Propositions

1. The diffusion of public debate is a mechanism for journalism’s social reproduction role. (This thesis)

2. Questions developed subsequent to behaviouralist understandings of power are empirically inadequate and politically dangerous. (This thesis)

3. Failure to acknowledge science as inherently political contributes to the epistemic authority crisis of academia.

4. The tension between the output-oriented assessment of the PhD and the process of becoming an independent researcher contributes to the mental health crisis in academia.

5. Treating sexual and gender-based violence as individual cases precludes fundamental changes at the institutional level.

6. Labelling the display of emotions as unprofessional reproduces harmful patriarchal relations of power.

7. The probability of a given individual to bring food to a potluck lunch is inversely proportional to their position in the tenure track system.

Propositions belonging to the thesis, entitled

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Newspapers as a Forum for Democratic
Public Debate on Food Production

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Chapter 1

General introduction
Chapter 1

1. Introduction

*Revealed: the dirty secret of the UK’s poultry industry*

*Two-thirds of fresh retail chicken in UK contaminated with campylobacter*
Guardian findings prompt investigations at three major supermarkets
Government shelves plans to name and shame suppliers

*Food poisoning scandal: how chicken spreads campylobacter*
Three of the UK’s leading supermarkets have launched emergency investigations into their chicken supplies after a Guardian investigation uncovered a catalogue of alleged hygiene failings in the poultry industry.¹

1.1. Problem statement

In 2014, The Guardian ran a series of articles reporting the findings of a five-month-long investigation on the alleged hygiene failings in the chicken meat production industry. In these articles, the routine flouting of supposedly strict industry standards and other structural problems were linked to high levels of contamination of chicken meat with Campylobacter, bacteria that are the most frequent cause of food poisoning and can even result in death. In the extract above, the outlet also highlights its own role in precipitating investigations throughout the industry by performing this investigative task. The attention-grabbing headline and lead above are exemplary of the press playing an essential political role, not just by providing the platform and substance for the democratic public debate about a public interest topic – food production and safety – but also, and importantly, by providing a mechanism through which the public can hold those responsible to account. This role is perhaps best encapsulated and most influential in the notion of the press as a Fourth Estate (Schultz, 1998).

The notion of the Fourth Estate is shorthand for the idealised, political role of news media as part of the system of checks and balances in democratic societies (Schultz, 1998). Though this notion emerged in a specific social, economic, political and cultural context – namely, nineteenth century Britain –, these liberal ideals about the role of news media in democratic governance continue to influence the aspirations of those involved in news production. This political role of news media is premised on its provision of information to facilitate political decision-making (Schultz, 1998). According to this notion, the press provide a forum for public debate, articulate public opinion, provide a channel of communication between government and governed and between groups, and hold the powerful to account (Christians et al., 2010; Curran, 2005; Curran & Seaton, 2002; Schultz, 1998). These normative expectations are articulated as the normative core of the journalistic profession (Hanitzsch, Vos, et al., 2019), espoused as benchmarks of good journalism (Vos & Wolfgang, 2018), and

built on to defend freedom of speech and freedom of the press as crucial for democracy (Oster, 2013; Standaert et al., 2021). Students in media and communication programmes are still writing essays and dissertations under topics such as ‘Will journalism save the world?’

It is partly on account of these important roles that news media and journalism are argued to be the lifeblood and pillar of a democracy (Fenton, 2010a), and are afforded privileges and protections in accordance with this (Tambini, 2010). In liberal democracies, news media are expected to fulfil a set of roles that are fundamental to the democratic process, including those of supplying citizens with the information necessary to be free and self-governing, providing a forum for inclusive public discussion, providing the government with the necessary information to make decisions in the common interest sensitive to public sentiments, and acting as a watchdog that holds all significant forms of power to account (Cammaerts et al., 2020; McNair, 2003; Mellado & Van Dalen, 2017; Strömbäck, 2005; Vos & Wolfgang, 2018). Media law guarantees effective and privileged means and protections to the media so that it can indeed accomplish its purpose as an independent check on government and other persons or institutions exercising power, as well as disseminating information and ideas of public interest, while at the same time protecting the public’s right to receive information (Oster, 2013).

However, critical media scholarship is sceptical about the extent to which the normative expectations of the Fourth Estate notion are – or indeed could be – compatible with media practice. Several studies contribute empirical evidence that points to a potentially increasing disconnect between the ideal and described practice, a widening gap between normative theory and political reality (Habermas, 2006). More specifically, there is also evidence of an increasing gap between what citizens expect and what journalists actually deliver (Abdenour et al., 2021; Eldridge & Steel, 2016; Willnat et al., 2019). Scholarship suggests there is a growing gap between the global space where issues arise, and the space where those issues are managed (still tied to the nation-state), as the source of some of the political crises affecting governance institutions (Beck, 2005; Castells, 2008). “Despite their centrality to our understanding of journalism’s place in society, normative and analytical traditions of conceptualizing journalistic roles have come to a point where they increasingly disconnect with journalism’s very realities in a global world” (Hanitzsch & Vos, 2018, p. 159). So, while journalists strongly favour the idea of the media as a Fourth Estate and a watchdog, few believe with conviction that the media fulfil this role (Schultz, 1998). Research also points to fragmented, disconnected or disrupted public spheres, which raises questions regarding the underlying assumptions that underpin many of these normative expectations (Bennett & Pfetsch, 2018; Dahlgren, 2005; Pfetsch, 2018).

More specifically, three kinds of critiques can be distinguished. First, political economy scholars call attention to the blind spot that is holding sites of power other than the state to account, especially when it comes to corporations. They argue that news media are structurally tied, though not subordinated, to wider patterns of privilege and control (Freedman, 2014) in ways that stop them from exposing concentrations of power that
threaten democracy (Christians et al., 2010). Indeed, some scholars have gone as far as to argue that in spite of press freedom remaining a crucial protection in democracy, it has also become a shield for corporate media to avoid social responsibility (Bennett, 2016). In its most extreme cases, research informed by this perspective looks for empirical evidence that speaks to the pervasive ideological influence of the media as a model of propaganda, affecting a largely passive audience (Schudson, 2003) (see, for example, (Chomsky, 2002; Herman & Chomsky, 1994). From this political economy perspective, news values tend to reflect commercial imperatives such as media ownership and advertising (Carson, 2014; Schultz, 1998). As part of the global financial conglomerate, news media are less vigilant in relation to corporate than public bureaucracy, not only for fear of “stepping on the corporate toes of a parent or sister company” (Curran, 2005, p. 124), but also because its decisions are increasingly made by financial officers interested solely in shareholders’ profit (Christians et al., 2010). As Curran (2005, p. 124) succinctly and unequivocally asserts, “Concern should no longer be confined to the media’s links to big business: the media are big business”. As a business whose product is the news, the media are also driven by a commitment to market practices driven by the desire to ensure profit (Fenton, 2010a, 2019). This dependence on advertising and market value risks the commodification of news, posing a fundamental threat to the democratic role of news media as platform for political and social debate (Plessing, 2017). This commodification of the news raises serious questions about news media’s watchdog functions in a democracy and, in particular, the durability of the notion of the fourth estate role prescribed in the liberal democratic tradition (Carson, 2014).

Second, sociological scholars have suggested important ways in which the organisational routines and pressures, daily practices, professional norms, format, marketing, and the mechanics of the journalistic field can actually produce bias and undermine the ability of journalists to deliver on these expectations (Bourdieu, 1998; Iyengar, 1991; Phillips et al., 2010; Schudson, 2003). For example, Bourdieu (1998) draws attention to how the mechanisms of a journalistic field that is subject to market demands have a hold not just on journalists themselves, but through them, on the fields of cultural production more generally. Schudson (2003) makes a similar point, arguing that publishers’ need to make money threatens the diversity of expression in the press, making news media vulnerable to the censorship of the marketplace. This commitment to profit – inherent to media as corporations or big business – is unlikely to result in journalism capable or willing to criticize this profit-driven logic elsewhere (let alone within), at least in a systematic manner. Research informed by this perspective looks for how media bias results as an unintended yet structural consequence of the structures and routines of newsgathering more generally (Schudson, 2003).

Third, research on mediatisation suggests that the relation between news media and democracy is further complicated by the influence of modern mass communications and their particular logics on the structures of politics and the political conditions (Meyer & Hinchman, 2002). Linking with the critiques levied by political economy media scholars,
mediatisation scholarship also points to the overlap between media logic and commercial logic, stemming from the fact that most media are run as commercial businesses, and thus media logic both follows from, and is adapted to, commercial logic (Esser & Strömbäck, 2014; Mazzoleni & Schulz, 1999; Strömbäck, 2008, 2011; Strömbäck & Esser, 2009). Research on news values – a particular instance of media logic (Strömbäck, 2008, 2011; Strömbäck & Esser, 2009) – shows that the values that guide selection of potential news stories appear to be led largely by practical rather than normative considerations (Harcup & O’Neill, 2017). In particular, tensions between news organisations as patrons of news journalism as an institution and as market actors, raise questions about the news values that guide what is considered newsworthy (Allern, 2002).

Hence, although there is a rich field of scholarship that critically investigates the role that news media and journalism play in democratic societies, most of this scholarship focuses on topics in the political arena (Hallin & Mellado, 2018; Standaert et al., 2021). The majority of our peer studies have tended to focus on so-called ‘political information environments’, dealing with topics that are proximate to political power and within the classical political communication tradition, usually locating the Fourth Estate in political journalism, where these roles are structurally embedded (Eldridge & Steel, 2016; Standaert et al., 2021). Such studies tend to focusing almost exclusively on election coverage or political reporting more generally (Hallin & Mellado, 2018). These include topics such as party and electoral politics and campaigning, governmental policies, social movements, political communication, etc. Examples of these studies can be found in articles and anthologies on mediated politics (Bennett & Entman, 2001; Van Aelst et al., 2012); politics, media and democracy (Curran, 2011; Curran & Gurevitch, 2005); journalistic roles (Hanitzsch, Hanusch, et al., 2019; Hanitzsch & Vos, 2017; Hanitzsch & Vos, 2018; Hanitzsch, Vos, et al., 2019; Hanusch, 2019; Mellado, 2015; Mellado & Van Dalen, 2017; Standaert et al., 2021); agenda-setting (McCombs & Ghanem, 2001; McCombs et al., 2014; Sevenans, 2017; Van Aelst & Vliegenthart, 2014; Van Aelst & Walgrave, 2011); or mediatization (Esser & Strömbäck, 2014; Strömbäck, 2008, 2011). Research on these highly politicised topics has produced mixed evidence regarding the extent to which normative expectations materialise in journalistic output (see, for example, Cammaerts et al. (2020), (Felle, 2016), Rao (2008)). There is comparatively less empirical research on the role of news media in democratic public debate regarding topics outside of this more traditional press/politics arena, where the conditions for such normative expectations might differ. Additionally, the critical perspectives alluded to earlier do not fundamentally challenge the underlying assumptions upon which the normative expectations are premised: “those who criticise journalism’s selective democratic credentials tend to do so from the same cherished and idealised notions of the Fourth Estate as held by those they criticise” (Eldridge & Steel, 2016, p. 818). In other words, those who defend the press, do it because it acts as a Fourth Estate, and those who criticise it, do it because it fails to do so. In light of this, scholars have repeatedly called for research that describe the role of news media in democratic politics, without reproducing the untested and potentially problematic assumptions underlying
these normative expectations, but instead problematize, challenge and rethink these long-held assumptions (Bennett & Pfetsch, 2018; Pfetsch, 2018).

Therefore, the present thesis subjects these normative expectations to rigorous and systematic empirical scrutiny through a paradigmatic case that was deliberately chosen because it is not part of this political arena, namely chicken meat production in the UK. This allows for an investigation into the extent to which these core normative expectations about the role of news media in democratic public debate materialise in journalistic output in ways that support the kind of public debates necessary to identify and tackle complex societal challenges, such as those linked to global food production, and support processes of accountability. Though it is not always regarded as a highly politicised topic, food – from production to consumption – is inherently political, in that it is inextricably bound to existing relations of power within and across individuals, groups, species and ecosystems, from micro to systemic levels. It has become the site of increasing contestation on account of its social, economic, environmental, public health and ethical implications (Almiron et al., 2018; Broad, 2016; Freeman, 2009). Animal production is widely recognised today as one of the top three most significant contributors to the most serious environmental problems we face today, including land degradation, air and water pollution, resource shortages, loss of biodiversity, and climate change (Castellini et al., 2012; Kiesel, 2010; Myanna Lahsen, 2017; Steinfeld, Gerber, Wassenaar, Castel, Rosales, & de Haan, 2006). Current practices of meat production are now increasingly recognised as being unsustainable, due in great part to both these processes of intensification and industrialisation. While these processes resulted in increased availability of cheap animal protein accessible to many consumers, intensification has also meant greater stocking densities that result in decreased animal welfare, negative environmental impacts, and human and animal health problems (van Bueren et al., 2014; van Mierlo et al., 2013). Practices surrounding the production and consumption of food are thus heavily contested, particularly in Western contexts, on account of issues such as the animal health and welfare, declining incomes for farmers, food safety, North-South inequalities that result from the globalisation of fodder ingredients trade, and the effects of factory farming on the landscape and broader environment, to name but a few salient topics (Hoogland et al., 2005). At the same time, recent demographic changes including a growing world population, as well as the changing eating patterns of large sectors of the population, particularly an increase in the demand for meat in countries like Brazil, India and China (Chiles, 2017; Happer & Wellesley, 2019) have resulted in a rapidly expanding demand for food, including these livestock products and, especially, pig and poultry (Anderson, 2000; Castellini et al., 2012). Consequently, meat production is expected to rise over the next decade (Blake et al., 2020). To address, enhance and profit from the increasing demand of food of animal origin resulting from such changes, the meat industry – like most other agricultural industries – has resorted to intensification, along with processes of specialisation, mechanisation and industrialisation (Anderson, 2000; van Bueren et al., 2014).
Chicken meat production is one of the most industrialised sectors in livestock agriculture (Caffyn, 2021), and in no other livestock sector are the changes related to the intensification of animal production more dramatic (Bessei, 2018). In terms of individual lives, chicken meat production dwarfs all other land animal production industries, with almost 69 billion chickens slaughtered around the world in 2018 alone (FAO, 2020a). Like other animal-based production systems, chicken meat production has been heavily contested since the mid-1950s (Godley & Williams, 2010) on account of the pervasive contamination of its output with foodborne pathogens (Boyd, 2001; Cogan & Humphrey, 2003; Didier et al., 2021; Meldrum & Wilson, 2007; Strachan & Forbes, 2010; Van Asselt et al., 2018; Wilson et al., 2008; Yeung & Yee, 2003), an issue linked to and exacerbated by the increase in antibiotic resistance in bacteria attributed to the (ab)use of antibiotics in animal agriculture (Bowman et al., 2016; Economou & Gousia, 2015; Finlay & Marcus, 2016; Graham et al., 2009; Morris et al., 2016; Rohr et al., 2019; Roth et al., 2019). The recurring outbreaks of avian influenza illustrate the complex interlinkages between ecological processes, environmental disruption and climate change, industrial poultry farms, and agricultural practices that have been linked to an increase in the emergence of infectious diseases of zoonotic origin more generally (Connolly, 2017; Gilbert et al., 2017; Rohr et al., 2019).

