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Profit, reputation and 'doing the right thing': Convention theory and the problem of food waste in the UK retail sector



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ABSTRACT

In 2014, Tesco – one of the world's largest food retailers – revealed that it had generated almost 57,000 tonnes of food waste in its UK operations over the previous twelve-month period. This shocking statistic added to existing evidence of a significant environmental and social problem in the UK and across the world. This paper utilises convention theory to examine the role of major retailers in the context of this global problem and assesses their motivations for acting on food waste. Drawing on interviews with key stakeholders (including major retailers), the analysis investigates their main justifications for action on food waste. It finds that retailers mostly appealed to three conventions or 'orders of worth' (civic, market and opinion) and used these as a basis for their commitment to food waste reduction. We argue that the combination of these different justifications is feasible and necessary in the context of the retail sector but that they may also lead to some unintended consequences (in the retail sector and beyond). Crucially, we demonstrate how the dilution of civic justifications (by their financial and reputational counterparts) might produce negative outcomes and inaction as retailers attempt to adhere to the so-called 'food waste hierarchy'. The paper highlights the continuing significance of convention theory as a framework for analysing possible responses to the social and environmental challenges confronting global agrofood systems.

1. Introduction

In October 2013, Tesco - one of the world's largest food retailers made headlines when it announced that it would audit the amount of food that is wasted across its supply chain and publish the findings. The subsequent revelation that the retailer had generated almost 57,000 tonnes of food waste within its UK operations in 2013/2014, added to existing evidence of a significant problem in the UK and across the world (IME, 2013; House of Lords, 2014). The announcement was followed by a commitment to tackle food waste - from Tesco and a range of other supermarkets.² This paper examines the role of major retailers in the context of this global problem and assesses their motivations for acting on food waste. Specifically, it uses convention theory (Boltanski and Thévenot, 1991; Ponte, 2016) to explore the three main justifications for action - civic concerns, financial implications and reputation and how the combination of these justifications has enabled short-term action (in the retail sector), while posing a potential impediment to a long term-solution to the problem (in the retail sector and the global food system more broadly). The paper makes an original contribution by extending convention theory to a new thematic area (food waste) and engaging directly with retailers to build on previous studies that critically apply convention theory to the analysis of corporate responses to sustainability challenges (e.g. Renard, 2003; Raynolds et al., 2007). Crucially, it demonstrates how the dilution of civic justifications (by their financial and reputational counterparts) might produce negative outcomes and inaction as retailers (and other actors in the global food system) attempt to adhere to the so-called 'food waste hierarchy'.

The standard 'waste management hierarchy' was introduced by the EU Waste Framework Directive in 2008 and incorporated into UK law. The hierarchy provides guidance on the disposal of any waste material and 'ranks waste management options according to what is best for the environment', with prevention as the first step, followed by reuse, recycling, other recovery and disposal (Defra, 2011). The basic waste management hierarchy has been widely applied to the problem of food waste in the UK and beyond (Zero Waste Europe, 2016; EPA, 2017; Feeding the 5000, 2017; WRAP, 2017). In the first instance, surplus

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¹ The actual figure was 56,580 tonnes (Tesco and Society Report, 2014).

 $^{^2}$ Details to follow in Section 2.

food should be reduced but where this is not possible, it should be redistributed (to those in need), used for animal feed or anaerobic digestion (AD) and then, as a last resort, incinerated or sent to land fill. The food waste hierarchy provides retailers with a framework for the management of surplus and acts as a guide in establishing the most appropriate options for dealing with the mounting food waste challenge' (Papargyropoulou et al., 2014, p. 107). Adherence to this framework – particularly in the context of redistribution – has played a key role in supermarket communications about food waste. Our paper provides a detailed analysis of the basis on which retailers adhere to the food waste hierarchy. It demonstrates how a commitment to its principles can be both facilitated and complicated by the differing demands of civic, financial and reputational concerns.

In previous work, we have suggested that current responses to food waste reduction in the UK are notable insofar as major retailers appear to be voluntarily and actively - in concert with a dense network of stakeholders - contributing to an emergent sense of distributed responsibility (Evans et al., 2017; Welch et al., forthcoming). The current paper provides a more detailed account of why this is the case. In the absence of strict legal regulations, why are retailers signing up to voluntary commitments? As something that will presumably lead to a decrease in profits, why are retailers eliminating promotional strategies and encouraging more efficient shopping habits amongst their customers? There are costs to be saved by reducing waste in-store, but this does not explain why retailers are encouraging their customers to buy less (or their suppliers - who typically bear the burden of surplus and rejected produce - to produce less). As we have argued elsewhere, these claims of efficiency gains reflect a limited and slightly 'lazy' interpretation of the situation (Evans et al., 2018). The application of convention theory - which explores the normative basis of economic action - yields insights into the dynamics of retailer involvement in food waste reduction activities as well as their implications for a long-term solution to the problem. This critical application of convention theory might be usefully applied to other sustainability challenges in the retail sector

The paper is divided into seven sections. Following on from the introduction, we present a context for the research (Section 2) and locate the study in existing literature on convention theory (henceforth CT) and agro-food (Section 3). We then outline the methodology (Section 4) and present the main analysis (Section 5). Drawing on the framework of CT, we identify the three main justifications for action: a) civic concerns, b) financial considerations and c) reputation as well as the potential conflicts between these individual justifications and the crosscutting adherence to the food waste hierarchy. Section 6 discusses the necessity of combining conventions in the retail sector and the implications of this approach for long-term action on the problem of food waste. To conclude, we highlight the pivotal position of the supermarket in the global food system and the importance of an approach (CT) that can analyse the complexity of motivations in this context, as well as the unintended consequences they may engender (Section 7).

