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Ethics and responsibilisation in agri-food governance: the single-use plastics debate and strategies to introduce reusable coffee cups in UK retail chains

Damian Maye*, James Kirwan and Gianluca Brunori

Abstract

This paper extends arguments about the potential for reflexive governance in agri-food sustainability by linking food ethics to the notion of 'unintended consequences' and 'responsibilisation'. Analysis of sustainable consumption governance shows the way authorities and intermediaries use food waste reduction projects to 'responsibilise' the consumer, including recent examples of shared responsibility. This paper takes this argument further by developing a 'strategies of responsibilisation' framework that connects relations between food system outcomes, problematisation in public discourse and strategies of responsibilisation in agri-food governance. A food and drink waste case study of strategies to introduce reusable coffee cups in UK coffee shops and food retail chains is examined to exemplify relations between problematisation and responsibilisation. We examine problematisation and responsibilisation discourses that have emerged in relation to the issue, particularly in relation to single-use plastics, together with emerging governance arrangements and their underlying rationalities. The case study shows two key things: firstly, how ethical questions about food in public discourses connect to wider environmental planetary concerns (in this case packaging in relation to the environment); and secondly, how responsibility has emergent and dynamic properties, which we term 'cycles of responsibilisation'. The paper concludes by assessing the wider value of applying a responsibility framework to examine governance responses to increasingly complex agri-food system sustainability challenges.

Keywords Ethics and agri-food governance, Food and drink waste, Single-use packaging, Reusable coffee cups, Problematisation, Responsibilisation

Abbreviations

CSR	Corporate Social Responsibility
EAC	Environmental Audit Committee
EMF	Ellen MacArthur Foundation
HFW	Hugh Fearnley-Whittingstall
PRS	Producer Responsibility Scheme
SDG	Sustainable Development Goals
WRAP	Waste and Resources Action Programme

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Introduction

The tendency to frame food ethics in simplistic ways using dichotomies that delineate between global (bad) and local (good), fast (bad) and slow (good), etc. has been widely critiqued in agri-food studies (Guthman 2003; Barnett et al. 2005). Goodman et al. (2010, p.1783) develop the idea of an 'ethical foodscape' to provide a critical analysis of "the processes, politics, spaces and places of the praxis of ethical relationalities embedded and produced in and through the provisioning of food". In this respect, the 'ethical foodscape' constitutes three inter-related analytical categories: food ethics, ethical/moral foods and ethical food networks. This emphasises the contradictions associated with ethics in food, not least because it is "entangled in discourses and practices which necessarily have and indeed always will have ethical implications for the humans and nonhumans, societies and environments, involved in its production-consumption relations" (Goodman et al 2010, p. 1782). We extend this notion of the 'ethical foodscape' by looking at ethics in relation to agri-food governance in terms of relations between food system outcomes, problematisation in the public sphere and emerging strategies of responsibilisation.

Discourses, knowledges, representations and norms related to ethics in food chains are contested and involve complex patterns of governance. Ethical trade, for example, is "neither an unambiguous moral good, nor a simplistic and insincere form of marketing or commodification. It is, rather, a set of institutional practices that, from the perspective of ethics and responsibility, offer both opportunities and challenges" (Popke 2006, p. 508). For ethical trade and ethical food networks a key challenge is the way in which ethical consumption is situated in an 'ethical complex' shaped by institutional arrangements that include supply chain, non-governmental and governmental actors as well as consumers. Governance, as the system of rules, arrangements and institutions (involving both state and non-state actors) that coordinate the food system, is a key mechanism that enables reflexivity. The ethical complex is "often governed by the corporate strategies and management systems of retailers and suppliers…as well as the conflicting internal politics of various NGOs" (Popke 2006, pp. 508-9), necessitating, in other words, an appreciation of business and non-governmental ethics (Dubbink et al. 2008).

Pereira and Ruysenaar (2012, p. 51) argue that "any 'ethical' systemic intervention… need[s] to involve as many perspectives as possible in order to be legitimate". This strategy to legitimise multiple stakeholder perspectives in order to develop shared understandings of ethics in

food chains has been developed in three related papers (Brunori et al. 2016; Kirwan et al. 2017a, 2017b). In this paper, we examine strategies of responsibilisation that emerge in the agri-food governance complex in response to 'hot topics' which are debated in public discourse as a result of concerns and/or new knowledge about negative food system impacts e.g. pollution, climate change impacts, poor diet. New approaches to ethics in agri-food governance are needed to capture these specific moments of problematisation and to examine institutional arrangements that emerge to address them. Market-led approaches to responsibilisation promote governance repertoires whereby 'responsibilities are individualised and consumers are responsibilised' (Evans et al. 2017, p. 1399). However, not all sustainability challenges follow this market logic and governance approaches have the capacity to change over time. Strategies of responsibilisation comprise governance processes that seek to address responsibility within agri-food chains, whereby those involved (whether individual actors or institutions) might be encouraged to be more reflexive within food chains and to acknowledge ethical responsibility for their purchasing behaviour.