In the UK in particular, food production has become a highly charged issue, with stakes that span from public health, food safety and food quality issues, to economic demands in a highly competitive global market, as well as social and environmental sustainability, and consumer confidence (Jackson et al., 2010). In many ways, chicken meat production in the UK epitomises the recent industrialisation and corporate consolidation of agricultural production more broadly. It is arguably the paradigmatic case of agricultural intensification in the UK (Jackson et al., 2010) and the pioneer of agribusiness in Europe (Godley, 2014; Godley & Hamilton, 2020; Godley & Williams, 2010). Chicken meat production in the UK in particular is a highly intensive and concentrated industry, with few economic actors dominating all four stages of the supply chain, from breeding to retail (Caffyn, 2021; Godley & Hamilton, 2020; Jackson et al., 2010; Manning et al., 2007). Currently, three main poultry processing corporations dominate production in the UK, collectively processing around 17 million birds per week. These companies are part of multinational agribusiness corporations that dominate markets across multiple agri-business sectors, from seeds and feedstuffs to genetics, drugs and manufacturing (Caffyn, 2021). The British Poultry Council – the lobby that serves as the voice of the industry – has been shown to strive to influence public opinion, public policy and even the broader political ideology (Jackson et al., 2010), illustrating the different agential and structural mechanisms of influence that corporate actors use to secure favourable regulatory regimes (Clapp & Fuchs, 2009; Hathaway, 2018, 2020). The long list of issues for which the chicken meat production industry has been heavily criticised since its inception echoes the negative impacts of corporate concentration and market domination in global food production systems on society and the environment (Clapp, 2018; Clapp & Fuchs, 2009; Clapp & Purugganan, 2020; Clapp & Scrinis, 2017).
Given the complexity and importance of food production, distribution, and consumption, and given the commitments of deliberative democracy, sound public debates are argued to be necessary to support urgent decision-making, organisation, and governance around such processes (Waltner-Toews, 2017). The media play an important role in these public debates as they mediate how we understand and construct knowledge about societal issues (McNair, 2003; Schudson, 2003), and are instrumental in constructing shared understandings, articulating potential solutions for these problems and constructing policy possibilities. This role is particularly powerful in cases of complex and intractable problems (Gamson & Modigliani, 1989; McCallum & Waller, 2013). Media coverage has been shown to play a key role in setting both public and political agendas, shaping which issues are considered important by the public and elected officials (Djerf-Pierre & Shehata, 2017; McCombs & Ghanem, 2001; McCombs et al., 2014; R. A. Neff et al., 2009; Van Aelst & Walgrave, 2011), and mediated narratives about food production systems are known to play an important part in shaping our shared knowledge about how we produce the food that sustains us (Broad, 2016; Lindenfeld, 2010).

Indeed, the concerns about the practices of global industrial food production have increasingly become more salient in the public and media agendas. From newspaper articles such as those published by The Guardian, to documentaries, exposés, cooking shows and cookbooks, a wide variety of media products reflect the concerns and anxieties about mass animal production, including the environmental, public health, economic and ethical impacts of intensive farming systems (Andersen & Kuhn, 2014; Kenner, 2008; Lindenfeld, 2010; Lymbery & Oakeshott, 2014; Phillipov, 2016a; Pollan, 2009; Schlosser, 2012; Wagenhofer, 2005). There are also several media products dealing specifically with the chicken (Ellis, 2007; McKenna, 2017, 2019), including two so-called ‘campaigning culinary documentaries’ about chicken meat production (Bell et al., 2017; Phillipov, 2016b). In Hugh’s Chicken Run and Jamie’s Fowl Diner, celebrity chefs Hugh Fearnley-Whittingstall and Jamie Oliver respectively highlight some of the problems with intensive chicken meat production and encourage consumers to change their purchasing and consumption habits, opting instead for free-range and organic options.

Luhmann and Theuvsen (2016) have argued that the salience of these issues in mass media has contributed to the increase in contestation of companies within these industries, and now an increasingly critical society demands that these companies take responsibility for their practices. Indeed, there is an expectation that making these environmental, public health, socio-economic and ethical consequences of industrial animal production – and agricultural production more generally – visible might force producers to adapt their practices and consumers to adapt their food choices in ways that lead to a more sustainable production system (Hoogland et al., 2005). Whether or not this expectation is correct, corporations do appear to give credence to the potential influence that public debate of these issues in, with and through media might have on their interests. This much is evident from their efforts to shape the discussion and framing of these issues in the public sphere;
corporations engage in such public debates to try and strategically use ideas in order to shape the public’s understanding not just of problems related to industrial food production, but also of potential policy solutions (Clapp & Scrinis, 2017). In this context of increasing corporate power, efforts to make visible the dynamics and effects of this corporate consolidation and in ways that make them subject to contestation and accountability are of the upmost importance; and media scholarship would suggest that news media are not just capable of but expected to add to those efforts to render powerful actors accountable by publicizing information and acting as a check on power (Waisbord, 2000).

If media are to open up discussions about complex issues such as global food production systems in ways that allow the public to identify and recognise diverse perspectives and interpretations of problems, trade-offs and tensions, competing interests, and the differential effects of solutions on different stakeholders, such public debate must be supplied the information and normative resources able to support an opening-up rather than a closing-down of the conversation (particularly around those solutions that benefit the status quo) (Ludwig et al., 2022; Stirling, 2008). The inherent and irreducible complexity of global food production systems, the many and frequently conflicting interests and trade-offs involved, and the multi-level consequences of industrialised food production, as well as the billions of lives affected by decisions and non-decisions regarding food production (including billions of non-human animals, in the case of animal production) suggest that for such public debate to support exploration of values in ways sensitive to relations of power, it should involve a wide range of stakeholders (Head, 2019). Such a debate requires fora that accommodate diverse evidence on different temporal and spatial scales to support multi-dimensional and multi-level discussion, with emphasis on structural and systemic perspectives, so that values and relations of power can be rendered visible and addressed (Waltner-Toews, 2017). The abundance of empirical and rhetorical resources reporting on the intersecting negative environmental, food safety, socio-economic, occupational, nutritional, and ethical implications of chicken meat production (Bessei, 2018; Caffyn, 2021; Costantini et al., 2021; Gilbert et al., 2017; Jackson et al., 2010; Johnson & Ndetan, 2011; Jones et al., 2013; Leinonen et al., 2012; Leinonen et al., 2014; Meldrum & Wilson, 2007; Nerlich et al., 2009; Roth et al., 2019; Stuesse, 2010; Van Asselt et al., 2015; Van Asselt et al., 2018; van Bueren et al., 2014; van Mierlo et al., 2013; Wakerley & Yuki, 2016) and, beyond that industrial animal production (Almiron et al., 2018; Almiron & Zoppeddu, 2014; Connolly, 2017; Economou & Gousia, 2015; Khazaal & Almiron, 2014; Kristiansen et al., 2021; Myanna Lahsen, 2017; Schwartz, 2018; Stibbe, 2001; Woolhouse et al., 2015) and corporate agribusiness more generally (Chiles, 2017; Levidow, 2015; R. A. Neff et al., 2009; Opel et al., 2010b; Rohr et al., 2019; Willett et al., 2019), further suggest the need for these public debates to support processes of accountability.
Chapter 1

The overarching research question that drives this research project is:

**How well does newspaper coverage about chicken meat production in the UK comport with normative expectations as required to support sound public debate of complex societal challenges?**

Studying the United Kingdom (UK) then offers particularly useful insight into the extent to which normative expectations materialise in media practice, for several reasons. First, not only is the UK the formative context in which many of these normative expectations were shaped – specifically, that of the Fourth Estate –; but also UK newspapers are exemplars in shaping expectations of news media and are regarded as important agenda-setters with a proven track record for holding power to account (Curran & Seaton, 2002; Cushion et al., 2018; Felle, 2016; Langer & Gruber, 2020), as illustrated by the opening quote. The concern about a depressed watchdog role has been argued to have a Western and, more specifically, Anglo-American normative underpinning (Stetka & Örnebring, 2013). Moreover, the UK chicken meat production industry is a particularly useful case for an examination of the normative expectation of holding corporate power to account. The industry boasts a strong lobby in the British Poultry Council (Jackson et al., 2010), which exemplifies the different mechanisms of influence of corporate power (Hathaway, 2018). Not only does this case provide a unique case study outside of the traditional sites for critical analysis, but it allows for the expansion and further specification of these normative expectations on two important dimensions that have so far been under-theorised: the particular requirements for public debate about complex societal challenges – through the theoretical lens of wicked problems – and the normative expectation of holding corporate power to account. As such, this research study makes significant empirical, theoretical, and methodological contributions that address several gaps in knowledge precisely because of the unique intersection of topics, theoretical and epistemological perspectives, and methodological design.

2. Theoretical background

2.1. A set of normative expectations for news media

To assess news media performance against normative ideas requires first that we derive a set of normative expectations that that are compatible with the requirements necessary to support sound public debate of complex or wicked problems as laid out in the preceding section, and that are also consistent with the particularities and historical specificity of the media system in the UK. As different models of democracy have different normative implications for the role of media and journalism, evaluations of the performance of news media depend on the model of democracy underlying the analysis (Ferree et al., 2002; Strömbäck, 2005, 2008). For this research project, normative expectations for the role of news media in democratic public debate must then be consistent with the liberal model that characterises the UK’s media system (Brüggemann et al., 2014; Hallin & Mancini, 2004).
To this end, the present study builds on three core strands of media scholarship: normative theories of the press, the notion of the Fourth Estate, and journalistic roles literature, and looks at the intersection of these academic fields to come up with two core notions: that of news media as forum for sound public debate and as mechanism for public accountability.

Normative theories of the press broadly speak to similar roles of the press in democratic societies: providing information and commentary, and a forum for the exchange and debate of diverse views and interests, as well as acting as a watchdog (Christians et al., 2010; Topić & Tench, 2018). The social responsibility tradition of normative theories of the press conceives of news media not just as defenders of democracy, but also promoters of social justice, by systematically investigating concentration and abuses of power, and moving the public to act on them (Christians et al., 2010). The media developed a moral foundation for this activity, constructing themselves as important for promoting social justice and redistributing social power. As journalism developed into a systematic critique of abuses of power, this gave rise to another dimension of this social responsibility tradition in the form of investigative journalism (Christians et al., 2010). Investigative or watchdog journalism is perhaps the clearest expression of social responsibility: forms of journalism whose purpose is not just to report of events of public importance, but to “systematically discover social problems or abuses of power and to use rhetorical resources to move the public to act on these problems” (Christians et al., 2010, p. 57). This quintessential function for democracy stems from their role during the eighteenth century as forum for public debate about how a representative government should be formed. In turn, this role in the facilitation and structuring of public debate and public opinion resulted in increased privileged access to other sources of power – as well as freedom to scrutinise and criticise them –, which eventually led to the press carving for itself a fundamental political role as part of the system of checks and balances, the so-called Fourth Estate (Christians et al., 2010; McQuail, 2003; Schultz, 1998). Following in this social responsibility tradition, a rich scholarship evaluates the media’s moral performance precisely in terms of whether and how they are or should be defending and serving democracy, and in doing so, contribute to cementing its identity as defender of democracy (Christians et al., 2010; Schudson, 2003).

The Fourth Estate is one of the most frequently cited roles in journalistic accounts of the roles that journalism performs (Eldridge & Steel, 2016; Hanitzsch, 2011; Hanitzsch et al., 2011; Hanitzsch & Mellado, 2011). “The notion of the Fourth Estate has long been identified as journalism’s raison d’être to safeguard democratic accountability and ensure the public has knowledge of what is being done on their behalf” (Eldridge & Steel, 2016, p. 817). It is grounded on the premise that the media play an essential political role as part of the system of checks and balances within democratic governance, and is arguably one of the most persistent and influential notions about the relation between media and democracy. The notion of the Fourth Estate became closely associated with social responsibility theories and, particularly from the late twentieth century, has become synonymous with watchdog journalism (Schultz, 1998). In other words, acting as a Fourth Estate is a big part of what journalists say
they do and what they understand their role to be. This important democratic function is also one of the most frequently cited reasons to protect journalists, and safeguard freedom of the press. A free – and unlovable – press is argued to be a cornerstone of any liberal democracy on account of this role (Rodny-Gumede, 2017; Schudson, 2008).

In line with this, research on journalistic roles has produced similar normative expectations regarding the crucial tasks that journalism provides in contemporary societies (Esser & Neuberger, 2019; Standaert et al., 2021). Drawing on empirical research, Schudson (2008) for example proposed a list of six or seven functions that journalism has, to differing degrees, played in democratic societies, including the provision of information; the investigation of concentrated sources of power; the provision of analysis and coherent frameworks of interpretation to help citizens make sense of a complex reality; the representation of and exposition to multiple viewpoints, experiences and interests; the provision of a form for public dialogue and debate; and the support and advocacy for political mobilisation. He argues that these functions can also provide a basis for normative expectations that serve as standards against which to assess media performance. More in general, common accepted canon of journalistic roles includes the monitorial, facilitative, radical and collaborative roles (Christians et al., 2010), as well as the influential distinction between the disseminator, interpreter, adversary and populist mobiliser roles (Willnat et al., 2019). Recently, Hanitzsch and Vos (2018) have integrated some of insights, and proposed a new and more inclusive classification of roles that better articulates the relevance of journalism for both the political and everyday life domains. With regards to the domain of political life, these authors distinguish between 18 journalistic roles, and classify them into six elementary functions of journalism that address essential needs of political life: informational-instructive, analytical-deliberative, critical-monitorial, advocative-radical, developmental-educative, and collaborative-facilitative. There is thus a clear overlap between ideal and non-ideal type normative theories regarding the role of news media in democratic societies.

There is thus general agreement that journalism performs tasks crucial for democratic life and governance, including those of checking abuses of power, and providing the site and substance for the exchange of ideas. Hanitzsch and Vos (2018) argue that the critical-monitorial function lies at the heart of the normative core of journalists’ professional imagination, particularly in Western countries. In this monitorial role – the most frequently adopted by the press itself – journalists are expected to systematically collect and publicise information on relevant events to help audiences construct an informed opinion, as well as hold the powers that be to account (Cammaerts et al., 2020). Including the monitor, detective and watchdog roles, this function is grounded in the ideal of journalism acting as a Fourth Estate, and speaks to journalists being critical towards elites and holding power to account, in ways that support the emergence of a critically minded citizenry (Hanitzsch & Vos, 2018). Empirical research on these journalistic roles has shown that both the informer and the watchdog roles feature prominently in journalists’ understanding of their normative roles. Together with the educator, reporter, investigator and monitor roles, these
form a normative core of journalism, which Standaert et al. (2021) argue is a professional ideology widely shared by journalists around the world. In their research, they encountered differences within and across Western and non-Western visions of these roles. Pertinently for this research, they mention that Anglo-Saxon countries in particular – including the United Kingdom – are distinguished from other Western countries, as journalists here specifically highlighted the relevance of the watchdog role. Indeed, the watchdog role led the hierarchy of journalistic roles in the UK. Moreover, “journalists have been socialized to accept these normative constructions as a benchmark for good journalism” (Vos & Wolfgang, 2018, p. 764). Journalists themselves describe their own role in terms of offering a forum for the articulation and exchange of ideas that are relevant to public life; this normative character has been further reinforced by the articulation in media scholarship of the importance of such functions for the healthy functioning of a public sphere (Vos & Wolfgang, 2018). In this facilitative role, news media is tasked with facilitating and supporting rational deliberation about issues of public interest; a role that aligns with the social responsibility approach (Cammaerts et al., 2020) outlined in a previous subsection.

In short, there is great overlap between social responsibility theories, the notion of the Fourth Estate, and the journalistic role – that is, watchdog journalism. It is in this space of overlap that the present research focuses to derive a set of normative expectations for news media in democratic public debate that are argued especially important in the context of complex societal challenges. Though these are further specified and explicated in the following empirical chapters, they can be broadly summarised as follows.

**First of all, the news media is expected to provide a forum for and facilitating public debate.** Within deliberative democracy, the public sphere(s) constitutes the space where citizens come together and articulate and (re)negotiate their views to influence the political institutions of society, and where civil society, understood as the organised expression of such views, interacts with the state (Castells, 2008). Especially in the context of wicked problems, public deliberation is crucial for arriving at negotiated – though not necessarily consensual – ways to address them, as deliberative mechanisms enable citizens to consider multiple problem interpretations, identify conflicting values and interests, and deliberate on the potential courses of action and their consequences and trade-offs (Lodge, 2009; Raisio & Vartiainen, 2015). Rather than a way to arrive at the right or best solution, from the perspective of wicked problems, the deliberation itself becomes the ongoing (re)solution. Addressing wicked problems thus requires both broad, diverse, and engaged audiences that are exposed to quality information and consider multiple perspectives; and genuine opportunities and fora for those audiences to identify, address and work through the tensions, trade-offs and paradoxes that are inherent to wicked problems (Carcasson & Sprain, 2016). In this model, the press plays an important role in the provision of an open forum for public debate, providing information and diversity, as well as channels of communication and control (Calhoun, 1992; Christians et al., 2010; Fenton, 2018; Habermas, 1991). Consequently, mass media are argued to constitute the most crucial institutional
structure of the public sphere (Baker, 2006), and a key locus of a sustainable democratic polity, in facilitating the public debate, formation of public opinion, which in turn can influence public policy and hold governments to account (Garnham, 2007). News media are central to this public sphere insofar they contribute to processes of information gathering, deliberation and action (Fenton, 2013), and the structuring of public debate (Schultz, 1998) that are necessary for people to engage as citizens.