2. Research context

According to recent reports, '30–50%...of all food produced on the planet is lost before reaching a human stomach' (IME, 2013, p. 7), while consumers in industrialised countries waste almost as much food as the entire net food production of sub-Saharan Africa (House of Lords, 2014, p. 7). The environmental implications of this problem are vast. Global food production necessitates large areas of land, substantial volumes of water and a great deal of energy (most of which is generated from fossil fuels). Food must be grown, stored, transported and distributed, and greenhouse gas emissions are generated at every stage of the process. In fact, the environmental impacts are such that 'the carbon saving of preventing all avoidable food waste in 2012 is equivalent to taking one in four cars off the road' (WRAP, 2012, p. 10). Moreover, in a world where one in nine people are suffering from chronic undernourishment

(FAO, 2016), food waste has become a significant moral issue. Indeed, in the same year that Tesco released its findings, almost a million people in the UK required the provision of 'emergency food' (The Trussell Trust, 2014) and over 20 million meals were distributed to people living in 'food poverty' (Cooper et al., 2014, p.4).

All of the UK's³ 'big four' supermarkets (Asda, Morrisons, Sainsbury's and Tesco) – along with a range of others (e.g., the Co-operative, Marks and Spencer, Waitrose) - have made some commitment to tackling the problem of food waste. This has included in-store initiatives such as changes to labelling (e.g., advice on storage) and packaging innovations (e.g., bags that can be resealed). Retailers have withdrawn promotional strategies that could lead to food waste in the home (e.g., Buy One Get One Free) and they have made efforts to educate their customers (e.g. websites that provide information on meal planning, freezing and portion control as well as recipes for using up left over food). In addition, retailers have tried to ensure that surplus, edible food is redistributed to people living in food poverty. These efforts have been directly informed by a commitment to the food waste hierarchy. More broadly, all of the major food retailers are signatories to the third phase of the Courtauld Commitment⁴ and, in 2015, the seven biggest supermarkets (87% of the UK grocery market) agreed to publish figures for food waste across their entire supply chains (British Retail Consortium, 2015).

The retailer is an 'essential focus for UK sustainability policy' (Dowler, 2008, p. 768) but, thus far, critical food scholars have eschewed systematic empirical engagement with major retailers and refused to treat them as a legitimate object of social scientific enquiry (cf. Evans, 2015, p. 36). Most of the previous research into food waste has focused on the household and family (Watson and Meah, 2013; Evans, 2014) and the everyday practices that lead to the generation of surplus (Metcalfe et al., 2013; Tucker and Farrelly, 2015). Elsewhere attention has been paid to the classification (Darlington et al., 2009) and causes (Hyde et al., 2001) of food waste and the savings that can be achieved through its minimisation (Hyde et al., 2003; Henningson et al., 2004) but these studies tend to focus on manufacturers or the food industry writ large (rather than retailers specifically). The exception is Mena et al. (2011) who interviewed retailers alongside other key actors (e.g., wholesalers, suppliers) in order to provide descriptive accounts of the 'root causes of food waste' (p. 649). In addition, the issue of food waste has played an important role in studies of food banks and redistribution (Hawkes and Webster, 2000; Tarasuk and Eakin, 2003, 2005; Midgley, 2013) but, with the exception of Alexander and Smaje (2008), this research has focused principally on the third sector. The neglect of retailer and supermarket engagement with the politics and practice of food waste reduction is a serious lacuna that this paper addresses by engaging directly with retailers and building on our previous work in this area.

3. Convention theory and agro-food

Originating in the work of Boltanski and Thévenot (1991, 1999), CT is a framework for exploring the normative basis of (economic) activity with an emerging focus on the multiple justifications that exist for action. It has been widely applied in the agro-food literature (Ponte, 2016). Based on the premise that objects, processes and actions can be evaluated in a number of different ways, it has mainly been used to research the qualities of products and labour, and how these provide the basis for co-ordination and exchange. The theory sets out six different 'orders of worth' and attendant principles of evaluation and

³ We note that retailers elsewhere in the world are taking similar measures. However, the UK has arguably been at the vanguard of responses to the challenges of food waste reduction, thus offering a useful case study of more general tendencies

⁴ This is a voluntary agreement administered through The Waste and Resources Action Programme (WRAP), aimed at improving the resource efficiency and environmental impact of the UK grocery sector.

justification. Whilst these principles are culturally specific, they have nevertheless become institutionalized as norms, expectations and agreements that reflect shared understandings of the legitimate basis for action. CT contends that a particular product (e.g., wine) or way of working (e.g., mass production) could be evaluated in a number of different ways (e.g., originality, efficiency) and that an individual or organisation may engage in a particular activity (e.g., purchasing or selling organic food) for many different reasons (e.g., ethical concerns, reputation). The six orders of worth are as follows 5:

The world of inspiration is concerned with imagination, creativity and passion; actions are evaluated and justified on the basis of their originality.

The domestic world is concerned with traditions, customs and social ties; actions are evaluated and justified on the basis of their trust-worthiness.

The world of renown is concerned with celebrity, recognition and reputation; actions are evaluated and justified on the basis of the opinions of others.

The civic world is concerned with solidarity, collective interest and responsibility; actions are evaluated and justified on the basis of their concern for the common good.

The market world is based on wealth, price and competition; actions are evaluated and justified in terms of their financial impact.

The industrial world is based on competency, productivity and performance; actions are evaluated and justified in terms of their level of efficiency.