To develop this governance perspective, we argue it is useful to consider how the market and ethical responsibility might meaningfully fit together, including arguments that recognise the need to be responsible for the unintended consequences of actions. This calls for greater collective social responsibility. The paper extends work on sustainable consumption governance, which examines strategies and techniques used to 'responsibilise' the consumer. Using insights from a European Commission-funded project on sustainable food chain performance[1], a conceptual model is developed using criteria that examine relations between food system outcomes, problematisation and responsibilisation. To illustrate this approach, the debate surrounding single-use packaging for food and drink, which forms a major component of the plastic waste stream that enters the world's oceans, and emerging strategies to introduce reusable coffee cups in UK coffee shops and food retail chains, are examined. Analysing the discourse associated with single use packaging for food and drink and emerging governance arrangements and their underlying rationalities shows how information and transparency on food system outcomes are critical to processes of problematisation and responsibilisation. The application of the responsibilisation

[1] GLAMUR - Global and local food chain assessment: a multidimensional performance-based approach. The project involved a systematic analysis of how the performance of food chains is perceived, defined and communicated in 12 countries (Brunori et al. 2016; Kirwan et al. 2017b, 2017a).

framework to other agri-food system sustainability challenges (i.e. extending beyond the specifics of the food and drink waste practices and environmental packaging case study) is considered in the conclusion, emphasising the need to mobilise agri-food chain actors in meaningful ways to build governance strategies that recognise responsibility as a distributed ethic (Young 2003).

Problematising moral agency: markets, individual and distributed responsibilities

In Marxist readings of economic relations commodities have become fetishised, whereby they are treated as being independent of their origins (Goodman and DuPuis 2002). For Marx, this would have been in terms of the labour input, but it can be more broadly thought of in terms of places, communities and environments. Commodity production under free-market conditions is driven by shareholder profits, as well as minimising production costs in order to remain competitive in a global market and to deliver cheap prices to the consumer. The result of this is that the modern consumer is divorced from the realities of production, unable to, or perhaps uninterested in analysing the implications of their purchasing decisions, acting "in blissful but dangerous ignorance of their actions" (Miller 2003, p. 367). The increased commodification of food consumption practices has led to a distancing between the production and consumption of food, leading to the obfuscation of underlying relationships and responsibilities (Sayer 2003).

A first step to reconcile markets with the public good is therefore to consider economic actors as 'ethical actors'. Scholars increasingly question the neoclassical notion of the 'market' as an abstracted economic entity, with now widespread realisation that all market relations are inevitably and inextricably embedded in both social, and cultural relations (Hinrichs 2000; e.g. Block 1990). As Sayer (2004, p. 2) puts it, as social beings it is impossible for individuals to have any kind of social interaction that does not involve making some kind of ethical decisions about what is of value or not, albeit that these decisions may in most instances be made 'on automatic' as part of an individual's normal practice. If all economic relations are embedded in the social, they must inevitably have ethical implications.

This raises important moral questions about relations between *individual responsibilities* and *collective social responsibility*. Individual responsibilities for social change are emphasised in market-based solutions to environmental problems, including climate change (Shove 2010).

Chandler (2013, p. 176, emphasis added) argues that "our ethical responsibilities stem from the unintended consequences of our *relational embeddedness* and our ethical duty to become aware of this". In relation to food chains, this implies that those involved are inextricably embedded in social, environmental and material relationships, even if this may not be apparent, and that as such they have a responsibility for them. As individuals and as institutions we may not have direct responsibility for the poor wages or working conditions of sweatshops that serve global markets, but as active participants in the global economy we must bear some of the collective political responsibility for their impacts. Chandler (2013) stresses the necessity of reflexively developing an ethical disposition in relation to 'others', whether these 'others' are directly known or unknown.

Ethics in this sense stresses our inescapable 'connectedness to others', as well as our inter-subjectivity as social beings and recognition of responsibility for actions that may have unintended consequences (Popke 2006; McEwan and Goodman 2010; Chandler 2013). The prevailing neoliberal model emphasises individual sovereignty and the idea that when markets are left free to operate they will perform in the best way possible. Chandler (2013), by contrast, emphasises a sense of interdependence and collective political responsibility. The individualistic model of moral agency can also be further challenged (Young 2003, 2011), in the sense that it blames individuals for system outcomes that they are not causally responsible for. Individual responsibilisation for outcomes that pertain to the system is highly problematic, requiring instead more collective notions of responsibility and the acknowledgement that *responsibilities are distributed* across complex networks of actors (Young 2003; Jackson et al. 2009; Evans et al. 2017). This posits a "more active relation between individuals, socio-structural processes, and responsibility … [and a] … conception of responsibility that does not assume blame, fault, or liability as the primary way of assigning responsibility" (Young 2011, p. 40). Responsibility is: "…not just an individuated action taken by a single person or by some collective agent. It is theorized in terms of how distributed actions join actors together, feeding into wider networks of cooperation that reach out and influence events elsewhere" (Barnett et al. 2011, p.9).

If we accept this view of responsibility as 'distributed', the challenge is how to encourage both individual actors and institutions to submit their respective frames of reference to public scrutiny through deliberation. Reflexivity, which is defined as a "critical reflection on prevailing social arrangements, norms and expectations" (Adkins 2003, p. 22), is important in this regard. This can draw attention to the importance of the unintended consequences of actions, whether

these are undertaken directly by individual actors or are the result of institutional or corporate structures (Chandler 2013). Within the context of agri-food chains, and in particular global chains, the impression is of a monolithic set of structures that the individual or institution has no identifiable responsibility for. However, given that we are unavoidably embedded within these structures, we are inevitably complicit in the results that these structures may have. Young (2011) argues that personal responsibility and system injustice are not part of a binary; rather the individual is central to ethical responsibility, but political, economic and social structures also play a crucial role. It would be wrong, for example, to blame individuals for failing structures because those individuals may be acting in an acceptable way but the cumulative impact of their actions may create an injustice e.g. poverty. Young calls for analysis of patterns in relations in "the whole of society, one that sees patterns in relations among people and the positions they occupy relative to one another" (Young 2011, p. 70). One insight from this is that information and transparency are critical to problematisation and problematisation is a critical component of responsibilisation.