Second of all, the news media is expected to provide a mechanism for and support processes of public accountability. Democracy also requires that the acts of those in power are made available for public scrutiny; that they be made visible, ascertainable, accessible, and therefore accountable (Bobbio, 1987). And while not the only one, journalism is an important mechanism for democratic accountability (Bovens et al., 2014; Carson, 2014; Ettema, 2007; Norris, 2014). Independent journalism has even been hailed as the only hope for regular and reliable information about what those in power are doing (Bennett, 2016). Schudson (2018) argues that the practice of liberal democracy as a form of government intrinsically committed to holding in check the power of elected leaders, albeit not impossible, would be substantially more difficult without the service of public accountability provided by journalism. He argues that the holding of democratic leaders to their rightful task requires a web of accountability, which includes not only the institutions that review and critique power and pursue offenders, but also the news organisations with the power, professionalism, and persistence to make public the shortcomings of those who govern. The system of checks and balances of power in democratic societies requires that elected leaders be held publicly accountable in order for them to be answerable to their voters via the ballot (Schudson, 2018). Newspapers and journalists are thus expected to be watchdogs by monitoring and holding powerful actors accountable for what they say and do (Eriksson & Östman, 2013). This monitorial capacity of journalism to hold power to account is articulated as a normative role by journalists the world over (Hanitzsch, Vos, et al., 2019).

Of course, these normative expectations, are not – nor are they meant to be – accurate descriptions of reality. Neither should they be understood as descriptors of past golden eras to which we want to return. Indeed, much of the historical evidence runs counter to ideals like the deliberative democracy, public sphere media as a Fourth Estate (Curran & Seaton, 2002); and even Habermas has recognized that deliberative democracy was an idealised situation that never survived capitalism’s penetration of the state (Castells, 2008; Habermas, 1976). However, these ideals remain useful intellectual constructs, not just as analytical constructs and representations, but also in terms of their normative value as critical categories (Castells, 2008; Ramsey, 2010). Habermas (2006) himself noted that the reality – particularly the real circuit of power – widely differs from this normatively prescribed image; however, the image is still useful in that it allows us to connect the normative ideal with the real practices. In other words, these normative expectations are not meant to be
impossible high standards up to which current journalistic practice cannot but fail to live up. They do however serve as benchmarks to assess journalistic performance, inasmuch as they provide professional legitimisation, frequently representing what is acceptable and appropriate within journalism (Abdenour et al., 2021; Hanitzsch & Vos, 2017; Mellado, 2015). The approach taken in this research towards normative expectations then serves to assess current journalistic performance in constant conversation and questioning of what it should be if it is to support the healthy public debate that such complex societal challenges require: “At issue is not only what is the role of journalism in society but above all what this role should be” (Christians et al., 2010).

2.2. Conceptualising the role of media in democratic public debate

In general, most media and communication scholarship either takes an actor-oriented or a structural approach when studying the role of media in the democratic public debate (Van Aelst et al., 2008). Each approach has its strengths and weaknesses, and brings implications to bear on the theoretical and methodological choices available to us as researchers. Studies from an actor-oriented perspective look to actors – say, journalists – to provide insight into this role (see, for example, (Standaert et al., 2021). Critics of such approaches accuse them of an excessive behaviouralism (Hay, 1997), which fails to recognise that embedded actors are constrained in their ability to comment on their own constitutive structures.

On the other hand, structural approaches in political communication tend to be largely descriptive. Not surprisingly, these studies look for evidence of a role of news media in preserving the dominant ideology and existing power relations (Van Aelst et al., 2008). Critics of these structural approaches have noted that these studies tend to neglect or underplay the agency of actors, and usually come up against methodological difficulties to demonstrate the political effects they claim beyond anecdotal evidence and in ways that establish causality, resulting in inconclusive and contradictory empirical evidence (McNair, 2003).

Given the critiques levied against each approach and the epistemological challenges faced on either camp, instead of reproducing a received analytical distinction that reproduces this false dichotomy, some scholars have called for research that recognises – and helps us understand – the place of both structure and agency (Fenton, 2010a). Given the focus on this research project and the overarching research question, I undertook the challenge to develop a research design and methodological instrument that spoke to a structural understanding of the role of news media as a forum, actor, and process, without neglecting individual agency, and also without starting from an untested presumption of their coherence as an actor or assumptions of humanist agency. The present study proposes a multi-dimensional understanding of news media as a forum, a political actor, and a process of mediation. Each of these three understandings speaks to a different dimension of media, thus necessitating that we interrogate the role of media on different
terms. Focusing on one dimension alone, to the detriment of others, risks missing a part of the puzzle. In adopting this multi-dimensional approach, the present study seeks to tackle the epistemological challenge of developing an analytical framework that allows for the assessment of media performance against normative ideas in a way that does not privilege one dimension over the others. I argue that this multi-dimensional approach allows for a more nuanced understanding of the role of news media in democratic public debate and is necessary to circumvent some of the difficulties of either structural or agential approaches.

2.2.1 Media as a forum

Public debate as envisaged within a deliberative democracy requires a forum for the articulation and exchange of ideas relevant to public life (Vos & Wolfgang, 2018). News media are tasked with providing such a forum that structures public debate, providing engaged citizens with coherent frameworks to identify, interpret and tackle complex issues (Curran, 2005; Norris, 2000; Schudson, 2003, 2008). They are also granted privileges and protections to allow them to fulfil these tasks (Felle, 2016; Oster, 2013; Tambini, 2010). As the extracts from The Guardian illustrate, newspapers have indeed provided the space for the urgent public debates about food production systems and societal challenges more generally. This example illustrates the expectation that the press provides both the site and the substance for these discussions, contributing the information and commentary to sustain, interpret and structure such debate. This structuring of public debate is at the heart of news media’s self-definition as the Fourth Estate (Schultz, 1998). The provision of information, investigation, interpretation, and analysis by news media is especially necessary regarding complex problems such as those inherent to food production. This necessity has grown with the heavy industrialisation within capitalist production systems that increasingly separate the production and consumption of food (Chiles, 2017). It is partly on account of this increasing disconnect and general lack of transparency that the information provided in and by news media about how food is produced, distributed, and consumed plays such an important role in shaping public knowledge and understanding about these complex issues (Broad, 2016; Lindenfeld, 2010).

Consistent with an understanding of power as context-shaping (Hay, 1997, 2002), such scholarship suggests that how these debates play out in, with, and through news media shapes the space of possibilities for subsequent action and responses to such complex issues. Hay (1997, 2002) proposes a conceptualisation of power that incorporates both context- and conduct-shaping forms. He defines power as the ability of actors to have an effect upon the context that defines the range of possibilities of others, whether in a direct (conduct-shaping) or indirect (context-shaping) form. This understanding of power as context-shaping emphasises power relations in which structures, institutions and organisations are shaped by human action. The question this understanding presents for a thesis such as this is whether the shape of the forum, newspaper coverage of chicken meat production, adequately supports the nature of public debate required by problems that
are ill-defined, ambiguous and contested, that are characterised by irreducible complexity, uncertainty, and that involve a variety of stakeholders with different and conflicting interests and values (Carcasson & Sprain, 2016; Rittel & Webber, 1973; Termeer et al., 2019; Termeer et al., 2015; Waltner-Toews, 2017).

### 2.2.2 Media as an actor

As the extract from The Guardian illustrates, news media do intervene in public debate and processes of governance as political actor fulfilling an expectation formed in the Fourth Estate. From this actor-oriented perspective, instances of journalism have led to the conclusion that the media act as “an independent watchdog, a monitor of unchecked power, a tribune of the people, a defender of the weakest, a fourth estate, a public sphere” (Fenton, 2019, p. 36). In this role as a Fourth Estate, news media are to champion and defend citizens against abuses of power, as well as to provide them with information that supports engaged citizenship. Independent – and especially investigative – journalism has even been hailed as the only hope for regular and reliable information about what those in power are doing (Bennett, 2016). From this perspective, freedom of the press is valuable to democracy inasmuch as the media can – and do – contribute to an enlightened understanding through the dissemination of information and support of healthy public debate (Strömbäck, 2008). Rather than just an end in itself, freedom of the press is seen as a means to a functioning democracy (Baker, 2006). It is partly on recognition of this that freedom of the press is enshrined in constitutions and laws the world over, and that laws and regulations grant special rights and privileges to the press to ensure that they can indeed safely perform those tasks (Felle, 2016; Tambini, 2010).

Journalists themselves share in this common understanding of journalism as a conduit for democracy, by facilitating public debate, being a force of public accountability, and providing the information and resources for citizens to better exercise their civil rights (Revers, 2017). From this dominant normative understanding, journalism plays the crucial role of acting as a watchdog on concentrated sources of power, holding both governments and corporations accountable for their actions, and – consistent with a liberal deliberative model of democracy – providing citizens with the information necessary to support rational decision-making (Hanitzsch & Wahl-Jorgensen, 2019). Journalists have been socialised to accept and internalise these normative expectations as benchmarks for good journalism (Hanitzsch & Vos, 2017; Vos & Wolfgang, 2018). Consequently, holding power and the powerful to account is part of what journalists say they do and what they consider their role to be (Hanitzsch, Vos, et al., 2019; Strauß, 2021). From this actor-oriented perspective, and considering that journalists appear to agree that their role includes holding power to account, it seems reasonable to ask to what extent their performance – as materialised in news texts – comports with expectations derived from this role; that is, to assess role performance against normative ideas.
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The question this understanding presents for a thesis such as this is whether the contribution of media speakers to the overall shape of the forum supports the nature of public debate required by such complex societal issues and, specifically, whether it is compatible with the expectation of journalism that holds power to account.

2.2.3 Media as a process

Finally, the media are also understood as a process of mediation, that is, a process of circulation, co-creation, and negotiation of meaning. This circulation of meaning is fundamentally social, historically specific, and politically economic. This conceptualisation of media as a process of mediation highlights how meanings emerge and change over time, where and with what consequences (Silverstone, 1999). This focus on meaning-making and circulation emphasises media as both shaping and shaped by society: changes in the media landscape are both cause and consequence of broader societal changes. From this perspective, journalism provides a substantial contribution to the process by which problems are defined, and thus play an important role in the social construction of meaning. From the recognition of this role of news media and journalism in meaning-making processes stems the rationale that underpins the belief that journalism matters because we believe it matters (McNair, 2003).

The question this understanding of media as a process of mediation presents for a thesis such as this is how meanings where negotiated, contested, and reproduced in, with and through newspaper coverage as forum for public debate about chicken meat production, how those meanings changed over time, and with what consequences. More specifically, the consequences that I am interested in is whether the dialectical meaning-making process effectively resulted in a structural shift in the terms of the conversation over time.

2.3. Framing as analytical tool

This research project uses framing as analytical tool to operationalise normative expectations in ways compatible with a multi-dimensional understanding of news media as forum, actor, and process, and in a manner consistent with an underlying conceptualisation of power as context-shaping. Framing provides us with an analytical tool to describe the structuring of public debate in newspapers and to assess the extent to which the patterns described comport with the normative expectations outlined in ways that support healthy public debate and processes of accountability in the case of wicked problems.

An understanding of framing grounded in problematisation is particularly relevant given the understanding of food production systems and mass animal production more generally as characterised by – or being themselves – wicked problems. Problem definition, agenda-setting and problem framing are recognised as important processes in policy and public debates more generally, not least because how a problem is defined or represented is closely tied to the (type of) solutions that are proposed (Bacchi, 2009, 2012; Head, 2019).
This becomes increasingly relevant in the case of wicked problems, precisely because they
defy a definitive formulation (Rittel & Webber, 1973). Substantive issue frames advance
particular ways of seeing or defining issues, and thus construct reality in a way that leads to
different evaluations and recommendations (Carragee & Roefs, 2004; Matthes, 2011). In this
sense, an understanding of framing sensitive to problematization speaks to the multiple
framings and interpretations that necessarily arise in public debates about wicked problems.

To this end, I used Entman’s seminal conceptualisation of framing: “To frame is to select
some aspects of a perceived reality and make them more salient in a communicating text,
in such a way as to promote a particular problem definition, causal interpretation, moral
evaluation, and/or treatment recommendation for the item described” (Entman, 1993, p.
52). This conceptualisation readily lends itself to the operationalisation of the news process
of defining the thematic categories around which public debates are organised, thus
allowing me to systematically describe how the framing of issues in newspaper coverage
shapes the range and quality of the arguments that inform public debate (D’angelo, 2002;
Kristiansen et al., 2021; R. A. Neff et al., 2009), at the same time shaping and shaped by
public opinion and so shaping the field that delimits subsequent action. Importantly, it
also allowed for an operationalisation of the normative expectations of news media in
democratic public debate of complex societal problems. In other words, I used the structure
provided by framing to translate the normative expectations derived from the theoretical
framework into a set of specific, operational expectations against which to contrast the data
and assess the extent to which described patterns of newspaper coverage comport with
the expectations, in a manner that is consistent with an underlying conceptualisation of
power as context-shaping.

Entman (2009) argues that a frame usually fulfils four functions: to define a problem,
identify a cause, endorse a solution, and make a moral judgment. In these research
project, I used these four functions as signalling framing elements. Incorporating insights
from identity framing, I further expanded on this basic framework by incorporating three
framing elements that speak to the framing of stakeholders relevant to the issue being
problematised: victims that suffer the harms or consequences of the problem, villains
who are identified as responsible for causing the problem, and problem-solvers who
are identified as responsible for solving the problem. Together, these framing elements
provided the thematic categories around which the public debate about chicken meat
production was structured.

Moreover, the analytical structure provided by framing facilitated the operationalisation
of the normative expectations in a way that allowed us to subject these to rigorous and
systematic empirical scrutiny. For instance, because these framing elements provide the
thematic categories around which the public debate is structured, we can derive concrete
expectations for what such structure might look like should newspaper coverage comport with the said expectations, and contrast those against the data. Similarly, this understanding of framing as grounded in problematisation – constructing something as a problem is, after all, the first function of a frame – is particularly suitable for the operationalisation of expectations related to accountability, if problematisation is understood as the first step in accountability as well (Maia, 2009).

2.4. The conceptual framework

The subsection presents the conceptual framework that guides this thesis (summarised in the conceptual map on Figure 1). In short, the argument can be summarised as follows: if we are to tackle and navigate the irreducible complexities, inherent tensions, uncertainties, and structural power imbalances of societal challenges such as those posed by global food production systems and corporate agribusiness in constructive and democratic ways, this requires that news media and journalism (1) provide the forum and the substance necessary to support such complex debates, as well as (2) facilitate and structure these debates in ways that support processes of accountability.

Earlier the overarching research question that drives this research project was formulated as:

> How well does newspaper coverage about chicken meat production in the UK comport with normative expectations as required to support sound public debate of complex societal challenges?