In an authoritative review of the application of CT in Anglophone agro-food literature, Ponte (2016) notes a number of tendencies. First, it has been used 'to explain global trends in specific sectors, certifications and commodities' (p.16), with research mainly focusing on the Global North. These empirical case studies have covered products such as wine (e.g., Barham, 2003), coffee (e.g., Raynolds, 2002) and flowers (Gibbon and Riisgaard, 2014) as well as practices such as fair trade and 'other sustainability certifications' (e.g., Barham, 2002; Renard, 2003) (p. 17). Second, the majority of research in this area has focused on 'the "quality turn" in agro-food studies and the emergence of so-called alternative agro-food networks' (e.g., Kirwan, 2006; Murdoch and Miele, 1999) (Ponte, 2016, p. 17). In addition, CT has been applied to research on the co-ordination and governance of agro-food value chains (e.g., Coq-Huelva et al., 2011) as well as innovation and institutional change (e.g., Cidell and Alberts, 2006).

This paper contributes to the development of one of the 'new thematic areas' identified by Ponte's review and uses CT to consider different justifications for a particular action. In this way it follows the work of Anderson (2011) who investigates the different motivations for (not) purchasing organic food and Evans (2011) who looks at the many reasons that individuals may or may not engage in sustainable behaviour. These studies do not use the orders of worth as a basis for determining quality. Rather, they are interested in why individuals may engage in a particular activity or follow a particular course of action. The current paper applies the same approach to an organisational setting (and is therefore in keeping with some of CT's applications within and outside of agro-food studies). We address why retailers engage in a particular activity (reducing food waste in-store) or follow a particular course of action (adhering to the food waste hierarchy more generally) via a focus on the different conventions or 'orders of worth' that underpin their accounts. In addition, we draw upon some of the critical scholarship in CT that has highlighted the problems associated with combining conventions. For example, Raynolds et al. (2007) and

Renard (2003) consider the ways in which initiatives such as Fair Trade, premised as they are on civic concerns, might be vulnerable to market pressures (and their attendant principles of justification). Our research similarly analyses the unintended consequences of combined conventions and provides a detailed account of how this might play out in the context of food waste.

This paper contributes to the literature on CT and agro-food in three distinct ways. First, although there are a number of studies that consider the role of the supermarket in agro-food networks, none of these have applied CT in the same way. For example, Freidberg (2003) investigates the quality conventions that are put in place when UK and French supermarkets deal with suppliers in Africa and highlights the prevalence of industrial conventions (focusing on efficiency). However, like so many of the other studies, this analysis considers how quality is determined rather than why supermarkets act in this way. Second, the empirical focus on food waste is a completely new addition to this area. It complements and builds upon existing studies that use CT to assess the potentially negative environmental and social consequences of the current global food system (e.g., Raynolds, 2002, 2012; Renard, 2003; Raynolds et al., 2007). Finally, and most significantly, our research extends the critical work of these scholars by demonstrating how the short-term success of combined conventions in one context (the retail sector) could also cause problems for the long-term solution to the social and environmental problems under consideration.

4. Methodology

This paper derives from our Economic and Social Research Council (ESRC) funded project: 'Households, Retailers and Food Waste Transitions' (ref: ES/L00514X/1), which investigated the emergence of food waste as a critical sustainability challenge and aimed to understand the mechanisms that are currently being used to tackle the issue. The research that informs the current paper began with an in-depth analysis of the secondary and documentary sources in this area (e.g., policy reports, campaigning materials, company websites) as well as participation and observation at a number of multi-stakeholder events. This preliminary research allowed us to produce a detailed background and context for the project and identify key stakeholders in the area of food waste.

Interviews were then carried out with 38 representatives from the retail sector (including the 'big four' supermarkets and a range of others) as well as trade associations, third sector organisations, activists and campaigners, sustainability consultancies and government departments. Respondents were all actively involved in framing and/or responding to the challenge of food waste reduction. Interviews were carried out between 2014 and 2015 and were mostly conducted in person by one or two of the authors. These conversations were semistructured and the aide memoir included questions about how and why they came to be involved in food waste reduction activities; current initiatives; their relationships with other stakeholders; their views on the nature of the challenge at hand, and the role of different actors in delivering change. The development of the aide memoir was informed by the preliminary analysis of the secondary data and we tailored the questions to accommodate 'retailers' and 'non-retailers'. All of the interviews were digitally recorded and professionally transcribed for the purposes of collectively carrying out an in-depth analysis of these data.

This paper presents our analysis of all the transcripts (retailers and non-retailers) with a specific focus on the justification for action in the retail sector. Drawing on the six conventions identified in Section 3 (inspired; domestic; opinion; civic; market; and industrial), we began with the key features of each convention (e.g., creativity, trust, reputation, collective interest, price and efficiency) and we identified the ways in which these could be used to categorise our participants' responses. It soon became clear that justifications for action in the retail sector pertained principally to three conventions (civic, market and opinion) and we proceeded to narrow our focus accordingly. This

⁵ Explanations of the original orders of worth (see Boltanski and Thévenot, 1999, pp. 370–373) have been supplemented with information from Ekbia and Evans (2009, pp. 334–335), Evans (2011, p. 111) and Ponte (2016, pp. 13–14).

approach follows previous research that has drawn on CT but limited its focus to three or four conventions or 'orders of worth' in the interests of analytic clarity (e.g., Cidell and Alberts, 2006; Coq-Huelva et al., 2011). As is often the case with qualitative work, the analysis was an iterative process. As new themes emerged we revisited earlier transcripts in order to refine and build upon our initial findings.

5. Analysis

The reduction of food waste and responsible management of surplus were top priorities for all nine retailers in the study and they all talked about the importance of the food waste hierarchy. Drawing on the views of retailers and non-retailers (e.g., third sector organisations, activists and campaigners), the analysis presents the three main justifications for this position: doing the right thing (civic); financial considerations (market); and branding (opinion). The final section considers the potential conflicts that are inherent in these conventions.

