed 5 June 2020).

Thomas, S. (2018), “Law, Smart Technology, and Circular Economy: All Watched Over By Machines of Loving Grace?”, *Law, Innovation & Technology*, Vol. 10 No. 2, pp. 230-265.

Thomas, S. (2019), “Law and the Circular Economy”, *Journal of Business Law*, pp. 62-83.

Thomas, S. (2020 forthcoming), “Legal Considerations for a Circular Economy”, in Tudor, T. and Dutra, C., (Eds), *A Handbook of Waste, Resources and the Circular Economy*, Routledge, Abingdon.

LEAD, (2019), “Special Issue on Designing Law and Policy Towards Managing Plastics in a Circular Economy”, *Law, Environment and Development Journal*, Vol. 15 No. 2, pp. 89-224.

Thompson, M. (2017), *Rubbish Theory: The Creation and Destruction of Value*, Pluto Press, London.

Thompson, M. and Bruce Beck, M. (2017), “Afterword to the second edition” in Thompson, M., *Rubbish Theory: The Creation and Destruction of Value*, Pluto Press, London.

Tidwell, R. (2015), “The Social Life of Dumpsters: An Examination of the Transformative and Communitive Properties of Dumpster Diving”, unpublished MA Thesis, Southern Illinois University.

Tigar, M. E. and Levy, M. R., (2000) *Law & the Rise of Capitalism*, New York University Press, NY.

Trentmann, F. (2016), *Empire of Things: How We Became a World of Consumers, from the Fifteenth Century to the Twenty-first*, Allen Lane, London.

Tromans, S. (2001), “EC Waste Law—A Complete Mess?” *Journal of Environmental Law*, Vol. 13 No. 2, pp. 133-156.

van der Walt, A. J. (2009), *Property in the Margins*, Hart Publishing, Oxford.

Vinegar, R., Parker, P. and Mccourt, G. (2016), “More than a response to food insecurity: demographics and social networks of urban dumpster divers”, *Local Environment*, Vol. 21 No. 2, pp. 241-253.

Waste Directive 2008, Directive 2008/98/EC of the European Parliament and of the Council on waste and repealing certain Directives (OJ L312/3 2008).

Windmüller, S., (2010), “‘Trash Museums’: Exhibiting in Between” in Pye, G. (Ed.), *Trash Culture: Objects and Obsolescence in Cultural Perspective*, Peter Lang, Bern, pp. 39-58.

Yasgur, B. S. (2015), “Managing Hoarding Disorder”, available at <http://www.psychiatryadvisor.com/obsessive-compulsive-and-related-disorders/hoarding-disorder-object-overattachment/article/428777> (accessed 5 June 2020).

1. For further explanation of circular economic thought, the reader is directed to the Ellen MacArthur Foundation, the leading contemporary organisation expounding on the CE, at [www.ellenmacarthurfoundation.org/circular-economy](http://www.ellenmacarthurfoundation.org/circular-economy), and the EU’s portal for its CE plans <http://ec.europa.eu/environment/circular-economy/index_en.htm>. [↑](#footnote-ref-1)
2. <https://www.ellenmacarthurfoundation.org/circular-economy/overview/principles>. [↑](#footnote-ref-2)
3. <https://www.ellenmacarthurfoundation.org/circular-economy/overview/characteristics>. [↑](#footnote-ref-3)
4. <https://www.ellenmacarthurfoundation.org/circular-economy/overview/characteristics>. [↑](#footnote-ref-4)
5. See also <https://www.gov.uk/government/news/smart-tracking-of-waste-across-the-uk-govtech-catalyst-competition-winners-announced>. [↑](#footnote-ref-5)
6. For a translation: <http://www.lawinfochina.com/display.aspx?id=7025&lib=law>. [↑](#footnote-ref-6)
7. See also [www.gov.uk/government/publications/legal-definition-of-waste-guidance/decide-if-a-material-is-waste-or-not](http://www.gov.uk/government/publications/legal-definition-of-waste-guidance/decide-if-a-material-is-waste-or-not). [↑](#footnote-ref-7)
8. It must be stated that this article is concerned with marginality in the specific context of developed economies, and there is an obvious difference with marginality in other economies. [↑](#footnote-ref-8)
9. On framing, see generally Bradshaw, 2020, which came to this author’s attention late in this work’s progress. [↑](#footnote-ref-9)
10. Cf Gregson and Crewe, 2003, p. 130-133, noting how some participants in the second-hand economy of car-boot sales acquire their goods from bins and skips. [↑](#footnote-ref-10)