Based on the theoretical discussion, the following sub-questions can now be formulated:

1. to what extent does newspaper coverage about chicken meat production comport with the normative expectation of providing a forum for healthy public debate? (SQ1)
2. to what extent does newspaper coverage about chicken meat production support processes of accountability? (SQ2)
3. to what extent does newspaper coverage of chicken meat production support the kinds of public debate required to address wicked problems? (SQ3)
4. to what extent do newspapers hold corporate power to account in the case of the chicken meat production in the UK? (SQ4)

By addressing these questions this dissertation makes four theoretical contributions:

1. first, through further specification and operationalisation of these normative expectations,
2. in a manner that eschews received distinctions between structural and agential approaches and that speaks to a multi-dimensional understanding of media,
3. investigating an original and paradigmatic case within food production that, beyond its inherent empirical value and urgency, raises questions relevant to other complex societal challenges that can be characterised as wicked problems, and
4. allows me to put the focus on the accountability of corporate power.
General introduction

Journalistic roles

Ideal-type normative theories of the press
Fourth Estate, Social Responsibility

Non-ideal type theories

Forum for public debate and accountability

Key expectations for debates about wicked problems

Accountability

Operationalised through Framing

Framing

Wicked problems

News media as a forum for debate about wicked problems

News media as a mechanism for accountability

FIGURE 1 | Conceptual map of the research project.
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3. Methodological approach and thesis outline

3.1. Research design

To address the previous four research sub-questions, in a manner consistent with a multi-dimensional conceptualisation of media and consequent with an underlying understanding of power as context-shaping, the present research project used a two-stage framing analysis of a census of relevant articles.

The first stage of this research project consisted in a theory-guided inductive content analysis on a randomly chosen subset of the data. This was a long and exhaustive process, consisting of several rounds of engagement with the data, to facilitate intimate and nuanced knowledge of the many topics that came up in the dataset, and which were found to be subject to very different framings and interpretations. The subset of data was analysed in a series of iterative rounds, using the functions of frames as sensitising concepts. Using the qualitative analysis software Altas.ti, newspaper articles were analysed and coded in-vivo. This first analysis of the data generated an exhaustive list of thousands of specific framing elements that fulfilled the different functions of a frame – well beyond the point of saturation. A second step in this inductive content analysis was then to analyse these specific instances and group these into broader categories. This process consisted of several iterations of increasing abstraction. To strengthen the validity and reliability of the instrument and the results, several techniques were used throughout the research. I kept detailed memos of the coding procedure, including problems that arose, ambiguities, etc. I also included several moments of peer debriefing at each stage of the coding and thematic analysis of the resulting codes, both with members of the supervision team and peers that were not involved then in the supervision. The end product of this first stage of the framing analysis was a detailed list of over 300 individual codes, grouped into larger categories at several levels of aggregation.

The results of this inductive qualitative content analysis were then used to construct a detailed coding schedule. This coding schedule was then subjected to several rounds of piloting, to further enhance the validity and reliability of the analyses. Three separate, independent coders helped me code randomly chosen subsets of data to assess the inter-coder agreement. Initial rounds of coding included coding together, discussing the codes and the agreements and disagreements between coders. The feedback was used to further refine the coding scheme, eliminating codes that resulted in unreliable results, collapsing categories, adding examples or additional explanations for the coders when necessary. This process also included detailed memo writing and peer debriefing with members of the supervision team, peers and second coders.

The finished coding scheme was then used in a second stage of the framing analysis, which consisted in a deductive content analysis. The coding scheme was systematically
applied in a second stage of the analysis, in a deductive quantitative content analysis of the full dataset, in random order. The coding schedule allowed for the systematic analysis of a large, heterogeneous dataset at different levels of aggregation, including a longitudinal analysis. The highly detailed and comprehensive structure of the coding scheme allowed for the same instrument to inform four separate empirical studies. For each study, I derived a set of concrete, operational expectations from the theoretical framework, which were testable using the analytical instrument, thus allowing for the examination of the extent to which empirically described practice corresponded with the normative expectations.

The integration of insights from two research methods, however, goes beyond the use of the inductively generated codes in quantitative deductive content analysis. Inductive qualitative content analysis allowed me to inductively identify the different framing elements that make up the frames, and that form the thematic categories around which public debate is structured. Though this inductive approach is time consuming, it allowed for the categories to emerge from the text itself, thus limiting the bias introduced by pre-determined categories. Moreover, an inductive qualitative approach allowed me to immerse myself in the data, allowing for rich, nuanced and detailed analysis. In contrast, deductive quantitative analysis allowed for the systematic examination of a large dataset in a rigorous and reliable manner, and lends itself to the systematic analysis of long-term changes and trends in media coverage (Hansen, 1998). The combination of these two approaches allowed me to balance the depth, richness and nuance of inductive qualitative analysis with the methodologic rigour, prescriptions for use and systematicity of deductive quantitative analysis (Hansen, 1998).

In an effort to enhance the replicability and reliability of this research project, the methodological instrument and dataset have been made publicly available via a data repository: https://doi.org/10.17026/dans-xuq-ve6a. Given access to the LexisNexis / Nexis Uni (and access to private archives for a small set of articles that were not included in the LexisNexis database at the time of data collection), it should be possible to replicate the data search with the search string used, and to apply the aforementioned inclusion criteria to end up with broadly the same dataset for the present study. Because this research project worked with the census rather than a sample of relevant articles, the replication of the dataset should be more straightforward. Similarly, as the complete coding handbook has been made publicly available, replication of the coding procedure for the deductive quantitative content analysis that constituted the second stage of the framing analysis conducted for this research project is feasible.

3.2. Data collection and analysis
The dataset used in this research project consist of a census of relevant newspaper articles published in seven major national circulation newspapers. These outlets still maintain a key position in the mediation of political debate, and continue to be important political,
public and inter-media agenda-setters (Curran, 2019; Cushion et al., 2018; Djerf-Pierre & Shehata, 2017; Feindt & Kleinschmit, 2011; Harcup & O’Neill, 2017; Harrington et al., 2012; Langer & Gruber, 2020); they are important sources of public knowledge (Antilla, 2005), and can be used as indicators for more general trends in journalism (Kepplinger, 2002). Moreover, though they are but one of many sources of information available in today’s high choice media environments, nationally and globally recognised newspapers – such as The Guardian – continue to play a critically important role in the framing of social issues; therefore, the study of output from these outlets can serve as a helpful proxy to gain insight to broader discourses (Chiles, 2017).

Working with a census rather than a sample of relevant articles strengthens the validity of the present research. In other words, this dissertation analysed all the articles about chicken meat production that were retrieved with the search string developed to this end. The dataset included 766 articles published over a period of 31 years and across seven of the highest circulation outlets in the UK: The Express, Financial Times, The Guardian, Daily Mail, The Mirror, Daily Telegraph and The Times. These outlets were selected to include a range of formats and target audiences from across the political spectrum. Taken together, these characteristics of the research design and dataset strengthen the external validity of the conclusions that can be drawn from these findings. It would be reasonable to expect that these findings are generalisable to other news outlets in the UK, particularly other newspapers.

3.3. Outline of the thesis

The present research project constitutes a single case study chosen for its paradigmatic character (Flyvbjerg, 2006), but is organised in four separate empirical studies that build on the same analytical instrument and use the same initial dataset or a subset thereof. Each study broadly tackles one specific sub-question, though some findings contribute to answering more than one specific question. Figure 2 illustrates the relation between the empirical chapters and the research sub-questions, as well as the main theoretical perspectives that inform each study. As mentioned in previous sections, this dissertation has focused on two core normative expectations, each tackled in two empirical studies.

Chapters 2 and 3 focus on the normative expectation of news media in providing a forum for and facilitating public debate. Though both empirical studies include a longitudinal framing analysis, they emphasise a different understanding of media. Chapter 2 takes a perspective consistent with the understanding of media as a forum and a process of mediation, and thus takes a more structural approach. This first empirical study uses the complete data set, including all speakers, and looks for structural shifts in the conversation and the overall shape of the forum, to tackle the first sub-research question (SQ1), regarding the extent to which newspaper coverage about chicken meat production provided a forum for healthy public debate. Building on a theoretical framework grounded on the notion of the Fourth Estate, and complemented with insights from normative theories of the press
and journalistic roles literature more broadly, I developed five concrete expectations that were subjected to empirical scrutiny. I argued that the notion of the Fourth Estate embeds clear expectations for the behaviour of newspapers. According to these expectations, we would expect to find evidence of conflict and contestation, structural problematisation, systemic contestation, systematic connections linking specific issues to each other and to broader structural issues, and, finally, we would expect a structural shift in the terms of the debate.

In contrast, Chapter 3 explicitly introduces the concept of wicked problems to further specify the requirements of that public debate, and thus tackles the third sub-research question (SQ3). This chapter takes a more actor-oriented approach and, consistent with the understanding of media as actor, looks at the contribution of media speakers to the overall shape of the forum, particularly with regards to whether or not this contribution supports an opening-up of the debate, as required to address wicked problems. Therefore, Chapter 3 works with a subset of data, comprised of articles covering the outbreak of the highly pathogenic H5N1 strand of avian influenza between 2004-2007, and includes only those statements made by media speakers. Chapter 3 builds on the theoretical framework developed for Chapter 2, but expands on this by incorporating insights from the wicked problems literature, articulating the requirements that ill-defined problems pose for public debate. Following a similar approach to that of the previous study, I developed a series of expectations, that were contrasted against empirical data. I argued that, if media speakers were comporting with the normative expectation of providing a forum for and supporting a healthy public debate about wicked problems; we would expect coverage that reflects the interconnections and mutual entanglement that characterise wicked problems by connecting specific problems to each other and to broader structural issues, we would expect coverage that reflects the systemic roots of wicked problems and their mutual entanglement, by including structural problematisation and systemic contestation; and finally, we would expect coverage that supports an opening-up rather than a closing-down of the debate.

Chapters 4 and 5 focus on the role of news media in providing a forum for and facilitating processes of accountability. Where the first two empirical chapters build more strongly on issue framing, the focus here is rather on the attribution of responsibility, building on insights from identity framing. Chapter 4 takes again a more structural approach, looking at the role of news media as forum for accountability, and enquires into the shape of this forum and the extent to which it is conducive to processes of accountability (SQ2). Consequently, this study again includes the entire dataset in the analysis. To subject the expectation of newspapers as providing a forum to support processes of accountability to empirical scrutiny, this study builds on theoretical insights from journalistic roles literature and, more specifically, from the critical-monitorial roles (watchdog journalism), which are complemented with insights from public accountability literature. Using the structure provided by framing, this study introduces an analytical framework that decomposes
accountability into problematisation, causal interpretation, and attributions of causal and treatment responsibility and victimhood.

Chapter 5 focuses specifically on the expectation of news media holding corporate power to account. Consistent with a more actor-oriented approach, this study includes a subset of the data comprised of statements by media speakers only, and tackles the fourth and final sub-question, which enquires into the extent to which newspaper coverage is compatible with holding corporate power to account. Chapter 5 articulates the chicken meat production industry as a defensible empirical proxy for corporate power. This fourth and final empirical study builds on the analytical framework presented in Chapter 4, and derives a set of concrete expectations that are subjected to empirical scrutiny. I argue that, if media speakers’ behaviour is consistent with holding corporate power to account, we would expect to find that they problematise the industry, constructing it as both the problem and the cause of the problem. More importantly, we would expect that this problematisation also translates to attributions of both causal and treatment responsibility, suggesting a recognition of the industry as liable to be held accountable.
These four empirical chapters are followed by Chapter 6, which brings together the findings presented in the four preceding chapters to provide an answer to the overarching research question. This concluding chapter also includes a discussion of these findings in the broader societal and scientific context, a methodological reflection, overarching conclusion and some closing remarks.
Chapter 2

The chick diffusion: How newspapers fail to meet normative expectations regarding their democratic role in public debate

This chapter is published as:

Media scholarship has commonly regarded newspapers as an essential element of strong democratic societies: a forum that structures public debate, providing engaged citizens with coherent frameworks to identify, interpret and tackle complex issues. Despite general agreement on the merits of this goal, there is little empirical evidence suggesting it approximates the democratic role historically played by newspapers. We examined three decades of newspaper coverage of chicken meat production in the UK to find evidence relevant to the normative expectations of the democratic role of newspapers as forum for public debate, by means of a two-stage framing analysis of 766 relevant articles from seven outlets. We found mutually disconnected episodic coverage of specific issues whose aggregate effect is consistent with the diffusion rather than the structuring of public debate. Newspapers here afforded polemic rather than the systemic contestation expected. The polemic contestation we found, with diffusion of public debate as an emergent political effect, troubles the assumptions subsequent to which it is possible to argue for the democratic role of newspapers.
1. Introduction

The public sphere is fundamental to strong democratic societies (Dewey, 1927; Habermas, 1991). As Fenton (2013, p. 175) explains, the news media are central to the public sphere insofar as they contribute to information gathering, deliberation, and action. Newspapers were a preeminent institution and remain an important forum (Habermas, 1991). Through newspapers, citizens inform themselves, learn the terms on which they make sense of their world (McNair, 2003), debate different perspectives (Curran, 2005) and construct public conversation (Schudson, 2003). Newspapers are expected to provide useful, reliable, and amusing information (Coleman et al., 2012). Journalists accept these normative constructions as benchmarks (Vos & Wolfgang, 2018) and they justify the legal protections afforded them.

While there is general agreement that newspapers support vigilant citizenship, we lack evidence that newspapers have historically discharged this role (Schudson, 2005). Since newspapers are recognized as exemplars for the media fulfilling roles fundamental to healthy democracy and as key in the media landscape (Djerf-Pierre & Shehata, 2017; Harcup & O’Neill, 2017), scholars are obliged to test the foundations of that recognition.

In this study, we responded to calls for research that tests dominant assumptions (Bennett & Livingston, 2018; Bennett & Pfetsch, 2018; Pfetsch, 2018). We undertook to describe the extent to which newspapers conduct themselves in a manner that is consistent with normative expectations recognized as the Fourth Estate. We chose to undertake this study in the United Kingdom, where those expectations were formed, over a timeframe (31 years) that made it easy to detect newspapers’ performance, and on an evidence-rich politicized but non-partisan topic subject to public contestation that could reasonably be expected to be reflected in newspaper coverage – chicken meat production. We chose to focus on the role of the newspapers in shaping the terms on which citizens make sense of their world. We tackled this objective through a two-stage analysis of the framing found in newspapers about chicken meat production. Our data were 766 relevant articles from seven national circulation outlets, published between 1985 and 2016. We described the extent to which the observable behaviour provides the coherent frameworks of interpretation (Schudson, 2008) required for citizens to take part in the meaningful debates fundamental to the navigation complex problems (Bennett & Pfetsch, 2018) in a manner that facilitates the structural and systemic contestation (Bennett, 2003; Fenton, 2018; Freedman, 2014) necessary for their successful resolution.
Chapter 2

2. Literature review

2.1. Conceptualising newspapers as a forum for public debate

Most studies start from the assumption that the news media should provide information that supports engaged citizenship. There is little empirical evidence suggesting the news media have historically played this role (Schudson, 2005). Media scholars, therefore, have called for research that tests assumptions, and that describes the role, if any, of newspapers in democratic politics (Bennett & Pfetsch, 2018; Pfetsch, 2018). These scholars now often focus on ‘disrupted public spheres’ (Bennett & Pfetsch, 2018, p. 245) or what has been described as changing or pluralizing media landscapes or environments (see e.g. (Bennett & Iyengar, 2008; Bennett & Livingston, 2018; Blumler, 2018; Djerf-Pierre & Shehata, 2017)). Authors suggest that we are seeing an emergent disinformation order, characterised by divided, disrupted, dissonant and disconnected public spheres, developments which challenge assumptions about coherent, functional, systemic democratic public spheres (Bennett & Livingston, 2018; Bennett & Pfetsch, 2018; Pfetsch, 2018). They call on media scholars to problematize and rethink long-held assumptions grounded in idealized normative conceptions of democratic politics. Ytre-Arne and Moe (2018) suggest we need more empirical research that questions these underlying assumptions. As exemplars, we argue, broad-sheet newspapers warrant particular attention.

2.2. Normative expectations of newspapers

To derive expectations adequate to test our data, we build on insights from three influential theoretical perspectives: Fourth Estate, journalistic roles and public interest obligations of journalism. We emphasized the expectations synthetic to the Fourth Estate given the weight of this body of thought in subsequent discussions. This section introduces these perspectives and how we incorporated their expectations in our research.