5.1. Doing the right thing

In many of the interviews food waste was framed as a moral issue. Participants found it 'abhorrent' that so much food should go to waste (Interview 5, Consultant), particularly in the context of food poverty and a 'massive growth in food banks' (Interview 28, NGO). Indeed, reflecting on perceptions of food waste amongst the general public, one interviewee talked about a 'sense of moral outrage' over the issue (Interview 14, Policy).

Most of the retailers expressed similar sentiments. First and foremost, food waste was said to be a 'moral problem' (Interview 21, Retailer; Interview 32, Retailer) or a 'moral thing' (Interview 31, Retailer). Others reported 'philanthropic elements' because people within the company 'care about the issue' (Interview 9, Retailer). These retailers justified their adherence to the hierarchy by appealing to civic conventions and their related order of worth, suggesting that their actions reflect a concern with collective interest, welfare, and social and environmental impacts. More specifically, participants talked about the hierarchy in the context of justice and inequality, drawing on the 'social implications' of the problem (cf. Papargyropoulou et al., 2014, p. 109). For example, one retailer reflected on the relationship between food waste and food poverty in the UK: 'How can we be more equitable? Is it right to have waste food here and people who are desperately hungry here?' (Interview 16, Retailer). In other cases the appeal to civic conventions extended beyond the UK. One participant talked about people who are starving in other countries: 'we are wasting a huge amount of food in Western societies and there's not enough food in other societies. So I think that's a strong driver as to why it's wrong' (Interview 31, Retailer). This retailer's concern for the 'general interest' appeared to encompass the notion of a global society where justice necessitates obligations beyond national borders.

The same justifications were apparent when retailers talked about redistribution. If food waste did occur then it was only 'natural' to donate surplus food to those who are hungry (Interview 3, Retailer). Given the current levels of food insecurity, retailers appealed to a sense of 'responsibility' (Ponte, 2016, p. 14) and the 'moral imperative of feeding those in need' (Hawkes and Webster, 2000, p. 26). Redistribution was about 'doing the right thing' (Interview 3, Retailer; Interview 7, Retailer) and 'being a good neighbour' (Interview 16, Retailer). Indeed, one NGO suggested that retailers were actually very keen to 'do the right thing' with surplus food: 'They make this food with love, they grow it with care so they want to see it go to people' (Interview 26, NGO).

This kind of justification - premised as it is on collective interest (hence civic conventions) - also extended to the environmental implications of the problem. Mena et al. (2011, p. 648) outline the significant environmental impacts of food waste that result from the 'inefficient use of natural resources, such as water, energy and land' and the greenhouse gas emissions associated with 'the disposal of waste to landfill'. Indeed, the culmination of these processes means that 'every tonne of food waste prevented has the potential to save 4.2 tonnes of CO² equivalent' (Defra, 2010, p. 54). The retailers in the study were very aware of these statistics and found something rather disconcerting about the disposal of food: 'there's a huge amount that's gone into production of that resource wise, which is also wasted, and that doesn't feel quite right' (Interview 16, Retailer). It was said to be a 'waste of resources in a resource constrained world' (Interview 7, Retailer) and there was a clear recognition of the carbon emissions that are associated with food waste:

The worst thing that can possibly happen is that you take time and resources to grow and develop and manufacture food and then it gets thrown in the bin because the carbon emissions associated with growth through to waste are pretty intensive.

(Interview 9, Retailer)

These retailers adhered to the food waste hierarchy because its aim is to 'identify the options most likely to deliver the best overall environmental outcome' (Papargyropoulou et al., 2014, p. 110). They recognised the 'environmental imperative' of the options in the top half of the hierarchy alongside the 'moral imperative' (Hawkes and Webster, 2000, p. 27). Although, according to Watson and Bulkeley (2007) these imperatives (or in our terms, justifications) do not have to be mutually exclusive. The (food) waste hierarchy 'can be interpreted as fundamentally concerned with issues of inter-generational justice, seeking to enhance the sustainable management of finite material resources and to minimise the effects of waste management' (p. 416). Justifications for action that are linked to resource management and the impacts of climate change also imply a concern for issues of justice, locating the worth of the (food) waste hierarchy in 'its wider benefits to [future] society as a whole' (Kirwan, 2006, p. 303). This lends additional weight to the idea that ecological issues can be analysed through recourse to civic conventions.

5.2. The financial implications of food waste

Non-retailers in the study (e.g., third sector organisations, activists and campaigners) were not necessarily convinced about the ethical motivations of the retail sector. One participant claimed that, 'what obviously motivates...both retailers and brands and manufacturers into minimising waste in their own operations is primarily the financial savings' (Interview 13, NGO). Another pointed out (reflecting the common sense interpretation of retailer engagement in food waste reduction discussed in the introduction) that 'it's in their interest to save waste because they directly pay for landfill disposal (Interview 24, Policy). The 1999 EU landfill directive has indeed led to statutory targets in England for the reduction of industrial and commercial waste going to landfill (Defra, 2006, p. 37) and, according to Hyde et al. (2003, p. 328), 'as much as 4% of turnover is typically lost through wastage if the full cost of waste in UK companies is considered'. In fact, with reference to one particular waste minimisation initiative, Henningson et al. (2004, p. 511) calculate that an initial investment of £412,000 led to annual savings of over one million pounds. Food waste reduction is therefore a clear 'economic driver for change' (Darlington et al., 2009, p. 1278) and it may well be 'fanciful for us to think

⁶ It should be noted that participants also referred to the 'food surplus hierarchy' and the 'food utilisation hierarchy'. However, for purposes of clarity and anonymity, we will refer to the 'food waste hierarchy' throughout

⁷ On this point, we acknowledge debates about adding a dedicated ecological order of worth to the categories of CT (Thévenot et al., 2000; Evans, 2011; Blok, 2013). For as long as this addition remains a matter of debate – and for reasons of clarity and brevity – we are confident in using civic conventions to address environmental concerns.