Governing responsibility: strategic intervention, repertoires and intermediaries

To further develop this link between problematisation and responsibilisation, this section considers work in food consumption which shifts attention from the behaviour change agenda to examine the political rationalities of ethical and sustainable consumption. For example, Barnett et al. (2011) and Evans et al. (2017) examine fair trade campaigns and food waste reduction projects, respectively, in terms of the strategies used to 'responsibilise' the consumer. They call for greater transparency and connection between production and consumption and the strategies civil society, the state and food chain actors can use to mobilise 'the consumer'. Fair trade networks empower consumers by providing more information about production practices, but they can also overwhelm consumers in their endeavours to educate them (Goodman et al. 2012). The neoliberal critique of such interventions argues that fair trade organisations are in danger of reproducing the 'logics of neoliberalisation' by implementing market-based strategies for social change. Barnett et al. (2011, p. 20) examine the "strategic interventions through which everyday consumption activities have been problematized in specifically ethical registers of global responsibility". Ethical consumption they argue is not driven by individual consumer demand. Instead, show how the

strategies and repertories of organisations and intermediaries (e.g. campaigns, ethical trading associations) politically mobilise and enrol consumers by questioning everyday consumption practices. Campaign activities involve intermediaries to enrol consumers by signifying their ethical preferences to consumers and other actors. One set of collective actors connect with other collective actors, such as retailers and regulatory agencies (Barnett et al. 2011, p. 85) in order to influence the latter's practices.

Evans et al. (2017) extend this insight through their analysis of food waste reduction projects in the UK, looking at why there was a re-emergence of concerns about the origins and consequences of food waste. They identify two waves, which they delineate in terms of "how 'the consumer' is constructed and mobilized" (Evans et al. 2017, p. 1341). In the first wave (ca 2007-2013), the responsibilised consumer is the main way in which the issue is framed and responsibilities are individualised. Food waste was framed as an 'end of pipe' issue, as evidence in the Waste and Resources Action Programme (WRAP) report (2008), *The Food We Waste*. Other governmental and non-governmental actors also became involved in the debate. These organisations played a key role in framing 'the consumer' as being at the root of the problem. This included drawing on "powerful rhetorical tropes that make claims on the consequences of consumer culture" (Evans et al. 2017, p. 1342), with the consumer the focus of campaigns via the deployment of "narrative resources of ethical responsibility". The campaigns surveyed articulated an ethical obligation, as well as consequentialist ethics in terms of how making changes to waste will create positive outcomes.

The second wave (2013-2015), which they term 'distributed responsibility', signifies a move away from the politics of blame associated with the individualisation of consumer responsibilities to a more collective sense of political responsibility (Young 2003). The responsibilities of other actors, notably supermarkets, were more evident in the food waste discourse. Major supermarkets and retailers became more visible in food waste reduction projects, even though they are only directly responsible for about 5% of total food waste. Actions included changing promotion strategies, labelling and packaging changes and changes in terms of relations with producers and suppliers. They link these changes partly to the Corporate Social Responsibility (CSR) agenda, but more significantly to a 'food waste discourse coalition', in which "a dense interrelated network of stakeholders (including major food retailers) have aligned around a shared set of understandings" (Evans et al. 2017, p. 1346). From a governance perspective, what is

particularly useful here is the way that the consumer became a rhetorical device that supermarkets could use to change their relationship with suppliers (via the voice of the consumer). This new politics of consumption mobilises consumers through intermediaries without directly responsibilising consumers as 'consuming subjects'.

Shared discourse, problematisation and strategies of responsibilisation

Contributions from Young (2003, 2011), Chandler (2013), Barnett et al. (2011) and Evans et al. (2017) challenges how we think about ethics and responsibility. Food system actors (e.g. scientists, policy-makers, producers, consumers) are able to develop an ethical awareness and responsibility for their actions through reflexively critiquing their mode of action and developing new frames of reference in relation both to their practices and to the performance of food chains. However, to enable this to happen it is critical to understand how we better organise food chains in order to encourage responsibility and reflexivity. In this regard, Hinrichs (2014) argues that people's everyday social practices develop according to a shared discourse but the distribution of power, politics and governance affects the prevailing discourse and helps to define what are considered as legitimate truth claims.

One way to identify ethical issues in a shared discourse is the analysis of what Kirwan et al. (2017b) call 'ethical attributes', wherein 'attributes' are characteristics of the system whose outcomes generate controversies and ethical dilemmas. According to Kirwan et al. (2017b), there are two types of ethical attribute: 'problematisation' attributes, which signify commonly identified ethical dilemmas routinely discussed yet open to debate and subject to refinement and change; and 'responsibilisation' attributes, which describe actions and procedures that encourage actors to problematize their activities and to take action to challenge existing practices. Problematisation attributes identify those issues that, on the basis of new information, new events, new frames of reference, help people to look in different ways at given system activities and to challenge existing shared norms and foster ethical assessments in relation to choice. In other words, problematisation attributes are those which challenge behavioural norms. Examples include unfair pricing, animal welfare and the working conditions of workers in some food chains (Kirwan et al. 2017a, 2017b). Responsibilisation attributes concern the capacity of actors in the system to generate processes of

problematisation (e.g. by looking actively at new information, starting deliberative processes), as well as the strategies and repertories of organisations and intermediaries that can enable individuals to reflect upon both the direct and indirect consequences of their choices.