Much of our thinking about the democratic role of news media in general and newspapers in particular\(^2\) derives from what Curran and Seaton (2002) call a political mythology, steeped in liberal orthodoxy (Curran, 2005, 2011). Many of our expectations about role of news media in democratic societies are encapsulated in the Fourth Estate\(^3\). Despite diverse interpretations, the Fourth Estate consistently holds that news media play the essential and political role of affording a mechanism through which the public hold the powerful to account (Schultz, 1998). Moreover, the structuring of public debate is at the core of news media’s self-definition as the Fourth Estate (Schultz, 1998).

In the late twentieth century, the Fourth Estate became closely associated with watchdog journalism (Schultz, 1998). In this line of argument, informed citizens are crucial

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\(^2\) ‘Media’ was then the printed press, primarily newspapers and journals (Curran, 2011).

\(^3\) As Schultz (1998) explains, the meaning given to the Fourth Estate has changed over time but consistently includes ‘holding the powerful to account’. For further reference, see Schultz (1998).
for democracy (Aalberg et al., 2010) and journalism plays a special role by reporting the news of the day, checking abuses of power, and providing a forum for the exchange of ideas relevant to public life (Vos & Wolfgang, 2018). Newspapers also provide coherent frameworks of interpretation to help citizens comprehend their complex world (Schudson, 2008) and a forum for public debate in which we can identify those problems and arrive at solutions (Curran, 2005).

However, there is evidence that news media are not a Fourth Estate (Curran & Seaton, 2002; Fenton, 2010a). In particular, they may not be a watchdog (Hackett, 2005; Hallin & Mellado, 2018). Studies question the quantity, quality, and accessibility of the political information provided by newspapers, as well as the expectation that they provide citizens with the substantial, factual and diverse views that are necessary for informed public debate (Curran, 2005; Schudson, 2005; Van Aelst et al., 2017). Further, newspapers may not facilitate structural and systemic critique and contestation (Bennett, 2003; Fenton, 2018; Freedman, 2014) or hold those in power to account.

Christians et al. (2010, p. 30) summarize the various ideas about media roles in democratic societies: they provide information and commentary, a forum for diverse views, a two-way channel between citizens and government, and act as a watchdog. In addition to providing truthful information, news media in particular are expected to be a forum for the exchange of comment, criticism, and public debate, as well as to develop a representative picture of the different groups and positions in society (Topić & Tench, 2018). Drawing on empirical studies, Schudson (2008) proposed a list of six (or seven) functions that journalism has frequently played in democratic societies, and which could also provide the basis for normative expectations and assessments. He argues that journalism serves democracy by providing fair and full information to citizens, by investigating concentrated sources of power, by providing analysis and coherent frameworks of interpretation to help citizens make sense of a complex world, by exposing citizens to the views and experiences of others, by providing a public forum for dialogue, and by serving as advocates for mobilization for particular political programs (Schudson, 2008, p. 12).

Print journalism and newspapers, in particular, are thought to have a ‘civic role’ in which they facilitate citizen participation and deliberation (Hallin and Mellado, 2018). However, empirical studies investigating newspaper coverage of party and electoral politics, governmental policies, or social movements (Bennett & Entman, 2001) have found little supporting evidence. Hallin and Mellado (2018), for example, found that media coverage of problematic issues quickly dissipates, that individual issues were not linked to policy, that higher level power was not held accountable and wider structural forces were ignored. Some scholars argue, with critical media studies (McNair, 2003), that such coverage benefits those best served by public silence (Djerf-Pierre & Shehata, 2017).

The Fourth Estate embeds clear expectations for the behaviour of newspapers. We would expect to find sufficient, substantial and varied information that included a variety of
voices and positions adequate to support a healthy public debate, a role which is central to news media’s self-definition as Fourth Estate (Schultz, 1998). If newspapers indeed “provide a forum of debate in which people can identify problems, propose solutions and reach a consensus” (Curran, 2005, p. 129), we would expect coverage reflecting the conflict and contestation present in scientific debate and other media outlets. Furthermore, if newspapers were providing the site and substance for meaningful public debate in fulfillment of the watchdog journalistic role (Bennett & Serrin, 2005; Hackett, 2005), we would expect such public debate to frequently refer to structural elements in a manner required to support systemic contestation and being a check on the abuse of all sources of power, in the private and public realms (Curran, 2005) and at specific and systemic levels. Similarly, we would expect journalism that ‘connected the dots’, consistently linking specific and individual problems to broader structural issues, providing coherent frameworks of interpretation to help citizens comprehend a complex world (Schudson, 2008). Building on Hay’s (1997) understanding of power as context-shaping, if indeed newspapers were functioning as a forum for public debate and allowing or partaking in systemic contestation, we would expect that, over time, the terms of the conversation effectively changed, shaping and shaped by the debate and contestation. In other words, we would expect a structural shift in the terms of the debate, which reflected the changes in the context in which actors engage in public debate and contestation in, with and through newspapers, as well as the changes in the media landscape and in chicken meat production itself. In the methodological section, we operationalize these expectations.

2.3. Between structural and actor-oriented approaches

There are both actor-oriented and structural approaches to study the democratic role of journalism and news media. An actor-oriented perspective takes interest in examining if and how actors provide insight into questions about the role of newspapers as a forum for public debate. However, as critics of the excessive behaviouralism of such actor-oriented approaches have pointed out (Hay, 1997), embedded actors are constrained in their ability to comment meaningfully on their own constitutive structures. Moreover, asking questions of media actors regarding their role demands the improbable assumptions that they are able to objectively provide such accounts, that individual level results speak to emergent collective characteristics, and that the collective consequences of their individual behaviour are in some way coherent.

From a structural perspective, the focus on structural social relations usually translates into descriptions of the function of the media in contributing to the preservation of the dominant ideology and power relations (Van Aelst et al., 2008). Critique of structural approaches highlights their neglect of the agency of actors who, they argue, actively engage and contest the information provided, as well as the ideological rivalry and contestation (McNair, 2003), particularly in today’s high choice media environments. Furthermore, the structural approach to journalism’s function as social reproduction has run into serious
methodological difficulties (McNair, 2003), not least with regards to demonstrating such political effects and establishing causality.

Given the challenges faced by previous research that adopted received distinctions between structure and agency, scholars have called for research that challenges these divisions (Fenton, 2010a). Our challenge was to develop a structural understanding of the role of newspapers that could query the presumption of their coherence as an actor while circumventing narrow assumptions of humanist agency. The path we chose was to select a strategic case within which we would describe the mechanics of the process of public debate in, through and with newspapers, and then to discuss the implications of our empirical findings for our understanding of the role of the newspapers in such processes.

2.4. Framing as tool for the analysis of public debate

We analyse the structuring of public debate through the construct of framing, understood as “the process by which all political players define and give meaning to issues and connect them to a larger political environment” (Callaghan & Schnell, 2001, p. 185). We work with an issue-specific understanding of framing in which an issue or event is first identified and only then can a frame in communication be defined in relation to such a specific issue, event or actor (Chong & Druckman, 2007, p. 106). This understanding of framing requires a focus on problematization (Bacchi, 2009) that fits our expectation of newspaper coverage. By constructing something as an issue – that is, by defining it as a problem that should be addressed and solved – framing is also about contestation. Moreover, because nontrivial reality supports heterogenous interpretations, issues are susceptible to more than one framing (Entman, 2007). Different and sometimes conflicting interests, perceptions and interpretations predict different and sometimes conflicting framings.

Framing itself has become reified “to the point that we are studying the concepts more than using them to clarify political realities” (Bennett & Pfetsch, 2018, p. 250). Therefore, instead of conducting framing analysis under assumptions of framing effects or frame-building and frame-setting processes, we use the structure provided by framing to examine the extent to which practice corresponded with the normative assumptions suggested by the Fourth Estate. For this purpose, we used Entman’s conceptualisation of framing: “To frame is to select some aspects of a perceived reality and make them more salient in a communicating text, in such a way as to promote a particular problem definition, causal interpretation, moral evaluation, and/or treatment recommendation for the item described” (Entman, 1993, p. 52). Furthermore, to allow for a more detailed analysis of the framing of the issue and of the identity of the stakeholders involved, we built on identity framing (Dewulf et al., 2009) and incorporated the framing of identities in a manner that speaks to the framing of issues with a particular focus on problematization, through framing elements that refer to the victim suffering the consequences of this problem, the villain responsible for causing the problem, and the problem-solver who should bring about the solution to the problem.
This conceptualization of substantive issue framing is particularly useful because it provides clear guides for the operationalization of framing as analytical tool for this study. Using Entman’s definition of framing to operationalize the news process of defining the thematic categories that organize public debates (Bennett & Pfetsch, 2018) is especially suited to the goal of the present study to test normative expectations about the role of newspapers as forum for public debate in which people can identify problems and their respective causes, propose solutions and reach a consensus (Curran, 2005).

The research question around which our study was structured is:

**To what extent did newspapers’ behaviour meet normative expectations regarding their role as a forum for the public debate in the case of chicken meat production in the UK?**

### 3. Methods

#### 3.1. Case selection

To investigate expectations arising from the Fourth Estate regarding the role of newspapers in public debate, we conducted a systematic, longitudinal and in-depth analysis of newspaper coverage of chicken meat production in the UK over three decades. We selected the UK and newspapers as those outlets in that nation are the context in which the normative expectations we have of news media were shaped. Despite changes in the media landscape over the past decades, newspapers remain important agenda-setters (Djerf-Pierre & Shehata, 2017). In spite of falling circulation figures for printed exemplars (Curran & Seaton, 2002) and predictions of their imminent demise, newspapers continue to have wide reach (particularly on account of their online platforms), break major news stories, and influence other media (Harcup & O’Neill, 2017). UK newspapers are exemplars in shaping expectations of news media more generally. As a liberal media system (Hallin & Mancini, 2004), the UK displays several characteristics that are increasingly common around the world, including predominantly commercialized newspapers with concentrated ownership. The UK has a highly professionalized news media, and a rich diversity of newspapers from varying qualities and different political inclinations, catering to a variety of readerships. Finally, we focus on newspaper coverage in the UK because it provides readily available longitudinal data, including elite or ‘quality’ outlets4 from different political inclinations that are thought to have a proven track record of watchdog journalism.

Most of our peer studies have focused on ‘political information environments’, topics proximate to political power: party and electoral politics, governmental policies, or social movements, as illustrated by anthologies on mediated politics (Bennett & Entman, 2001), politics, media and democracy (Swanson & Mancini, 1996), or mediatization (Esser &

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4 Outlet here refers to a specific newspaper, such as The Guardian or Daily Mail.
Strömbäck, 2014). Research on these highly politicized topics has not provided supporting evidence for the conditions necessary for the normative expectations of the Fourth Estate to hold. Studies point to news media organizations’ strong incentives to influence media coverage in their own interest in topics related to media policy and regulation, for example (Ali & Puppis, 2018; Freedman, 2014). Some even argue that it is always in the media’s interest to legitimize, naturalize or institutionalize their own authority (Freedman, 2014). Under such conditions, normative expectations such as those of the Fourth Estate would be untenable.

There is comparatively less empirical research on the role of newspapers in public debate about topics outside of the traditional press/politics arena, where the conditions for such normative expectations might differ. Agricultural animal production provides us with a topic that is content rich, socially relevant and with high news value: “Today, industrial-scale animal production represents a central aspect of this food system, one that is the site of significant contestation on account of its social, environmental, public health, and ethical implications” (Broad, 2016, p. 44). Food production in the UK in particular has become a highly charged issue with high stakes in terms of public health, food safety and quality, economic demands in a highly competitive global market, social and environmental sustainability, and consumer confidence (Jackson et al., 2010).

Since the introduction of the first broiler5 shed in the UK in 1953, broiler production has grown into a highly intensive and concentrated industry that epitomizes the recent industrialization of agricultural production (Jackson et al., 2010). In 2018, an estimated 1,137 million chickens were slaughtered in the UK, amounting to an estimated value of production of £2,076 million (DEFRA, 2019). All four stages of the British chicken meat supply chain – breeder farms, hatcheries, growers, and processors – as well as the retail, are dominated by relatively few economic actors: while three breeder companies provide the poultry genotypes, more than 70% of fresh chicken is sold through the four largest supermarket chains (Jackson et al., 2010).

Like other animal-based production systems, broiler production has been criticized for animal cruelty (Duncan, 2001), environmental impact (Leinonen et al., 2012), use of antibiotics as growth promoters (Morris et al., 2016), and foodborne pathogen contamination (Boyd, 2001). From salmonella to campylobacter (Meldrum & Wilson, 2007) and outbreaks of highly pathogenic avian influenza (Leibler et al., 2009), chicken meat production has also been at the centre of agro-food crises – like BSE for beef, or foot-and-mouth disease for cattle (Loeber et al., 2011) – that illustrate the high news value of public health concerns. Nonetheless, chicken meat production and consumption have been on the rise (Parrott & Walley, 2017), with broiler production in the UK more than doubling between 1976 and 2016 (FAO, 2018).

5 Chickens used for meat production are called broilers to distinguish them egg-laying chickens.
We know that chicken meat production has been structurally and systemically contested, as exemplified by recent studies regarding the ecosystems and economics of avian influenza (Leibler et al., 2009), the links between food systems and industrial animal production in particular and anthropogenic climate change (Kiesel, 2010), the systemic oppression of non-human animals (Almiron et al., 2018), or the negative correlations between animal welfare, environmental emissions, and farmers’ future prospects in current broiler production systems (van Mierlo et al., 2013). This contestation is also present in popular television shows such as celebrity chefs Jamie Oliver’s and Hugh Fearnley-Whittingstall’s series denouncing the horrors of factory farming.

This shows there is a rich debate about broiler production systems, both in scientific and non-scientific circles. Building on this evidence, we argue that chicken meat production provides us with a strategic case study where there is already evidence of public debate and contestation that could reasonably be expected to be reflected in newspaper coverage. Since there are no known strong corporate ties between newspapers and chicken meat production companies, we would not expect the kinds of silences that other authors have found for cases in which news media have a vested interest, such as media policy and regulation (Ali and Puppis, 2018). Chicken meat production in the UK provides a strategic case study because it meets the conditions under which we might reasonably expect the newspapers to provide the arena for contestation along the lines of the implications derived from the normative expectations of the Fourth Estate.

3.2. Data collection
Our dataset consisted of relevant newspaper articles from seven high circulation, national newspapers in the UK that were published between 1985 and 2016. We recognized that longitudinal research was necessary in order to test expectations of influence since debates over key issues unfold over years or even decades. Consequently, our data goes as far back as 1985, just before the Wapping revolution (McNair, 2003). Data before that year is not archived in LexisNexis for several of the outlets included. Our study included output from Daily Mail, Daily Mirror, The Daily Telegraph, The Express, The Times, Financial Times, and The Guardian. These outlets have different editorial perspectives and formats, and cater to a wide variety of audiences. We included a diversity of outlets to minimize the bias of each individual paper in the overall sample, while maintaining the possibility of analysing the data by outlet. The final search string used to retrieve articles was designed, piloted and refined to recall the highest number of articles related to chicken meat production (excluding recipes, for practical reasons) using LexisNexis. The search string was iteratively refined through a set of inclusion and exclusion criteria, such that our initial result of 2650 articles was reduced to a dataset of 766 articles. A fuller description of the data collection and curation processes, including the selection of these particular outlets and the limitations imposed by these methodological decisions, is provided in Appendix A.
3.3. Operationalisation of analytical framework

We used Entman’s four functions of frames as a theory-informed coding structure that allowed us to identify those framing elements in texts: problem, cause, solution, and judgment. We complemented these with framing elements referring to the identity of stakeholders: victim, villain, and problem solver. Together, these framing elements allowed us to describe how the topic is framed and constructed as an issue, and how these issues then become the main thematic categories around which public debate is organized. Because these frames are thought to structure public debate (Callaghan & Schnell, 2001), and because this structuring is only detectable over time, we conducted a longitudinal analysis to see if and how framing changed over time.

We operationalised our set of normative expectations through five concrete expectations for our specific case of study and dataset. The expectation of conflict and contestation was operationalised as frequency counts of mentions throughout the period of a diversity of topics problematized in different terms and at various levels, reflecting contestation of both specific and broader, structural issues. The variable used to test this expectation is that of the issues being problematized, such as avian influenza, foodborne illness, the use of antibiotics, or global trade.