[retailers] are going to do a whole bunch of this work out of altruistic motives' (Interview 14, Policy).

Interestingly, retailers did not dispute this position. The reduction of food waste had obvious benefits for the business and many of them talked about the financial implications of the problem. One retailer acknowledged that 'typically we'll see waste in terms of pounds and shillings and pence on the bottom line of a profit loss account somewhere and obviously then it's in our interest to drive that number as low as we possibly can' (Interview 9, Retailer). Others talked about 'wasting money' (Interview 31, Retailer), 'driving down costs' (Interview 29, Retailer) and the operational changes that had occurred in the context of the landfill tax (Interview 32. Retailer). These respondents drew on market conventions⁸ as well as civic ideals to justify their adherence to the food waste hierarchy. They talked about the 'price' that was attached to various aspects of food waste and they demonstrated a commitment to 'outputs' and 'profitability' (cf. Kirwan, 2006, p. 303). In fact, one retailer claimed that moral motivations could only ever be sustainable in the context of broader economic concerns. A business case for action was said to be important as a foundation for doing 'the right thing' because it brought food waste into the 'core part of our business'. It was an intrinsic part of the organisational culture and expectations of the retailer rather than simply a 'nice thing to do' (Interview 19, Retailer).9

These financial motivations for reduction could also be used to justify the process of redistribution. Hawkes and Webster (2000, p. vi) claim that 'supermarkets are increasingly keen to become involved in such schemes as alternatives to disposing of waste', while Tarasuk and Eakin (2003, p. 1506) argue that redistribution programmes provide an 'economical means for food corporations to dispose of unsaleable products'. One retailer did acknowledge the cost saving aspects of redistribution (as an alternative to landfill) (Interview 16, Retailer) but, in general, retailers tended not to draw on market conventions when they talked about the donation of surplus food. However, several participants did acknowledge a process through which products were sold at a reduced price before they were considered for donation (Interview 9, Retailer; Interview, 16 Retailer). This prioritisation of price reduction over redistribution does not necessarily negate the civic conventions attached to the act of donating food to the hungry but it does suggest that the responsible management of surplus and waste food cannot be divorced from a more general profit imperative (and vice-versa cf. Jackson et al., 2009' on moral economies of food). Indeed, Alexander and Smaje (2008) do not dispute the 'genuinely philanthropic aims' of those who donate surplus food (p. 1295), but they do highlight the fact that the 'financial interests of the retailer' (to ensure that stock is sold) can compete with the interests of redistribution organisations who rely on good quality, free products (p. 1294).

Market conventions played an important role in the internal management of food waste but, of course, retailer involvement in this issue was not limited to their own operations. As noted, the retailers in the study also appeared to be engaging in activities to promote food waste reduction in the home. This is particularly interesting because we would assume that, in order to waste less food, customers would need to buy less food in the first place. The logic of retailers promoting food waste reduction in this context would appear to directly counter the financial imperatives of reducing food waste in their own operations (i.e., profit maximisation). It may be that we can simply point to civic conventions in the context of this initiative (because encouraging customers to waste less food is also the right thing to do). However, the interviews did generate the interesting observation that customers who bought less food would often 'trade up' (Interview 27, NGO) or

'upmarket on the food they're buying' (Interview 12, NGO). As one retailer explained: 'There's evidence...that the money customers save through wasting less, around 50% of it actually comes back to retail in the form of customers trading up, buying more expensive products as a result of wasting less (Interview 7, Retailer). Retailers were likely to recoup a proportion of any losses through the sale of higher quality food (or non-food) items. Market conventions therefore play a role in the promotion of food waste reduction and what we have elsewhere termed an emergent sense of distributed responsibility (Evans et al., 2017; Welch et al., forthcoming).

5.3. Food waste as a brand issue

Retailers also reported concerns about the perception of their business amongst the general public. Public concern about levels of food waste was very high ('it's almost like anybody who looks at it says this is absolutely outrageous!' – Interview 28, NGO) and the fact that it was 'clearly important to [our] customers' (Interview 31, Retailer) provided a final justification for action. Alongside civic and market conventions, adherence to the food waste hierarchy was underpinned by opinion conventions where worth is located in the 'regard, reputation and recognition' of the business. In the context of food and sustainability, a 'socially responsible business' can benefit through the enhancement of its 'brand value' (Defra, 2006, p. 26).

The reduction of food waste 'in store' had important reputational implications for the retailers. Participants suggested that action to tackle the problem had a 'good halo effect with customers' (Interview 32, Retailer) because 'more and more people want to be associated with and want to shop with or do business with corporately responsible businesses' (Interview 21, Retailer). There was a 'competitive edge' to the practice of food waste reduction (Interview 10, NGO) and this sentiment was expressed by both retailers and non-retailers (Interview 4, Consultant; Interview 19, Retailer). In addition, failure to deal with the issue could have negative consequences. As one retailer explained:

I have meetings with our major shareholders and investment analysts in [Location X] and they ask us...what are you doing about food waste? – because they see it as a risk, as a business risk...if your reputation is poor because you're seen not to care about a particular issue, you're an investment risk because that ultimately damages perception and perception then drives custom.