Information and communication are important, in terms of raising peoples' awareness and encouraging activism, for example, as well as changes in procedures, new strategies or governance arrangements at the firm or state level (such as new ethical standards e.g. minimum wage levels or new regulations for pollution). The process is not always clear cut or linear e.g. there may be a lack of evidence or contradictory information. Transparency is also important in order to improve corporate social responsibility, because it enhances accountability and makes it easier for stakeholders to confront companies regarding their actions (Dubbink et al. 2008). Responsibilisation attributes are mechanisms that potentially 'action ethics' (Chandler 2013). Even where there may not be obvious transparency this does not negate the necessity of taking / encouraging responsibility (Young 2003), thereby highlighting the importance of *strategies of responsibilisation* as a way by which to enable distributed responsibility.

Ethical choices stem from social norms and shape daily practices. When a norm is established, it becomes unproblematised: in a given group, for example, it would be unethical not to behave in a given way. Is the consumption of organic products an 'ethical' choice? It is, but when it is largely agreed that buying organic products is the right choice, and buying organic food becomes a daily routine for most, organic consumption will no longer be an ethical issue unless somebody challenges organics with new information or with new arguments, such as its 'real' environmental or social impact. Considerations about the environment, health, social justice and animal welfare - among others - generate new norms of consumption, but they can be considered problematised attributes only when they introduce new issues that challenge existing frames. For example, the debate on conventionalisation (i.e. the suggestion that the organic provisioning system shares similar structural attributes to the conventional industrial system (Goodman et al. 2012) introduces an ethical question into organic consumption and production routines, fostering a new cycle of problematisation.

The conceptual model in Figure 1 is an attempt to better understand the relationship between problematisation and responsibilisation. It builds on the system approach proposed by Westhoek et al. (2016, pp. 33-34), which describes food system activities and interaction with socio-economic drivers and natural resources. Food system activities form the basis of the model,

in the sense that they produce outcomes (e.g. environmental or social impacts), the ethical assessment of which depends on the way knowledge is produced, used and communicated. Unproblematic system activities are where the outcomes are not known or do not challenge existing shared values. When new information is available or when new values are proposed, some system activities are submitted to a process of problematisation, which invests the public sphere and generates deliberation and reflexivity. In turn, deliberation activates knowledge production, use and communication over the distribution of responsibilities in the system. In order to comply with updated norms, actors action ethics by adapting their practices / governance arrangements, in turn affecting food system activities.

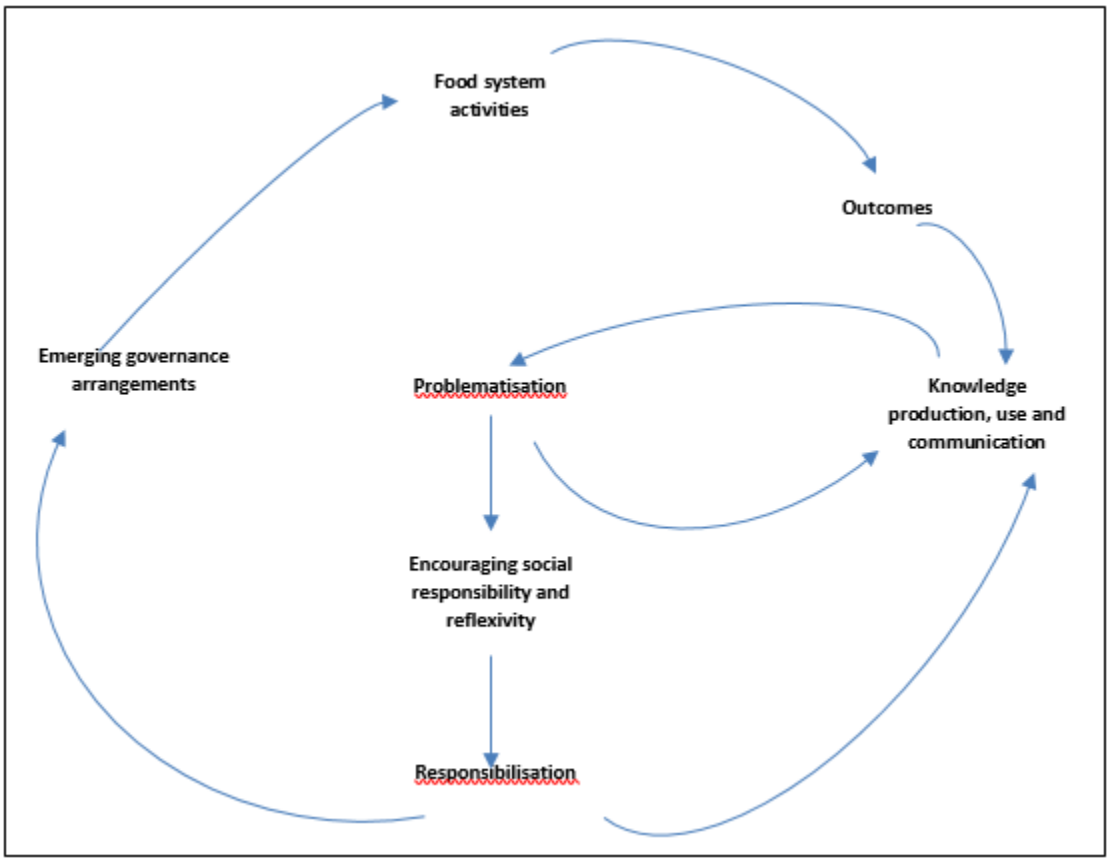

Figure 1 Food system outcomes, problematisation and strategies of responsibilisation.