The expectation of coverage that makes connections across specific issues and to broader societal issues was operationalised as frequency of co-occurrence of the values for the issue variable, reflecting consistent mention of both issues in the same statement. Issue co-occurrence frequencies count the mentions of pairs of issues in the same statement, such as a statement that mentions both animal welfare and foodborne illness issues. If speakers are consistently and systematically making connections between two issues, these would commonly be mentioned in one statement, and their co-occurrence frequencies would consequently be high relative to the frequency with which each issue appears in our dataset. We can thus use co-occurrence frequencies and coefficients as a proxy for consistent and systematic links or connections across issues.

The expectation of systemic contestation was operationalised as systemic references included as values for four framing elements variables: Cause, Solution, Action for Solution, and Villain. The variable ‘Causes’ includes references to the production system, or to systemic or structural elements as causing the problem. Examples of such systemic references include commodification, industrialization, intensification of food or agricultural production, and factory farming in general. The ‘Solutions’ variable includes references to the transformation of the production system as the solution for a problem, such as changes to the food production, mass animal production, or agricultural production systems. The ‘Actions for Solutions’ variable includes references to solutions that are achieved through transformative changes at the systemic level, such as transforming the food production system, banning indoor production systems, or boycotting factory farming or large-scale production systems. Finally, the ‘Villain’ variable includes references to the system as
responsible for causing the problem, such as the capitalist system, food production system, mass animal production system, or agricultural production system, for example.

The expectation of structural problematization was operationalised as the identification of a systemic cause for more than one issue, and tested through co-occurrence of systemic causes and multiple issues. To analyse if several narrower and more specific issues were effectively being linked in the discussion in a way that supported broader structural problematization, we operationalised the structural problematization as the identification of systemic causes for more than one issue: when several issues were framed as being caused by systemic causes, we interpret that as evidence of structural problematization. An example of this structural problematization from our data links animal welfare and human health problems to a structural factor of intensive factory farming.

The expectation of a structural shift in the framing and problematization of chicken meat production was operationalised as longitudinal trends in the relative frequency of the use of framing elements.

### 3.4. Framing analysis

Our units of analysis were explicit and discrete statements, understood as a continuous utterance by the same speaker(s). In some cases this was an entire article while in others it was dependent clause within a sentence. We examined 7227 statements through a two-stage framing analysis: first, a theory-driven inductive stage, followed by a second and deductive stage. Following Chong and Druckman (2007), we first identified the topics that were being problematized, and then used the functions of a frame to extract the specific framing elements from the text. Working with a subsample of 200 articles, we conducted in vivo coding in Atlas.ti to identify specific examples of each of these framing elements in these articles. Through an iterative process of increasing abstraction, we constructed broader categories from these specific values of the framing elements. These broader categories formed the basis for our coding scheme: a set of variables and their respective values and codes to guide the deductive coding for our framing analysis. After several rounds of piloting and refining with three separate independent coders, the coding scheme was used to elaborate a complete coding handbook that included detailed instructions for the second stage.

The second stage of our framing analysis was a deductive content analysis of the full dataset. Two independent coders systematically applied the codes as established in the coding handbook to the 766 articles (in random order). The results from this deductive content analysis were exported to SPSS and Excel, transforming the codes applied into frequency counts for each value per variable and thus facilitating descriptive longitudinal analysis.

To calculate inter-coder agreement (ICA) using Atlas.ti, two independent coders applied the coding handbook to a random subsample of 80 articles. Even though this subsample
represented 5% of the total dataset, the multiple specific issues subject to different framings, implied that some values did not come up during ICA tests, which impeded computation of their ICA values. The ICA scores for individual codes therefore vary from 0 to 1. To increase internal validity of our results under these circumstances, the first author coded over 80% of the dataset, and reviewed the coding done by the second coder. Furthermore, when there was doubt, we erred on the side of caution, meaning that we only coded what was explicitly mentioned in the text. Atlas.ti’s built in Krippendorff’s c-Alpha-binary agreement coefficient analysis tool yielded a score of 0.917 for all codes used in the ICA subsample. Admittedly, this is an unexpectedly high inter-coder agreement result, owing mostly to the way in which Atlas.ti calculates inter-coder agreement, which only takes into account those codes that were applied in the coding of the material, and excludes those that were not applied. As mentioned above, the size and complexity of our coding scheme, coupled with the length and breadth of our dataset, resulted in some codes not coming up in the subsample of data used for ICA testing. Since Atlas.ti excludes these from the calculations, the reported score is therefore unexpectedly high.

4. Results

The following section presents the main results of our study, structured along the lines of the five concrete expectations outlined above.

4.1. Frequency and distribution of issues

We found a wide variety of topics being framed as problematic, and thus constructed as issues. This indicates that issues regarding broiler production were not silenced, and that the diversity of perspectives over time required for the emergence of contestation is present. From the specific examples found in the news texts, we constructed sixteen categories of issues: adulteration, alternative agriculture, animal welfare, antibiotics, avian flu, cheap chicken, chicken meat industry, consumption, economics, foodborne illness, global trade, information, policy and regulation, work and employment, food preparation, and other (for a more detailed overview of the issues included in each category, please see the Appendix A).

We found that the relative frequency with which these issues were discussed in the newspapers varied not just across issues, but also within each issue – to different degrees (Figure 3). For example, the issue of avian influenza generated by far the most coverage, but the coverage was concentrated between 2003-2007, reflecting the re-emergence of the highly pathogenic H5N1 and its spread from Asia to Europe. By contrast, the broiler industry and its practices were problematized far less often but more consistently over time. This indicates that newspaper coverage about chicken meat production varied over time, not just in terms of overall frequency with which the topic was discussed in the new, but also in terms of the particular issues problematized and discussed.
FIGURE 3 | Frequency distribution of issues mentioned per year.

4.2. Co-occurrence of issues

We found that while some statements did mention more than one issue, these mentions were not consistent (Table 1 and Table 2), and we did not find systematic links between issues at the level of statements. Table 1, which presents the statement-level co-occurrence frequency between issues, shows that the frequency counts are well below 50, except for three pairs of issues. Issues do not seem to consistently appear together in the same statement in a manner that would support their linking.

We used the absolute frequency counts of these issues to contextualize co-occurrence and provide a clearer picture of the relative frequency of each pair of issues in our data. Table 2 summarizes the co-occurrence coefficient calculated using Atlas.ti. The correlation coefficient, $c$, is calculated as $c = n_{12}/(n_1 + n_2 - n_{12})$, where $n_1$ and $n_2$ are the frequency counts of codes $c_1$ and $c_2$, and $n_{12}$ is their co-occurrence frequency. Co-occurrence coefficients therefore range from 0 (codes do not co-occur) to 1 (codes co-occur wherever they occur). In our dataset, only two co-occurrence coefficients were above 0.05, with the exceptions being the codes for animal welfare issues and industry issues, and those for policy issues and global trade issues. This means, for example, that broiler industry issues, which were mentioned 616 times in our dataset, appeared 122 times in the 418 statements discussing animal welfare. This co-occurrence results in the highest co-occurrence coefficient in our dataset (Table 2) and indicates that these were the two issues that were mentioned in the same statement most often. The second highest co-occurrence frequency is 0.06, between the global trade and policy issues. In this case, global trade issues, which were mentioned in 383 statements, appeared in 37 of the 317 statements that mentioned policy issues. By contrast, issues coded as avian flu, economics, work, food preparation and religious, have
very low co-occurrence coefficients across the board; this indicates that these issues are not usually mentioned alongside other issues in a manner that supports their mutual linking.

TABLE 1 | Co-occurrence frequency across issues at the level of statements.

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<th>Antibiotics</th>
<th>Avian flu</th>
<th>Cheap chicken</th>
<th>Industry</th>
<th>Consumption</th>
<th>Economics</th>
<th>Foodborne illness</th>
<th>Global trade</th>
<th>Information</th>
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</table>

Co-occurrence at the level of articles\(^6\) presented a similar pattern to that at the level of the statement (Appendix A). Because articles often include multiple statements, the same pairs of issues appear together more often in articles. We found that articles mention more issues together than do statements. To illustrate, the highest co-occurrence frequencies at the level of articles were those between industry issues and the issues of alternative agriculture, animal welfare, antibiotics, cheap chicken, consumption, and foodborne illness. We also found higher co-occurrence at the level of the article between foodborne illness and antibiotics issues, as well as between animal welfare and cheap chicken issues. However, only two of the co-occurrence coefficients at the level of articles are higher than 0.15. Moreover, more than half of the articles in our dataset mentioned only one issue (Figure 4). Therefore, even at the broader level of the article, we did not find the sorts of rates of co-occurrence that we would expect if the media were to be systematically linking issues.

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\(^6\) Issue co-occurrence at the article level is coded only on a present/absent basis; that is, it shows the number of articles in which the two issues appear, regardless of how many statements mention each issue or anything else.
TABLE 2 | Co-occurrence coefficient across issues at the level of statements.

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<td>0.01</td>
<td>0</td>
<td>0</td>
<td>0.02</td>
<td>0</td>
<td>0.01</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

FIGURE 4 | Frequency distribution of the number of issues mentioned per article.

We did not find evidence of consistent and systematic links across issues. While the category of the industry as an issue does appear more often in statements and articles that also mention issues regarding alternative agriculture, animal welfare, antibiotic use, cheap
chicken, consumption, and foodborne illness, the overall pattern that emerges from these results does not support the expectation of coverage that consistently and systematically ‘connects the dots’ across these issues.

4.3. Systemic contestation

Our results show sporadic references to systemic values across several framing variables. We could only identify systemic references for four variables during the first stage of our framing analysis. The deductive stage of the framing analysis confirmed this initial finding: systemic references were rare (Figure 5). Except for 1995, when systemic causes were mentioned more frequently and consistently, the percentage of statements that identify systemic causes remained below 13% when examined by year and averaged less than 5% overall. As for the solutions endorsed, systemic solutions remained below 6% of the solutions mentioned when examined by year and averaged less than 1% across the period. Similarly, the identification of systemic action as necessary to bring about the solution peaked at 7% during 1993, but was on average under 0.5% for the 31 years covered. Finally, the system was blamed for causing the problem in only six out of the 31 years included in our study. This framing of the system as the villain represented less than 3% of the villains mentioned each year, and the average was less than 0.3%. Therefore, our findings are not consistent with the expectation of systemic contestation.

![Percentage distribution of systemic references in four framing element variables per year.](image)

4.4. Structural problematization

We found that narrower and more specific aspects of or related to chicken meat production were problematized rather than chicken meat production as a whole. The sixteen issue categories and the frequency with which these issues were mentioned throughout the dataset as shown in Figure 1 illustrate this point. We found that systemic causes represented only a small portion of the total causes named each year and an even smaller portion
linked more than one issue to the same systemic cause. Figure 6 shows the percentage distribution of systemic causes identified per year, out of the total causes mentioned in our data. There is no clear indication of trends in Figure 6 to suggest a consistent increase or decrease in the structural problematization over time. As such, our analysis did not find behaviour consistent with the expectation of structural problematization.

![Figure 6: Percentage distribution of systemic causes linked to one or to more than one issue, of the total causes identified per year.](image)

4.5. Structural shift

Our analysis of descriptive data on the longitudinal development of the issues – illustrated in Figure 7 as the standardized yearly variation by issue – does not show a structural shift in the topics that were problematized during the period under study. One of the most significant features of Figure 7 is the lack of trends across the board. We could find no cumulative trends showing a consistent increase or decrease in the relative frequency of any issue, nor could we find a consistent pattern to the frequency variation. Similar pictures emerge when we look at each of the different framing elements (Appendix A).

The findings summarized in Figure 7 and Figures 21 to 25 in Appendix A show that we did not find building trends in the framing elements for which we coded. None of the framing element variables and values showed a consistent and cumulative trend over time, so we found no support for the expectation of a structural shift over time in the framing of chicken meat production.
FIGURE 7 | Annual difference in mentions per issue.
5. Discussion: The diffusion of public debate and contestation as emerging political effect

In this study, we examined a strategically chosen case for evidence that practice corresponded with expectations. We looked for structural problematization, links between issues, changes over time relevant to systemic contestation and a structural shift in the public debate. Our results show that the articles examined typically focused on lower level, narrowly framed specific issues, exhibiting reporting of specific problems with specific causes that call for specific solutions. Although our analysis shows evidence of problematization, debate and contestation about a variety of issues throughout this period, we did not find the structural problematization, connection across issues, or structural shift in the terms of the conversation that we expected. The episodic nature of coverage, narrow framing and problematization of specific aspects related to chicken meat production in relative isolation and in the absence of either structural problematization or systemic references, do not appear to be compatible with the emergence of a sustained shift in the terms of the debate.

While we did not find evidence compatible with these expectations, neither did we find the silence or fawning coverage that would be expected were newspapers captive to corporate interests. Broiler production was certainly, and at times noisily, publicly discussed in ways that clearly faulted corporations; and we found examples of such critical discussion of chicken meat production in newspapers across the political spectrum. Compatible with the findings and explanations put forth by Hallin and Mellado (2018), instead of ‘systemic contestation’ our findings of coverage can better be characterised as ‘polemic contestation’, with diffusion of public debate as an emergent consequence.

The narrow episodic coverage we found appears to effectively – though not necessarily intentionally – shift the attention from chicken meat production to specific problems that naturalise specific rather than systemic solutions. A narrow framing and problematizing of issues rather than broader, structural framing and problematization of issues effectively selects, highlights and emphasises these lower-level issues in a manner that predisposes debate towards more technical solutions. Without systematic connections to each other or to broader societal problems, the picture that emerges from our data is one of isolated episodes of problematization and contestation of specific issues within a larger structure that goes unnoticed. In terms of the analysis function of journalism, this kind of coverage does not appear to be providing coherent frameworks of interpretation to help citizens comprehend the complexity (Schudson, 2008) of the multiple issues about and related to chicken meat production. Recalling our understanding of power as context-shaping (Hay, 1997), the emergent effect we found is that of the diffusion of public debate.

Our negative findings are made more striking by the presence of structural problematization and systemic contestation of chicken meat production, most notably in scientific literature, but also in non-scientific sources, such as the TV series of chefs Oliver
and Fearnley-Whittingstall. Most poignantly, there are also examples of such structural problematization and systemic contestation from these same newspapers. So, we did find coverage that speaks to the expectations of the Fourth Estate, demonstrating that this sort of contestation is possible and that newspapers can and sometimes do indeed provide space to such critical perspectives (Freedman, 2014), but this sort of coverage was extraordinarily rare. In terms of a quintessential element of theorisations on the Fourth Estate and watchdog journalism – acting as a check on power (Eriksson & Östman, 2013; Schultz, 1998) – these findings suggest that systemic and structural dimensions of powers are seldom discussed in coverage about chicken meat production. Such findings are not incompatible with previous research that has questioned the extent to which newspapers – and news media more generally – facilitate structural and systemic critique and contestation (Fenton, 2018; Freedman, 2014). Our findings suggest areas that are rarely part of the discussion, adding to research that points to limitations of the critical surveillance by newspapers, particularly regarding checks on corporate power (Curran, 2005; Fenton, 2018; Freedman, 2014).

Our findings appear to be incompatible with the assumptions of the either/or nature of both the actor-oriented and the structural approach to media studies. Building on the idea that each article puts forth a newsworthy topic as mentioned in the news values literature (Allern, 2002; Harcup & O’Neill, 2017), the lack of structural problematization and the lack of a structural shift suggest that these topics did not build structurally – as would be expected from a structural approach to the media. However, the episodic and isolated coverage focused on lower level, narrower, and more specific issues, in addition to the lack of trends indicating a cumulative effect, suggest that these topics did not build thematically either – as would be expected from an actor-oriented approach to the media as a coherent collective actor. These results might suggest another mechanism speaking to the social reproduction role of journalism (McNair, 2003). They are also reminiscent to the critique laid by Galtung and Ruge (1965) to Western journalists in particular, regarding their lack of training to capture and report on long-term processes, instead of focusing on events.