Interview 9, Retailer

The worth of the business was 'the result of other people's opinions' (Boltanski and Thévenot, 1999, p. 371) and, in the context of food waste, the retailers were motivated by 'external pressures', such as customers and shareholders (Shnayder et al., 2016, p. 216). The retailers we spoke to suggested that external pressures shaped their internal adherence to the food waste hierarchy: '[customers] don't want to hear that we've got food waste but when they do they want to hear that it's given to charity' (Interview 29, Retailer). The donation of surplus food was thought to generate 'additional benefits' through its 'reputational aspects' (Interview 16, Retailer) and this justification for action was often identified during the non-retailer interviews, where it was referred to in terms of 'good publicity' (Interview 14, Policy) and as a 'PR opportunity' (Interview 18, NGO). Indeed, previous studies of the redistribution process talk about the 'beneficial publicity' (Alexander and Smaje, 2008, p. 1295) and positive 'public relations' associated with the practice (Hawkes and Webster, 2000, p. vi).

Promoting food waste reduction in the home was positioned as

⁸ We acknowledge the possibility that industrial conventions – where worth is located in efficiency – are at play here. However, the dominance of economic concerns in the respondents' own accounts convince that industrial conventions do not warrant separate consideration here.

⁹ An NGO expressed a similar sentiment in Interview 26.

 $^{^{10}}$ Research conducted by WRAP (2014, p. 1) supported these claims: 'as consumers find more ways to avoid waste they change their purchasing behaviour and buy smaller quantities of more expensive food'.

¹¹ Critical accounts of 'green capitalism' would argue that 'values of competition' are increasingly dominant in a society than prioritises economic concerns over social equity and non-economic human values (Wanner, 2015, p. 35).

another sign of being a responsible business. Supermarkets are in 'a unique position to influence household behaviour for the better' (Defra, 2006, p. 36; cf. Evans et al., 2018) and this was important because of its actual effects (reduced food waste in the home) and the fact that the retailer could 'demonstrate to their customers that they really are trying to help them reduce the amount that's thrown away' (Interview 27, NGO). Retailers were 'recognising that actually, helping their customers save money, do things more efficiently, there could be a reputational benefit for them (Interview 18, NGO). Many participants reflected on the measures that they had taken to help customers reduce food waste in the home (smaller portions, better packaging) and the positive implications this had for 'customer loyalty' (Interview 9, Retailer) and getting people 'back in to do (their) shopping' (Interview 19, Retailer).

Moreover, participants pointed out that excessive food waste in the home could also be linked back to retailers: 'If a customer suddenly thinks, hang on a minute, I'm throwing away a bag of salad every other week here from [X Retailer], there's...clearly a brand issue there' (Interview 18, NGO). As one retailer acknowledged:

If customers waste food they're less likely to come in to buy that product with us and in general it can turn them off a retailer if they're finding that their products spoil or if they're not getting the life out of the product or if they're buying a pack that is just too big for them and spending money they don't need to.

Interview 29, Retailer

In terms of market conventions, encouraging customers to waste less (and presumably buy less) food could have a negative impact on the bottom line in the first instance. However, the positive implications of a good brand meant that retailers could maintain and possibly increase the number of people who chose to shop with them (while the negative implications of wasted food could produce the opposite effect). For the retailers in our study it was important to develop customer loyalty by positioning themselves as trusted authorities who could help consumers to solve such problems in their everyday lives (Dixon, 2007).

5.4. Conflicting conventions?

The analysis so far suggests that all three conventions – civic, market and opinion – provide the basis for retailers taking action on food waste and pursuing the responsible management of surplus. However, it is important to acknowledge the possibility that these same conventions could work through the food waste hierarchy to produce negative outcomes and inaction. For example the reputational concerns (opinion conventions) that prompt engagement in food redistribution could equally provide the basis for not doing so. For all of the retailers in our study health and safety was a significant concern. In part, this was because they 'don't really want to go round making people sick' (Interview 3, Retailer) but also because they retained some (reputational) responsibility for the products that they were passing on:

The initial market qualities attached to food prior to its transition to surplus possess a persistent influence and power over its utilisation, as not all original product qualities, such as branding and legal obligations, are detached or altered through becoming surplus and require careful management'.

Midgley, 2013, p. 17

Just as customers 'want to hear that [surplus] is given to charity' (Interview 29, Retailer), they do not want to hear that the same food has made someone poorly. Opinion conventions could therefore pose a challenge for retailers as they attempt to strike a balance between the 'act of donation' which 'enhances brand' and the distribution of items close to their use by dates which, 'in the wrong situation', could lead to

'negative publicity' (Alexander and Smaje, 2008, p. 1297).

Similarly, the practice of redistribution could be undermined by a commitment to market conventions. Whilst donating surplus food was seen as the 'right thing to do'; it has some financial benefits as compared to paying for food sent to landfill (Interview 16, Retailer). However, the financial implications of a redistribution scheme could also prove an obstacle to the practice. One retailer argued that effective redistribution would require a better infrastructure: 'it would mean us putting a sorting office into a depot, which we're not going to be able to do' (Interview 32, Retailer). Without significant investment, there were structural limitations on the amount of food that could be donated. Moreover, on the basis of market conventions, redistribution is only viable in the absence of a more lucrative alternative, O'Brien (2013, p. 197) claims that 'energy product solutions' such as anaerobic digestion (AD) have become increasingly popular and that this can be 'explained partly...by subsidies for "renewable" energy projects'. If the lower half of the hierarchy presented opportunities that were more financially attractive, retailers might be likely to favour them over redistribution. Indeed, several non-retailers claimed that this situation was already occurring: 'At the moment there's a very poor alignment between the food waste hierarchy where you've got prevention and redistribution at the top and where the incentives currently are around renewables, AD' (Interview 4, Consultant). There were reported to be 'subsidies' (Interview 6, NGO) and financial 'support' (Interview 15, NGO) available for sending food to AD plants, with no equivalent incentives for donation. The 'free' distribution of food therefore "represents labour superfluously expended" and cannot, within a capitalist social formation, be permitted to flourish as anything other than a marginal activity' (O'Brien, 2013, p. 208, citing Marx 1977). It should be noted that all of the retailers in the study denied any suggestion that redistribution was only a marginal activity but the financial tensions between redistribution and anaerobic digestion remain a potentially negative consequence of market conventions in the context of surplus food.