The food and drink waste case study below examines current public debate about single-use plastic and emerging food chain responses aimed at markedly increasing the use of reusable coffee cups in UK coffee shops and food retail, and the phasing out of single use coffee cups. We

use documentary sources and newspaper and social media data to examine the coffee cups debate. The case illustrates the value of a responsibility framework to examine governance responses to agri-food system sustainability challenges, particularly in terms of the problematisation and responsibilisation discourse and emerging governance arrangements. This includes understanding relations between food system activities and outcomes and processes of knowledge production, use and communication, which may or may not lead to problematisation, responsibilisation and changes to governance arrangements. Knowledge production, use and communication are not straightforward. Governance processes are based on 'cycles of responsibilisation' rather than linear, uncontested processes. In examining specific examples like the one below, it is important to assess how issues are framed, interpreted and responded too, including periodising the accounts to show impacts when new information is introduced in the process, revealing nuances between problematisation and responsibility relations in governance.

The single-use plastics debate, food and drink waste and takeaway coffee cups

Introduction

Plastic is seen as a versatile, indispensable product that is secure, hygienic, cheap and long lasting. However, it is often made with fossil fuels and when finished with is difficult to dispose of, creating problems in the environment (Laville 2018). Three hundred million tonnes of plastic are produced globally each year, of which 12% is recycled. It is estimated that 12 million tonnes of plastic enter the world's oceans every year, with single use packaging for food and drink (food system activities) the most notable component of this waste stream. Once in the oceans, plastic is a major problem, dispersed by currents throughout the world, from the surface down to the greatest depths and at all latitudes. It can take more than 450 years to degrade, in the process breaking down into smaller and smaller pieces of micro plastic that can then be ingested by marine life, as well as by humans. Takeaway coffee cups are a significant component of this, with more than 7 million being used every day in the UK, or 2.5 billion a year, of which only 1 in 400 is recycled. Louisa Casson, posting on the Greenpeace website, is highly critical of this food system outcome, arguing that: "It simply doesn't make sense for plastic bottles, bags or coffee cups to be used for

only 5 minutes – after which, they can stick around in our environment for hundreds of years" (Casson 2017). While plastic is increasingly out of fashion in some respects, major chemical companies have invested huge sums of money in new production facilities that will come into production over the next 10 years, meaning that it is inevitable there will be commercial resistance to change (Siegle 2017). Similarly, the large takeaway coffee companies (such as Costa, Starbucks and Café Nero) are also likely to be resistant to change (Nicholls 2016).

The coffee industry in the UK has grown rapidly, with four times as many coffee shops as there were in 2000, and 20% of people in the UK visiting a coffee shop every day (EAC (Environmental Audit Committee) 2018). Most consumers assume that takeaway coffee cups are recyclable, not least because there is a recyclable 'Möbius Loop' symbol on the sleeves of many of them. However, the reality is somewhat different, in that while the outer cardboard sleeve may be recyclable, it is bonded with polyacetylene on the inside in order to make it water/liquid resistant. Disaggregating these two materials is very difficult, with only three highly specialised recycling companies in the UK able to do it. The result is, that although in theory these coffee cups can be described as recyclable, in reality less than 0.25% of takeaway coffee cups are actually recycled. In terms of knowledge production and use, this means that the many people who put their coffee cups into a recycling bin every day are effectively being misled (Wollaston 2016; Gabbatiss 2018). As a result, there are growing concerns that the companies who produce these cups are failing to take responsibility for where their products end up. The current system for allocating responsibility for recycling in the UK is known as the Producer Responsibility Scheme (PRS). However, the scheme has recently been criticised as failing to fairly allocate the cost of recycling, with just 10% of the cost of packaging waste disposal being born by business, with the remaining 90% being paid by taxpayers. This compares unfavourably with Germany, where producers pay 100% and France where there is a sliding system of charges that penalises those who put more non-recyclable material into the system (Laville and Taylor 2018).

The problematisation of plastic waste though circular economy thinking

There is little doubt that plastics and plastic packaging are a key component of the global economy; it is also clear that there are significant drawbacks to their use, which is becoming ever more apparent. The Ellen MacArthur Foundation was set up in 2010 with the aim of accelerating the

transition to a circular economy, which includes a cross-sectoral approach to material flows and plastic waste. A key output in building towards a more efficient plastic system, was the production of a report in 2017 entitled 'The new plastics economy: catalysing action' (WEF and EMF 2017). This report provides a "global action plan to move towards 70% reuse and recycling of plastic packaging…while highlighting the need for fundamental redesign and innovation of the remaining 30%". Key to this approach is to move beyond the current "take-make-dispose extractive industrial model" and to develop a circular economy that decouples economic activity from finite resources and designs waste out of the system. It is clear that this approach has widespread industry support, as illustrated in the following response to the 2017 report by Erik Solheim, Executive Director, UN Environment (WEF and EMF 2017, p. 5):

> "Healthy oceans can support healthy people and healthy profits; if we let them. That means governments, business and individual citizens backing an inclusive, circular economy. It means using legislation, innovation and consumer choices to replace plastic related demand and pollution".