Our findings further add to the imperative to problematize dominant assumptions about the scope, coherence and functionality of public communication in ways that challenge the assumed unity and inclusiveness of public spheres in democratic societies (Bennett & Livingston, 2018, p. 135). While these authors focus on disinformation, our study suggests another mechanism speaking to a diffusion of public debate and systemic contestation that are theorised as crucial to functional democratic public spheres. In particular, our findings regarding the episodic coverage of specific issues related to chicken meat production in relative isolation and in the absence of either systemic references or structural problematization echo the fragmentation of newsworthy political events (Blumler, 2018), as well as that of information environments more generally (Van Aelst et al., 2017). Our findings of diffusion as emerging political effect lend further evidence to claims that public debate is largely noisy, disconnected and disrupted (Pfetsch, 2018). Bennett and Pfetsch (2018) argue that normative expectations built on assumptions that
the legacy media provide coherent frameworks for citizens to meaningfully navigate these complex problems are largely out of touch due to the proliferation of digital media and the fragmentation of publics. Our research suggests that assumptions of coherent, systemic democratic public spheres were problematic even before the advent of digital media and when focusing on newspapers, suggesting the need to include diffusion of public debate to their concerns about disconnected and disrupted public spheres.

Our results and discussion are, necessarily, informed by the single case we examined. The logic by which that case was selected and the nature of the analysis we undertook, combined, strongly indicate the relevance of further research that tests both normative expectations of news media and their underlying assumptions. While our data do not support causal claims, journalism research should inquire into the role of everyday journalistic practices and norms in shaping the coverage of complex issues, particularly in debates that take place over longer periods of time.

More broadly, the polemic contestation we found, with diffusion of public debate as an emergent political effect, raises serious concerns about the tenability of the assumptions subsequent to which it is possible to argue that newspapers have a role in tackling the kinds of multidimensional, systemic, complex issues that we face. Specifically, we wonder whether newspapers ‘are’ in the ways that we require for the debates we have about their role. Newspapers may not be the coherent actor found in theorisations about the public sphere, the Fourth Estate or journalistic roles. Further research should, therefore, ask whether similar mechanisms also characterise coverage at the level of individual outlets, as evidence of diffusion emerging at this level of analysis would cast even stronger doubts over the assumption of coherence that is necessary to speak meaningfully about ‘the media’. The way we have framed newspapers, and news media more generally, have in turned shaped our expectations with respect to the role that they can, should and do play in contemporary democracies. Our findings lend empirical support to the call made by Fenton (2010a): further research must continue to challenge traditional divides that prioritize either structure or agency, and instead research must strive for theoretical and analytical frameworks that queer these proven inadequate divisions. In reflecting on our own discomfiting results, we found that the more open understanding of power as both conduct- and context-shaping (Hay, 1997) may provide a useful avenue through which subsequent research may trouble the frames through which our current expectations of the media in democratic societies are formed.
Chapter 3

Something wicked this way comes: How well did UK newspapers support the public debate of Avian Influenza as a wicked problem?

This chapter is published as:

The news media in general, and newspapers in particular, are supposed to provide a forum for public debate. These expectations of news media take on a heightened relevance in the case of wicked problems precisely because of the irreducible complexity, the inherent tensions, and the multiplicity of stakeholders and conflicting interests involved in such issues. Both their material complexity and lack of consensus make wicked problems difficult to address. This study uses British newspaper coverage of the H5N1 avian influenza outbreak (2003-2008) to determine if under near ideal conditions, newspaper coverage in the UK is compatible with the expectation that newspapers provide a forum that supports constructive societal debate of a complex, wicked problem. We chose to work with avian influenza because it was extensively covered, evidence rich, and not captive to clear partisan constructions. Our frame analysis examined 254 relevant newspaper articles published in seven national circulation outlets between 2003 and 2008. Newspaper coverage did reflect multiple problem definitions and causal interpretations of avian influenza, which is consistent with the expectation that the media inform and open up public debate. Coverage did not, however, link avian flu to other related issues, engage in systemic contestation or problematise structure. Finally, we found that, despite heterogeneous problem definitions, there was near consensus on a single technical solution. This coverage does not appear to support the open, constructive and informed public debate whose promise justifies the privileges given to news media.
1. Introduction

The latest animal health crisis to arise after avian flu claimed its first human life in Thailand forms part of a pattern that has gone along with industrialisation and mass transportation of livestock

The Guardian, 24/01/2004

The disease will be a devastating blow to many of the estimated 2m families involved in Thailand’s poultry industry, until now the world’s fourth-largest chicken exporter

Financial Times, 26/01/2004

I blame greedy supermarkets for unwittingly causing avian flu by putting pressure on Asian poultry farmers to produce the cheapest birds, at the same time destroying the UK poultry industry, where hygiene, animal welfare and EU standards have always been paramount

The Times, 18/10/2005

Politicians may also need to protect the interests of wild birds, if avian flu hysteria mounts. There have already been ill-informed calls in Asia and eastern Europe for culls of migratory birds

Financial Times, 24/02/2006

The nature and diversity of coverage given to Avian influenza by British newspapers suggest that it, like other infectious diseases at the human-animal interface including the current coronavirus pandemic, is best recognized as a wicked problem (Connolly, 2017). Problems qualify as wicked when they are credibly subject to diverse and incompatible problem definitions and causal interpretations (Rittel & Webber, 1973). These diverging problem definitions come with their own stakeholders, effects thereon (Constance et al., 2018; Gordon et al., 2016) and suites of (un)intended consequences. Both their material complexity and dissensus make wicked problems difficult to address, as any proposed solution will meet opposition from those who recognize the problem differently and any enacted solution will likely produce material effects that were not anticipated. Waltner-Toews (2017) suggests scholarly and public spaces for constructive, high-quality deliberation to support exploration of alternative interpretations, debate, articulation of possible outcomes, and tracing possible trade-offs.

The news media in general, and newspapers in particular, are tasked with providing a forum for public debate (Norris, 2000; Schudson, 2003, 2008), a function that justifies the protections afforded journalists. Studies from normative (Christians et al., 2010) and sociological perspectives (Schudson, 2008) speak to the role of news media in providing
Chapter 3

a forum for public discussions. These scholars emphasize effect of news media’s support of public debate when topics are contested in producing social empathy (Schudson, 2008). While empirical evidences suggest that news media have not always met these normative expectations (Curran, 2005; Curran & Seaton, 2002; Fenton, 2010b; Freedman, 2014; Schudson, 2005), they remain benchmarks of good journalism (Vos & Wolfgang, 2018) and, if nothing else, valuably serve as standards against which to assess current practices (Fenton, 2010a).

The expectations that news media support informed public debate are yet more relevant when confronting wicked problems precisely because of their irreducible complexity, inherent tensions, diverse stakeholders and conflicting interests. News media shape political controversy over intractable or wicked problems (McCallum & Waller, 2013). Public debates about wicked problems, such as avian flu, should enable readers to understand how diverse stakeholders interpret the problem and see how the diversity of solutions proposed may affect stakeholders if readers are to detect, and therefore acknowledge, trade-offs and tensions they did not initially recognize. In order to support debate, the fora provided in news media must accommodate diverse evidence on different temporal and spatial scales as advanced by multiple stakeholders, so that values and relations of power can be seen and addressed (Waltner-Toews, 2017).

Given an understanding of power as context-shaping (Hay, 1997), and evidence that newspapers remain agenda-setters (Djerf-Pierre & Shehata, 2017; Harcup & O’Neill, 2017), how these debates play out in, with, and through newspapers shapes the space of possibilities in ways that may shape response to wicked problems. For example, if a problem is consistently represented to be specific and isolated, debate will tend towards specific and often technical solutions, constraining public debate to a single or a very limited set of courses of action (Stirling, 2008). While perhaps fit for tame problems, failure to report wicked problems’ complexities may harm as this inappropriately constrains societal understanding and response. Coverage fit for wicked problems opens up and enriches public debate by revealing the indeterminacies and contingencies, asking alternative questions, including marginalized perspectives, considering (un)known uncertainties (Stirling, 2008, pp. 280-281), and supports assessment of the different interpretations and new possibilities, in ways sensitive to issues of values and relations of power (Waltner-Toews, 2017).

This study uses the coverage of British newspapers of the outbreak of the highly pathogenic H5N1 strand of avian influenza between 2003-2008 that appeared in newspaper articles discussing issues in chicken meat production to assess the extent to which coverage by the very newspapers that ground our expectations of media in mature democracies of a core dimension of a complex and well reported event adequately supports appropriate public debate (Waltner-Toews, 2017). Our primary interest was in testing the extent to which media speakers’ coverage of avian flu opened up (as expected for a wicked problem) or closed down (as appropriate for a technical problem) public debate. We tackled this
question through a two-stage framing analysis of 254 newspaper articles published in seven national circulation outlets between 2003 and 2008.

2. Background

2.1. Avian flu as a wicked problem

In many ways, the “formulation of a wicked problem is the problem” (Rittel & Webber, 1973, p. 161). “Wicked problems arise in situations that can be defined from a variety of apparently incompatible perspectives. Since there is no definitive problem formulation, and scientific uncertainties confound all formulations, they cannot be resolved in any definitive manner. Solving one part of a wicked problem may exacerbate other parts” (Waltner-Toews, 2017, p. 3). So, for example, while industrial agriculture may feed an increasing population, it also requires massive habitat conversion and biodiversity losses, as well as pollution due to animal waste and increased use of agricultural biochemical inputs, all of which have been linked to increases in emerging infectious diseases for human and non-human animals (Rohr et al., 2019).

Every wicked problem is also a symptom of another problem (Rittel & Webber, 1973). To illustrate, avian influenza is an animal health problem caused by waterfowl migration. Stepping back a level, like other emerging infectious diseases, avian influenza is a symptom of “wicked problems embedded in complex social-ecological feedbacks, characterized by changing inequalities of social and economic power, well-intentioned ecological destruction, repression of eco-social diversity in the name of better healthcare, colonial attitudes an paternalistic environmental management” (Waltner-Toews, 2017, p. 4). These two interpretations suggest very different models that support diverging solution paths; illustrating how “The choice of explanation determines the nature of the problem’s resolution” (Rittel & Webber, 1973, p. 166).

Wicked problems are also characterised by entanglement. In the case of avian flu, there are complex interlinkages – which were known and reported in the publicly accessible scientific literature at the time – between ecological processes, like wild bird migration, environmental disruption and climate change, industrial poultry farms, and agricultural practices (Canavan, 2019). Avian influenza thus illustrates the geophysical, social, ethical and health impacts of climate and environmental change, as well as the interconnections of environment, wildlife, and human activities (Canavan, 2019). Understanding of these interlinkages is complicated by interactions that are neither linear nor unidirectional. For example, while livestock production is recognised as one of the major causes of the world’s most pressing environmental problems and as an important driver of biodiversity loss and climate change (Almiron & Zoppeddu, 2014; M. Lahsen, 2017; Waltner-Toews, 2017), climate change can in turn directly and indirectly affect pathogen distribution, reproduction
rates, and transmission media (Khan et al., 2019). Loss of biodiversity has also been linked to increases in infections (Rohr et al., 2019), an effect that is further exacerbated by the emergence of antibiotic-resistant bacteria due to drug overuse in industrialized agriculture (Rohr et al., 2019; Waltner-Toews, 2017).

2.2. Framing

For our study, to frame is to “select some aspects of a perceived reality and make them more salient in a communicating text, in such a way as to promote a particular problem definition, causal interpretation, moral evaluation, and/or treatment recommendation for the item described” (Entman, 1993, p. 52). In order to recognize framing of the issue as well as stakeholder identities, we incorporated the framing of identities (Dewulf et al., 2009) as victims suffering the consequences of this problem, villains responsible for causing the problem, and the problem-solvers who should fix things.

Our operationalisation of framing permitted us to reliably describe the themes and identities that news media used to organize their contributions to public debates (Bennett & Pfetsch, 2018), and to test their practice against the requirements imposed by wicked problems. Through our use of framing analysis, we hoped to capture if the information needed to understand the problem depended upon idea for solving it, and if the choice of explanation of the problem also determines the nature of the problem’s resolution (Rittel & Webber, 1973). Entman’s (1993) conceptualisation of framing speaks to the multiple framings and interpretations that can arise in debate of wicked problems. The functions he identifies for a frame provided us with guidelines for transparent and reliable description of media behaviour.

2.3. Expectations

We have created, tested and operationalised a framework that describes the behaviour of media in creating a space for public debate of the wicked problem of avian influenza (Waltner-Toews, 2017).

Since wicked problems are characterised by entanglements, we expected newspaper coverage to mention other related issues. We expected coverage to ‘connect the dots’, to report patterns at broader levels, to put findings into context, to establish connections across cases. Since wicked problems require consideration from concrete to systemic analytic levels, we expected newspaper coverage to at least mention these levels. Since wicked problems have systemic roots (Waltner-Toews, 2017), and since many stakeholders argue that news media are vital in holding power to account (Christians et al., 2010; Fenton, 2010a; Schudson, 2003), we expected coverage to contain some systemic contestation, for example, by identifying systemic causes of avian influenza like contemporary food production systems (Canavan, 2019; Gilbert et al., 2017; Rowe et al., 2008; Waltner-Toews, 2017) or speciesist ideologies that deny moral consideration of nonhuman interests.
Moreover, there was at the time rich discussion of complex entanglements in the scientific literature about avian influenza (Canavan, 2019; Connolly, 2017; Waltner-Toews, 2017) as well as literature suggesting links between these emerging zoonoses and global food production systems (Rohr et al., 2019), climate change (Khan et al., 2019), the oppression and exploitation of nonhuman animals (Almiron et al., 2018; Almiron & Zoppeddu, 2014; Khazaal & Almiron, 2014), and the structural inequalities upon which industrial (animal) production relies (Waltner-Toews, 2017), amongst other structural phenomena. Since there was at the time of the outbreak evidence of the UK press reporting on warnings about avian influenza and the potential for a pandemic from scientists and experts (Nerlich & Halliday, 2007), we expected newspaper coverage to make links across issues to broader issues laying the ground for systemic contestation.

Finally, if newspapers indeed “provide a forum of debate in which people can identify problems, propose solutions, and reach a consensus” (Curran, 2005, p. 129), we expected framing of a tame problem to converge or close down over time (Stirling, 2008) around the consensual solution. Conversely, since avian flu was a wicked problem, characterised by both low consensus and inherent complexity, we expected newspaper coverage to support opening of public debate (Stirling, 2008) to accommodate alternative and contending narratives that acknowledge trade-offs and continual tensions (Waltner-Toews, 2017).

While we found backing in the literature for the expectations we set, we did not find any useful discussion of standards. Therefore, we propose an operationalisation of an ideal that is frequently referenced both in scholarly and professional contexts, in ways that have symbolic and material effects. As such, we have chosen just to report the raw findings from our census of relevant articles in one section in a manner that permits readers to render their own assessments, if any, and then to discuss the implications that we see of those findings separately.

3. Materials and methods

3.1. Data collection and curation

The 254 newspaper articles used for this study are drawn from a larger dataset consisting of 766 newspaper articles on chicken meat production. We designed, piloted and refined a search string to retrieve relevant articles about chicken meat production from seven high circulation, national newspapers7 in the United Kingdom that were published between 1985 and 2016 (Garnier et al., 2020). For this study, we focused on a subset of data comprised by those articles published between 2003 and 2008 that covered the resurgence of the highly pathogenic H5N1 strand of avian influenza first detected in the UK in 2006 (de Krom & Mol, 2017).

This outbreak produced an explosion of articles (Nerlich & Halliday, 2007) that was reflected in our data; avian influenza was the single most extensively covered issue, resulting in over a third of all articles included (more details are provided in Appendix B). Since our goal was to examine the extent to which news media supports the sort of public debate required by wicked problems, examined media speakers separately as we anticipated that they were more likely to be sensitive to the expectation of supporting public debate than might be stakeholders who were more likely to use a newspaper to advocate a position. Table 3 summarises the speakers included in the Media Speaker category.