It is more difficult to identify the negative consequences of opinion and market conventions in the context of food waste reduction. Reduced food waste has clear financial and reputational benefits for retailers and, as long as the issue remains a concern for stakeholders and customers, it is unlikely that market or opinion conventions will lead to an increase in food waste. Going forwards, however, it is possible that the issue could lose its 'momentum' and be overshadowed by new and more pressing concerns (Interview 10, NGO; Interview 11, Consultant). We have argued elsewhere that we are currently witnessing discursive hegemony over the field of potential contention (Welch et al., forthcoming) but we do not go so far as to presume that the consensus will last forever. New environmental (or non-environmental) concerns could emerge in the future and it is not clear how a decrease in attention would affect retailer response to the problem of food waste. However, we can surmise that opinion conventions would require retailers to concentrate on new and emerging concerns. According to Brook Lyndhurst (an independent research and strategy consultancy) (2012, p.28) retailers are always reluctant to pursue issues that go 'against the grain of customer demand in the absence of policy requirements to act'. If customers move on from the issue of food waste then it seems likely retailers would do the same.

6. Discussion

It has been suggested that concerns about equity and justice in the food system are more likely to be located in local, alternative movements than large corporations (Allen, 2010). Based on this line of reasoning, non-retailers in the study may be right to feel cynical about the role of civic conventions in the context of the supermarket sector. However, with reference to 'ethical' food in particular, Goodman et al. (2010, p. 1783) argue that we should move beyond this kind of 'dualistic characterisation', where alternative foods are ethical and conventional foods are not, because ethical products (e.g., organic, fair

 $^{^{12}}$ Even with the assumption that customers are 'trading up', retailers still stand to lose 50% of their previous profit through a reduction in sales.

trade) 'have now equally become a part of more conventional food systems'. It seems fair to assume that the same can be said about ethical practices such as the reduction of food waste and the redistribution of surplus. Rather than introducing domestic conventions to signal the ethical credentials and alterity of non-conventional food networks (cf. Murdoch and Miele, 1999), we suggest the inclusion of civic conventions in accounts of mainstream or industrial worlds of production. By extension, this recalls claims that all economies are moral economies and that 'the market' and morality need not always be seen in strictly oppositional terms (see Sayer, 2000, Jackson et al., 2009)

The combination of conventions within any particular food systems - whether conventional or alternative - has long been recognised as a practical and analytic necessity. In her study of fair trade flowers. Raynolds (2012) explains that consumer expectations have forced growers to consider social and ecological issues (civic conventions) alongside their traditional preoccupation with price (market conventions), physical quality and longevity (industrial conventions). Similarly, although Anderson (2011) highlights an intuitive problem with combining conventions - 'the internal logic of the different moral orders means that arguing from within one order ultimately means denouncing all others' (p. 443) - she acknowledges that sometimes it is necessary to draw on more than one justification for action. In the context of organic food, the participants in her study appealed to amongst others - civic conventions (e.g., the environmental implications of food production), market conventions (e.g., the premium cost of organic eggs) and domestic conventions (e.g., the provenance of organic meat).

The compromise between conventions is not always an easy one and it can involve protracted negotiation between different positions (see Stark, 2011). Despite their contention that it was actually the 'right thing to do', the flower growers in Raynolds' study argued that fair trade was very costly in the short term (Raynolds, 2012, p. 502) and a large part of the discussion in Anderson (2011) focuses on how individuals handle the 'moral complexity' of drawing on different justifications for (not) eating organic food (p. 445). Whatever the circumstances and evolution of the situation, however, it certainly appears feasible that different conventions can co-exist and that different justifications for action can be combined in some form in the context of food waste and the retail sector. Indeed these compromises represent a core concern of CT outside of its applications in agro-food studies (see Boltanski and Thévenot, 1991).

6.1. Facilitating short-term action on food waste

Taking this argument a step further, it would seem that it is not only feasible that conventions can be combined but that, in the retail sector at least, the combination of different justifications is a prerequisite for the effectiveness of the actions they are justifying. Our analysis has demonstrated that we cannot rely on the 'moral imperative' of protecting the environment and helping those in need (Hawkes and Webster, 2000, p. 27), and that civic concerns do not alone provide sufficient justification for retailer commitment to the food waste hierarchy. Part of the problem is that food waste reduction and the responsible management of surplus remain 'a nice thing to do' and something that makes sense in relation to particular retailer objectives (related to sustainability and Corporate Social Responsibility) rather than being an integral part of the retail sector as a whole.

A useful comparison can be drawn here with the issue of fair trade. Emerging in the 1960s and 1970s as 'a project to challenge and displace conventional channels of international trade' (Goodman, 2003, p. 4), fair trade has now been successfully integrated into the mainstream retail sector where it has seen a 'spectacular' increase in the sale of 'guaranteed' products (Renard, 2003, p. 91). The balance between civic and market conventions has allowed the practice to flourish and endure over time. As argued by Raynolds (2002, p. 411), fair trade networks are 'ideologically and materially rooted in domestic and civic

conventions' but 'market expectations must be taken into account if these networks are to be sustained'. In the context of food waste and the retail sector, each of the conventions – civic, market and opinion – represents a necessary but not sufficient justification for action. It would appear that the combination of the three justifications might provide an essential balance for the integration of the food waste hierarchy as (at least) a short-term priority in the retail sector.