For its part, the UK Government's 25 Year Environment Plan, published in January 2018, has the ambition of eliminating all avoidable waste by 2050 and all avoidable plastic by 2042. Key to this is moving towards a regenerative, circular economy that ensures as many products as possible are recycled. To this end, it has a four-point plan. First, at the production stage, to encourage producers to take more responsibility for the environmental impacts of their products. This includes rationalising packaging and materials formats to enable them to be more easily recycled, as well as reforming the Producer Responsibility Scheme in order to incentivise producers to take greater responsibility for their products. Second, at the consumption stage, to reduce the demand for single use plastic by extending the 5p plastic bag charge, providing support for companies to offer refill points for people to top up water bottles for free, and working with retailers to introduce 'plastic free supermarket aisles'. Third, at the end of use stage, to make it easier for people to recycle through better labelling. Fourth, at the end of life/waste management stage, to improve the rate of recycling and ensure that a consistent set of materials is collected by all local authorities. Government sees collaborative action across the sector as critical to achieving its goals (DEFRA 2018). To this end, the Waste & Resources Action Programme (WRAP) is

working in partnership with the Ellen MacArthur Foundation to ensure engagement and commitment by businesses, governments, local authorities, NGOs, media and society more generally to circulate a circular economy for plastic (WRAP 2018).

Encouraging social responsibility and reflexivity

A key element of responsibilisation and the development of new governance arrangements is communication of the problems associated with the identified issue to both the businesses involved, but also to society at large. The purpose being to encourage social responsibility and reflexivity, thereby maintaining or increasing pressure on the government and institutions to make changes to the system involved (in this case the food system). In this context, a key event was the 2016 BBC television series entitled 'War on Waste' presented by Hugh Fearnley-Whittingstall (HFW), which was intent on enabling transparency and encouraging responsibility. In this series, HFW highlighted how little waste is recycled, presenting the issue in such a way as to engender concern about the problem (Wollaston 2016), arguing that consumer pressure can make change happen: "If enough people make a noise, these companies will have no choice but to step up and start dealing with their woeful waste issue" (BBC News Online 2016). Raising awareness is key, with the potential to prompt reflection and a sense of responsibility that subsequently leads to action.

Episode four of the BBC series Blue Planet II, which aired in November 2017, appears to have been an even more significant moment in terms of raising public awareness of, and reflection on, their responsibilities in relation to ocean pollution. In particular, footage of a female pilot whale swimming around with her lifeless calf, which the narrator, Sir David Attenborough, said was likely to have died because its mother's milk had been contaminated with plastic. Attenborough narrated: "A mother is holding her newborn young – it's dead. Pilot whales have big brains, they can certainly experience emotions… Unless the flow of plastics and industrial pollution into the ocean is reduced, marine life will be poisoned by them for many centuries to come" (Country Living 2017). Unsurprisingly, the programme prompted a passionate reaction from the public, demonstrated in the number of Google searches immediately following the broadcast as people sought to find out more about the issue of recycling, both in relation to plastics (Figure 2), but also to takeaway coffee cups (Figure 3).

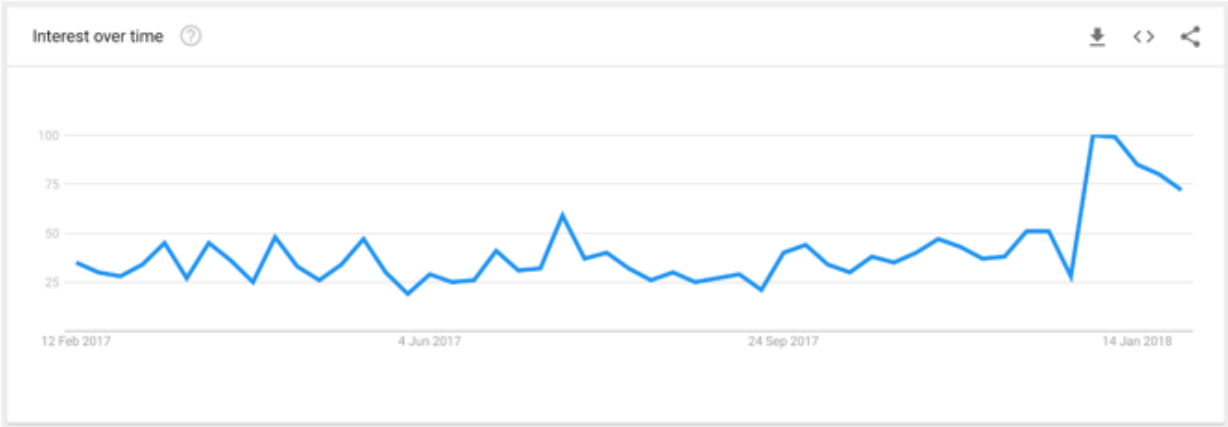

Figure 2 Recycling plastic (in the UK)

Source: Google Trends, 06.02.2018

Figure 3 Recycling coffee cups (in the UK)

Source: Google Trends, 06.02.2018

New governance arrangements for takeaway coffee cups

Where the Blue Planet episode represents a key turning point for raising public awareness and reflexivity in relation to plastic waste and responsibilising those involved, the publication of the UK House of Commons Environmental Audit Committee (EAC) report, *Disposable Packaging: Coffee Cups*, on 5th January 2018 (EAC (Environmental Audit Committee) 2018), set out a series of recommendations for Government to consider in response to pressures to develop new

governance arrangements for the takeaway coffee chain. The EAC report calls for the 'Polluter Pays' principle to apply to all packaging, including single use coffee cups, as well as the Waste Hierarchy (reduce, reuse, recycle) rule. Both are enshrined in EU law, as well as being recognised as sustainable development principles and forming part of the UN's Global Goals for Sustainable Development (to which the UK is a signatory), most notably SDG 12, which concerns moving towards more sustainable production and consumption. In compiling the report, a range of witnesses were called from a cross-section of interested parties. The Committee were told how consumers are mistakenly thinking that if they put their cup in a recycling bin, it will be recycled, whereas clearly this is largely not the case. This is partly due to the bonded plastic lining, highlighted above, but also because many of them will be contaminated with food waste (including leaving coffee in them) and can no longer be recycled on health grounds.

The report recognises that although a number of large coffee retailers currently offer a *discount* to customers for bringing their own cups, awareness and uptake has been very low to date (around 1%). This was contrasted with the plastic bag *charge* introduced in October 2015, which reduced plastic bag usage by 83% (or 6 billion bags) in its first year (Riley 2018). People are more sensitive to losses than gains when making decisions (Kahneman and Tversky 1979; Poortinga 2017). As such, the first recommendation of the report was that a 25p 'latte levy' should be introduced on disposable coffee cups, to be charged to the customer. The second recommendation was that by 2023 all coffee cups should be recycled, or at least recyclable, and if that does not happen then they should be banned by law. In other words, that if the industry fails through voluntary mechanisms to make the desired changes, it will be compelled to by law. As highlighted in the report: "Disposable coffee cups are an avoidable waste problem and if the UK cannot be confident of their future sustainability, the Government should ban them" (EAC (Environmental Audit Committee) 2018, p. 20). Third, that the companies themselves should be made to pay for the disposal of mixed material packaging which is difficult to recycle, by making adjustments to the PRS, as outlined above. Fourth, labelling should make customers aware that the current cups are not widely recycled, as well as what options they have available to them to best dispose of their cup. At present, this will often mean taking it back to the shop from where they bought the coffee, which in many cases is not practicable in that these cups, by definition, are to be 'taken away'. To help overcome this problem, the report calls for a greater 'bin structure' that will make it easier for consumers to recycle their cups (ibid.). Hugh Fearnley-Whittingstall, in commenting on the EAC

Report argues that "The UK has woken up and smelled the coffee cup nightmare - and now there's no way this horrendous and avoidable problem can be put back to sleep" (River Cottage 2018).

Table 1: Examples of reusable coffee cup schemes in the UK

Organisation	**Initiative**	**Timing**
National Trust	Recognition that the use of single use plastics in their cafés, such as single use coffee cups, is at odds with their commitment 'to creating and maintaining a healthy and more beautiful natural environment'. As such, they have replaced all take-away coffee cups, drinking straws and sandwich boxes with fully biodegradable packaging, made from recycled and plant-based materials. In addition, they have launched a pilot scheme to make reusable and biodegradable hot drinks cups available at all their cafés.	March 2018
Waitrose	Waitrose is to stop using disposable coffee cups in all its stores by Autumn 2018, saving 52 million cups a year. Members of its loyalty scheme will still be able to get free tea or coffee from self-service machines but must use their own reusable cup. Tor Harris, its head of sustainability, said: "We realise this is a major change, but we ... are confident the majority of customers will support the environmental benefits."	April 2018
Starbucks	Introduced a 5p cup charge on paper cups. Three months trial in 35 stores across London to find out whether customers will reduce their use of single-use paper cups. The early signs are that the initiative is raising consumer awareness about the need to reduce waste from single use coffee cups. They also provide a 25p discount each time a customer brings in their 'own tumbler or cup', although historically only 1.8% of customers take up this offer. They are also looking at new cup innovations which are more widely recyclable, principally in terms of separating the inner polyethylene liner from the paper outer.	February 2018

Organisation	Initiative	Timing
Pret A Manger	Throughout 2017, Pret a Manger trialled several initiatives to improve coffee cup recovery and recycling. In 2018 they introduced a 50p discount for customers bringing their own reusable cups to reduce the number of cups used. They have also made a commitment that by 2025 all their plastic packaging will be 100% recyclable, reusable or compostable; they will eliminate all unnecessary single-use plastic; and they will make it possible for customers to recycle effectively in their shops.	January 2018
Costa Coffee	Costa Coffee has said it will recycle as many disposable cups as it sells by 2020 in a 'cup recycling revolution'. Under the scheme, 500 million coffee cups a year would be recycled, including some sold by its rivals. It also intends to make it financially attractive for waste collectors to put in place infrastructure to handle the cups - from installing collection points in offices and elsewhere, to sorting them and taking them to recycling plants, by paying them a supplement of £70 a tonne – a 150% increase on what they currently receive.	April 2018
Scottish Government	Ban on single use coffee cups. Hot drinks to be served only in reusable cups. Saves 450,000 cups being thrown away each year	June 2018
Mail online	Report showing the movement on reducing single use coffee cups, with consumers leading the way. E.g. the kitchenware shop, Lakeland, report that sales of reusable cups doubled in January 2018 compared with December 2017; while Argos says sales are up 537 per cent. For their part, high street outlets are also highlighted: Pret a Manger offering a 50p discount off hot drinks if customers bring their own cups; Starbucks and Costa Coffee, 25p; Leon 30p; Greggs, 20p; and Caffe Nero 22p.	January 2018
Historic Environment, Scotland	Now sell reduced price 'keep cups' at their head office, as well as giving reusable cups away for free at events. They are intent on raising awareness of the issue through the use of signs saying how many paper cups have been used each week.	
Church of England	Have sought to end disposable coffee cup use internally, investing in 'keep cups' for their staff in order to lessen the use of disposables.	

It is apparent that knowledge of the issues surrounding the use of plastics, and in particular single use coffee cups, has been dramatically communicated through Blue Planet II (in particular),

highlighting the problems associated with their use and prompting reflexivity and calls for greater responsibilisation. Table 1 incorporates some of the responses to this mounting pressure, illustrating the range of measures taken but also the variety of actors involved, including key actors in the food chain, coffee retail sector and other institutional actors.