6.2. Addressing sustainability challenges in the long-term

More widely, however, the necessary inclusion of financial and reputational considerations alongside civic concerns might seriously impede long-term action on a range of social and environmental challenges (in the retail sector and beyond). Potential obstacles in the area of food waste are instructive for those seeking to find a lasting solution to similar issues. For example, justifications for action on food waste must also be evaluated in the context of impacts across the supply chain, and existing research in this area re-introduces scepticism and cynicism about the motivations of the retailers. Notably Gille (2013), in a critical evaluation of the global food waste regime, argues that retailers have often been able to reduce the waste attributed to their direct operations through the exploitation of suppliers, particularly those in the global south. It is a familiar story: suppliers are expected to continually provide sufficient produce for retailers, while retailers are able to reject unwanted produce and return it without payment. This highlights the potentially unjust nature of the global food system and actually 'introduces a further mechanism for increasing food waste' (p. 35) caused by the retailer but attributed to other points in the food chain. Viewed as such it is hard not to infer a strong disregard of civic conventions and concerns about justice on the part of the retailer. Leaving aside the effects on waste reduction, it becomes hard to take seriously any claims (by retailers) that they are committed to 'doing the right thing'. Indeed, research into so-called 'green capitalism' would argue that retailers are simply pursuing growth and profit (financial conventions) through the pretence of environmental and social concern (civic conventions) (cf. Prudham, 2009). The necessary inclusion of financial conventions (in the retail sector) is overshadowing its civic counterpart and proving an obstacle to effective action in the global food system as a whole.

Similarly, although Renard (2003) highlights the success of fair trade in mainstream retail distribution, she also suggests that this is contrary to its original aims. As a practice that was initially intended as a 'tool for modifying the dominant economic model' (p.91), fair trade has now been successfully integrated into that same system. The civic values that are attached to fair trade are still generating good outcomes (e.g, sales of equity coffee in Denmark have grown 20% yearly) but it is at the cost of 'compromising ethical principles and juggling them with mercantile considerations' (Renard, 2003, p. 92). We have not witnessed a fundamental transformation of the international market because 'market-industrial conventions are more prone to hamper possible venues for progressive change' (Ponte, 2016, p. 18). This issue may be more pronounced in the context of food waste. Retailers have done a great deal to facilitate their adherence to the food waste hierarchy and the combination of conventions has certainly produced some successful initiatives and commitments in the short-term. 13 Beyond these modest reforms however, progress on food waste reduction has been limited. The most recent audit of Tesco's operational food waste indicates that the problem is actually getting worse (59,400 tonnes in 2015/2016)¹⁴ and, to date, the seven other big supermarkets have yet

¹³ Since June 2013, Asda has donated enough surplus food to make over 1.3 million meals (Asda, 2016) and Morrisons now supports over half of the Foodcycle initiatives in the UK (Morrisons, 2016). In addition, Sainsbury's has recently pledged to invest £10 million to tackle household food waste (Sainsbury's, 2016) and Tesco has recently promised that no surplus food will be wasted in their UK operations by 2017 (Tesco, 2016a).

¹⁴ Tesco (2016b).

to publish their own results. It may therefore be the case that the problem of food waste (and other sustainability challenges) require a more radical approach. Although the combination of conventions may facilitate short-term success, they may also reinforce the dominance of the current system and impede the implementation of a more long-term solution to the problem.

7. Conclusion

This paper investigated the role of the retail sector in the context of food waste. Why have retailers voluntarily committed to action in this area and can their motivations extend beyond their own narrow economic interests? We argued that there are, in fact, multiple justifications for action on food waste, including moral concerns about the environmental and social implications of the problem and that, in the context of the retail sector, this combined approach is a prerequisite for effective action. However, we also note that the combination of these justifications can lead to a number of unintended consequences. This might be counter-productive for long-term action on food waste (and other sustainability challenges) in the retail sector and the global food system more broadly.

To conclude we return to the observation that supermarkets occupy an important position in the global food system (Burch and Lawrence, 2007) and it would be remiss of us to underestimate the influence that they can exert both up and down the supply chain. It is therefore essential that we engage directly with retailers and acknowledge their significant potential to respond to current sustainability challenges facing the food system. CT provides a useful theoretical lens through which to do this. Our analysis shows how economic and normative motivations combine in order to encourage and facilitate action on food waste in this context. The combination of empirical research with retailers (and their critical stakeholders) and the conceptual resources of CT represent a useful blueprint for future studies of supermarket responses to other societal problems that require action at multiple points in the food system. The approach necessarily gives credence to the possibility that economic actors might be motivated by non-economic, and even moral, concerns. Indeed, given the engrained nature of the current global (food) system, we would argue that Ponte's (2016) revival of CT comes at a critical juncture in food studies and political geography more generally. We are facing monumental environmental and social problems and our paper demonstrates the continuing significance of a framework that is able to analyse the complexity of motivations for dealing with food waste from a number of important global actors (supermarkets being a case in point).

That said, our research has also provided an important extension to perspectives that apply CT to agro-food scholarship insofar as the combination of conventions has been shown to both enable and constrain action on social and environmental challenges. While it may be important to draw upon all three conventions (moral, financial, reputational), to facilitate some action in the current system, the dependence of ethical motivations on their financial and reputational auxiliaries may actually prevent a long-term solution to the problem. Three years on from Tesco's announcement and the commitments that followed, retailers continue to address the problem of food waste but the actual results so far have not been significant. We cannot dispute claims that supermarkets are generative of a global food system that continues to produce excessive amounts of waste. Understanding the balance of justifications for action in the retail sector is a useful place to start precisely because supermarkets currently occupy the pivotal position. However, the best solution in the retail sector is not necessarily the best solution overall and it might be equally important to consider alternatives to the current system and the potential effects of wider structural change. We do not underestimate the enormity of this challenge but we think it is an important avenue for further research.

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