Discussion and conclusion

This paper has examined the notion of 'responsibility' in relation to ethics and agri-food governance, with the aim of extending the 'ethical foodscape' framework (Goodman et al. 2010) to include the potential for reflexive governance in agri-food sustainability as a mechanism for deliberation and appraisal (Pereira and Ruysenaar 2012; Kirwan et al. 2017a, 2017b). It has done this by linking ethics to food system outcomes, problematisation and responsibilisation (Figure 1). As exemplified by the single-use coffee cup example, one way to action this framework is through analysis of ethical dilemmas in the public sphere, together with attendant agri-food governance relations, strategies and framings that emerge to address these problems. As Young (2003) argues, analysis of patterns of relations in society (in this case examining shared discourses and associated interventions and intermediaries) helps to understand ethical actions and avoid solely market-led approaches to responsibilisation.

One important way to do this is by observing patterns of information and communication as mechanisms for transparency in public discourse. The public debate about single-use coffee cups, and strategies to introduce reusable coffee cups, powerfully illustrates the value of this approach. In fact, the topic has recently received so much public attention in the UK that the Collins Dictionary has selected 'single-use' as the 2018 word of the year (Flood 2018), recognising the significant impact of television programmes like the BBC's Blue Planet II in contributing to the increased usage of the term. It is a useful case too because it connects food/beverage consumption to waste policies, as well as to wider environmental outcomes linked to plastics and environmental packaging. From a systems perspective, this emphasises the connection between food system activities and wider environmental outcomes. A key finding from the case study is the idea of 'cycles of responsibilisation'. In the takeaway coffee cups example we see, for instance, how initiatives such as the Producer Responsibility scheme, alongside recently announced plans to reduce single-use plastic in supermarkets and plans to improve waste management, have

evolved, often in response to public scrutiny. However, the processes and relations between 'problematisation' and 'responsibilisation' are not straightforward or unidirectional (either for this case, or more generally). In the coffee cup case, for example, an initial period of problematisation was instigated by Hugh Fearnley-Whittingstall in 2016, which itself sits against wider initiatives such as the circular economy work of the Ellen MacArthur Foundation initiated around 2010. In this respect, coffee cups and food waste have been debated and amplified at different points in time and strategies to tackle the discarding of single-use coffee cups were in place before the Blue Planet II episode was aired in late 2017. That said, this programme was very significant in galvanising public debate. It is clear that public reaction to the programme has since triggered a series of actions by the Government, food retailers and coffee chains to address the issue, thereby providing a strong example of the power of information and transparency in problematisation. However, the point of the case study is not to judge whether the responsibilisation strategies we observe are sustainable, but to observe relations between them and public debate; in fact, some environmental campaigners have questioned the logic behind replacing single-use plastic cups if the alternatives also have negative environmental impacts (Monbiot 2018). This latest critique further highlighting the cyclical nature of problematisation and responsibilisation (Evans et al. 2017).

The coffee cup example also demonstrates, particularly in more recent interventions and strategies, the development of state and industry partnerships. This is in line with the 'distributed responsibility' framework advocated by Young (2003) and noted by Evans et al. (2017) in their analysis of food waste practices in the UK. In this regard, there are grounds for cautious yet critical optimism. On the one hand, it could be argued that Government calls for collaborative action across the sector to help it achieve its waste-reduction goals (DEFRA 2018) are not really that innovative, symbolising if anything a fairly classic and predictable governance response to a growing problem. On the other hand, some of the 'strategies for responsibilisation' proposed by EAC (Environmental Audit Committee) (2018) call for strong intervention by the Government, as well as targeting individual choices and behaviours and, if necessary, recommending enforcement of change through law (e.g. 25p 'latte levy'). The EAC's approach also suggests instituting changes in law if voluntary mechanisms fail, enforcing companies to pay for the disposal of mixed waste through adopting the polluter pays principle. However, the key point is not to view these as binary examples of personal responsibility as against political, economic and social structures

(Young 2003, 2011), given the individual's inextricable embeddedness within the latter's wider structures.

As the single-use coffee cup example advances, the priority then is to foster approaches that improve knowledge, learning and awareness of an issue with governance approaches that are collaborative and market-based, but also recognise the necessity of distributed responsibility. All too often the assumption is made that consumers are not interested in environmental issues. However, the case study presented here and other recent agri-food consumption trends related, for example, to reduced meat consumption, the rise of veganism, increased popularity of alternative dairy products and demands for sustainable palm oil, suggest this is not the case, particularly if the information is communicated in the right way. Finding ways to embody ethical problematisation and responsibilisation into food system governance is a key priority, particularly given growing calls for more 'sustainable diets' (Mason and Lang 2017) and a transition to systems of food production and consumption that reduce greenhouse gas emission contributions(Springmann et al. 2018). The Government is usually the central actor responsible for and capable of instigating change processes, exemplified in the EAC (Environmental Audit Committee) (2018) recommendations. However, a systems approach implies that the Government is one part of the system rather than the central actor, opening up space for 'infomediaries' to disseminate information produced by food companies to interested parties, including consumers (Dubbink et al. 2008). This aspect of business ethics could be usefully applied in future studies to extend the framework presented in this paper.

Extending the 'ethical foodscape' framework by incorporating responsibility shows how connections between public discourse and agri-food governance can be made via a nuanced analysis of the relations between problematisation and responsibilisation. Two concluding points are notable in this regard: first, reflexivity to enable public scrutiny of current arrangements is important, which points to the need for forms of media and other public fora that can enable problematisation to happen (and subsequently responsibilisation); and second, there is an important link between problematisation and CSR. Transparency has always been important in CSR because it enhances accountability (and thereby responsibility), making it easier for stakeholders to confront companies regarding their actions.

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