<table>
<thead>
<tr>
<th>Speaker</th>
<th>Short description</th>
<th>Statements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Journalist and writing staff</td>
<td>Includes journalists, columnists, editors, and writing staff (for example, as identified in the byline of an article)</td>
<td>994</td>
</tr>
<tr>
<td>Newspaper</td>
<td>Includes specific references to a newspaper outlet (such as self-references or references to other newspaper outlets), and also articles without an identifiable author in the byline and thus attributed to the newspaper outlet, such as editorials.</td>
<td>70</td>
</tr>
<tr>
<td>TV</td>
<td>Includes TV broadcaster or channel (such as BBC, ITV, Channel 4, etc.)</td>
<td>3</td>
</tr>
<tr>
<td>New media</td>
<td>Includes new media outlet (includes websites, digital news providers, blogs, social media, etc.)</td>
<td>1</td>
</tr>
<tr>
<td>Other media</td>
<td>Includes other media outlets, such as radio broadcasters, books, movies, etc.</td>
<td>9</td>
</tr>
<tr>
<td>Media general</td>
<td>Includes general references to the media, mass media, legacy media, etc.</td>
<td>2</td>
</tr>
</tbody>
</table>

For the purpose of this study, all other actor categories that are not considered media speakers have been collapsed here into the single category of ‘other speakers’. This includes speakers from all levels of the production chain, retailers, governmental authorities, inter- and supranational organisms, civil society, etc. (a more detailed overview of the categorisation of speakers is included in Appendix B).

3.2. Framing analysis

We used Entman’s four functions of frames as a theory-informed coding structure that allowed us to identify those framing elements in texts: problem, cause, solution, and judgment. In addition, we coded for the identity of stakeholders: victim, villain, and problem solver. Together, these framing elements allowed us to describe how a topic is framed and constructed as an issue, and how these issues then become the main thematic categories around which public debate is organized.
We used statements as the main unit for analysis, understood as a continuous utterance by the same speaker(s). We examined 2810 statements by means of a two-stage framing analysis: first, a theory-driven inductive stage of a randomly selected subset of our data, followed by a second and deductive stage. For the first stage, we identified the issues that were being problematised. Using the four aforementioned functions of a frame as a guide, we identified the specific framing elements that fulfilled each function in the text via in vivo coding in Atlas.ti. Through an iterative process of increasing abstraction, we constructed broader categories for each of the framing elements. These broader categories then formed the basis for a coding scheme, which presents the set of nine framing element variables and their respective values and codes. This inductively developed coding scheme was subjected to several rounds of piloting and refining with three separate independent coders to improve reliability, resulting in a detailed coding scheme for deductive use in the second stage of our analysis.

The coding handbook we used consisted of 326 individual codes or values across nine framing element variables (issue, problem definition, victim, cause, villain, solution, action for solution, solver, and moral judgment), plus variables to characterise the speaker, quotation and article. This coding handbook supported analysis at several levels of aggregation. The analytic categories used for this publication are an aggregation that speaks to the theoretical framework that underpins this study. (More details about the methodological design can be found in Appendix B).

In our second stage, we used the inductively developed coding scheme to support deductive content analysis of the full dataset. Using Atlas.ti, two independent coders systematically applied the codes set out in the coding handbook to the newspaper articles (in random order). The results from this content analysis were translated into frequency counts for the applied codes, as well as co-occurrence frequency counts between codes, using Atlas.ti. These frequency counts were then exported to Excel for further quantitative analyses.

3.3. Operationalisation of expectations
This section presents each expectation and its operationalization.

Connecting the dots: the percentage of the statements that mention avian influenza that also mention another issue related to chicken meat production, out of the total frequency of mentions of avian flu as an issue. From all the specific issues mentioned in the news texts, we constructed a list of sixteen categories, which besides avian influenza, include adulteration of chicken meat, alternative agriculture, animal welfare, antibiotics, cheap chicken, chicken meat production industry, consumption, economics, foodborne illness, global trade, information, policy and regulation, work and employment, food preparation, religious slaughter, and others (Appendix B provides further detail and examples of how these issues were problematised).
Systemic contestation: the extent to which statements include systemic references for four of the framing elements included in the coding scheme – Cause, Villain, Solution, Action for Solution. Systemic references refer to explicit mention of systemic elements. For example, in the case of systemic cause identification, this includes references to the system (food production system, animal husbandry system, capitalist system, etc.), as well as references to systemic dynamics such as commodification, globalisation, industrialisation, intensification or factory farming in general (details for the other relevant variables are included in Appendix B).

Structural problematisation: the extent to which statements that identify that a systemic cause of avian influenza is also relevant in causing a different problem. Given previous evidence of a lack of systemic contestation in coverage of chicken meat production more generally (Garnier et al., 2020), we decided to include a lower-level test of structural problematisation, which consists of references to the chicken meat production industry and its practices as causing avian flu and at least one other issue. In this case, there is no explicit mention of systemic causes, but we take the broiler industry as a structural reference.

Opening debate: the extent to which there is a diversity of framing elements used at all stages and across time.

In this study we report by outlet, which was coded at the level of the article. This allowed us to aggregate and analyse the statements by media speakers from each newspaper outlet, as that is often cited as predicting behaviour. Where relevant, findings for all other non-media speakers provide context and a point of comparison to assess whether media speakers were indeed more likely than other stakeholders to frame avian influenza in a manner consistent with the opening up of the public debate required for in discussions of wicked problems.

4. Results

4.1. Expectation 1: Connecting the dots

Table 4 summarizes the frequency counts for statements with mentions of avian influenza as an issue, as well as frequency counts for mentions of avian influenza together with at least one other issue, both for all the speakers included in our dataset and only for media speakers, in each of the different outlets included. Only a small proportion (~5%) of the total mentions of avian flu also mention other issues related to chicken meat production, across all the outlets included.
TABLE 4 | Frequency counts of statements mentioning avian flu, and avian flu together with at least one other issue, by speaker in each outlet.

<table>
<thead>
<tr>
<th>Avian flu mentioned as an issue by all speakers</th>
<th>The Express</th>
<th>Financial Times</th>
<th>The Guardian</th>
<th>Daily Mail</th>
<th>The Mirror</th>
<th>Daily Telegraph</th>
<th>The Times</th>
</tr>
</thead>
<tbody>
<tr>
<td>146</td>
<td>541</td>
<td>360</td>
<td>300</td>
<td>109</td>
<td>412</td>
<td>654</td>
<td></td>
</tr>
<tr>
<td>Avian flu and other issue(s) by all speakers</td>
<td>1</td>
<td>23</td>
<td>14</td>
<td>25</td>
<td>0</td>
<td>34</td>
<td>39</td>
</tr>
<tr>
<td>Avian flu mentioned as an issue by media speakers</td>
<td>54</td>
<td>190</td>
<td>130</td>
<td>119</td>
<td>45</td>
<td>150</td>
<td>266</td>
</tr>
<tr>
<td>Avian flu and other issue(s) mentioned by media speakers</td>
<td>1</td>
<td>10</td>
<td>6</td>
<td>12</td>
<td>0</td>
<td>20</td>
<td>25</td>
</tr>
</tbody>
</table>

Limiting our data to media speakers, statements that mention avian flu together with another issue make up a small proportion (~8%) of mentions. Though the exact proportion varies across outlets, the total number of statements that mention both avian flu and least one other issue represents only a small proportion of the total number of statements that problematise avian influenza, varying from none of the 45 statements about avian flu by media speakers from the Mirror also mentioning at least one other issue, to 20 of the 150 statements (13.3%) in the case of media speakers from The Telegraph. While media speakers did mention avian flu together with another issue more frequently than all other speakers taken together – suggesting that they did make more connections between avian influenza and other issues than non-media speakers – these frequencies remain a very small proportion of the overall mentions of avian influenza.

FIGURE 8 | Frequency distribution of number of issues mentioned in an article, per outlet.
Figure 8 presents the frequency distribution of the number of issues mentioned per article in each outlet. Looking at the frequency counts at the level of articles as unit of analysis, and based on most articles containing at least one and usually more statements, we would reasonably expect to find more frequent mentions of avian flu together with other issues. However, even at this broader level of analysis, over 62% of all the articles only mention one issue: avian influenza. Figure 8 shows differences across outlets in this regard. As for the tabloids, one and none of the articles from the Express and the Mirror mentioned more than one issue, respectively. By contrast, eighteen of the articles from The Telegraph mentioned one issue, sixteen mentioned two issues, five articles mentioned three issues, and one even mentioned six different issues related to chicken meat production (Appendix B includes co-occurrence frequencies and coefficients across issues by media and non-media speakers, as well as specific examples).

Taken together, however, these results do not support the expectation of coverage that consistently established links across issues, connecting the issue of avian influenza to other issues related to chicken meat production. Though they suggest that media speakers did mention avian flu together with another issue slightly more often than the rest of the speakers, mentions of avian flu with at least one more issue represent only a small proportion of the total number of statements that problematise avian flu. While we do not expect every statement by a media speaker to make these connections, if indeed news media were often making links between avian influenza and other chicken meat production related issues, this would have been reflected in frequent mentions of these issues together in the same statement, and consequently in a higher proportion of statements about avian influenza also mentioning other issues related to broiler production. These results are, thus, not consistent with coverage or indeed journalism that is making links across issues and connecting the dots.

4.2. Expectation 2: Systemic contestation

TABLE 5 | Co-occurrence frequency counts of mentions of avian flu as an issue with systemic references in four framing elements, by outlet (all speakers).

<table>
<thead>
<tr>
<th></th>
<th>The Express</th>
<th>Financial Times</th>
<th>The Guardian</th>
<th>Daily Mail</th>
<th>The Mirror</th>
<th>The Daily Telegraph</th>
<th>The Times</th>
</tr>
</thead>
<tbody>
<tr>
<td>Avian flu mentioned as an issue</td>
<td>146</td>
<td>541</td>
<td>360</td>
<td>300</td>
<td>109</td>
<td>412</td>
<td>654</td>
</tr>
<tr>
<td>Avian flu and systemic cause</td>
<td>0</td>
<td>4</td>
<td>13</td>
<td>3</td>
<td>1</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>Avian flu and systemic villain</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Avian flu and systemic solution</td>
<td>0</td>
<td>2</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Avian flu and systemic action</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
Table 5 summarizes the co-occurrence of statements that mention avian flu with a systemic reference as cause, villain, solution or action necessary to bring forth the solution, and contextualises these frequency counts within the overall number of statements mentioning avian influenza as an issue. Surprisingly, only a very small proportion of the statements problematising avian flu also mention other systemic elements. Only one of the 541 statements about avian influenza in the Financial Times mentions a systemic action (an overhaul of traditional agriculture) as necessary to bring about the solution to avian flu. Similarly, only one of the 654 statements about avian flu in The Times mentions the factory farming system as the villain responsible for causing avian flu (these and other examples are included in Appendix B). These are the only two instances that mention a systemic villain or a systemic action necessary to solve the problem of avian influenza. Two out of 541 statements in the Financial Times and three out of 360 statements in The Guardian mention systemic solutions for the issue of avian flu. Systemic causes for avian flu were only slightly more frequent in our dataset. These range from none of 54 statements in the Express mentioning systemic causes for avian influenza – or any other systemic reference, for that matter – to thirteen out of 360 statements in The Guardian mentioning systemic causes for avian flu.

**TABLE 6 | Co-occurrence frequency counts of mentions by media speakers of avian flu as an issue with systemic references in four framing elements, by outlet.**

<table>
<thead>
<tr>
<th>Statements by media speakers</th>
<th>The Express</th>
<th>Financial Times</th>
<th>The Guardian</th>
<th>Daily Mail</th>
<th>The Mirror</th>
<th>Daily Telegraph</th>
<th>The Times</th>
</tr>
</thead>
<tbody>
<tr>
<td>Avian flu mentioned as an issue</td>
<td>54</td>
<td>190</td>
<td>130</td>
<td>119</td>
<td>45</td>
<td>150</td>
<td>266</td>
</tr>
<tr>
<td>Avian flu and systemic cause</td>
<td>0</td>
<td>2</td>
<td>8</td>
<td>2</td>
<td>0</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Avian flu and systemic villain</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Avian flu and systemic solution</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Avian flu and systemic action</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Table 6 is even more striking. It shows only the mentions of avian flu by media speakers in each of these seven outlets. None of the statements in which media speakers problematise avian influenza mention either systemic villains, systemic solutions or systemic actions to bring about the solution. Moreover, none of the statements about avian influenza by media speakers from the Express and the Mirror contain any systemic reference at all. The highest proportion of systemic causes for avian flu mentioned by media speakers was found in The Guardian, where eight out of 130 statements about avian flu also mentioned systemic causes, representing 4% of the total number of statements about avian flu by media speakers in that outlet.
These results do not appear to be compatible with the expectation of systemic contestation. Though there were differences across outlets, statements mentioning avian influenza together with reference to systemic values were rare across the board. Taken together, statements with systemic references make up 1% of the total mentions of avian flu, and 2% of the mentions of avian flu by media speakers. The picture that emerges when looking only at the statements made by media speakers is even more striking, as none of the seven outlets included mentions any systemic references for three of the four framing element variables that include them. These results do not provide support for the expectation of coverage that highlights the systemic and broader structural elements related to this issue in a way that supports systemic contestation. Contrary to our expectations, evidence of systemic contestation by media speakers is even less frequent than for the totality of speakers included in our dataset.

4.3. Expectation 3: Structural problematisation

**TABLE 7 | Frequency counts of structural problematisation at two levels, by outlet (all speakers).**

<table>
<thead>
<tr>
<th></th>
<th>The Express</th>
<th>Financial Times</th>
<th>The Guardian</th>
<th>Daily Mail</th>
<th>The Mirror</th>
<th>Daily Telegraph</th>
<th>The Times</th>
</tr>
</thead>
<tbody>
<tr>
<td>Avian flu mentioned as an issue</td>
<td>146</td>
<td>541</td>
<td>360</td>
<td>300</td>
<td>109</td>
<td>412</td>
<td>654</td>
</tr>
<tr>
<td>Structural problematisation of avian flu</td>
<td>0</td>
<td>0</td>
<td>6</td>
<td>1</td>
<td>0</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Structural problematisation of avian flu (industry level)</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>3</td>
<td>0</td>
<td>1</td>
<td>3</td>
</tr>
</tbody>
</table>

**TABLE 8 | Frequency counts of structural problematisation by media speakers at two levels, by outlet.**

<table>
<thead>
<tr>
<th></th>
<th>Daily Express</th>
<th>Financial Times</th>
<th>The Guardian</th>
<th>Daily Mail</th>
<th>The Mirror</th>
<th>Daily Telegraph</th>
<th>The Times</th>
</tr>
</thead>
<tbody>
<tr>
<td>Avian flu mentioned as an issue</td>
<td>54</td>
<td>190</td>
<td>130</td>
<td>119</td>
<td>45</td>
<td>150</td>
<td>266</td>
</tr>
<tr>
<td>Structural problematisation of avian flu</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>1</td>
<td>0</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Structural problematisation of avian flu (industry level)</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

Table 7 and Table 8 present the results for structural problematisation for all speakers and for media speakers, respectively. A small proportion of mentions of avian flu fit our operationalisation of structural problematisation as identification of a systemic cause for more than one issue.
As shown in Table 7, three of the outlets included did not have a single statement that identifies a systemic cause for more than one issue, even at the more limited level of the industry as a structural cause. The highest proportion was found in The Guardian, where 6 out of 360 statements problematising avian influenza also mention at least one other issue and a systemic cause. Table 8 presents the results for structural problematisation of avian flu by the media speakers of each outlet. Though instances of structural problematisation also vary across outlets, they represent only a small proportion of the total mentions of avian influenza by media speakers.

Taken together, instances of structural problematisation of avian flu make up less than 0.5% of the statements that problematise avian influenza, and less than 1% of the statements by media speakers problematising avian flu. Looking at a lower level of structural problematisation, statements that identify the industry as a structural cause of at least one other issue besides avian flu represent around 0.4% of all statements problematising avian influenza, both for media speakers and for all speakers together. Instances of structural problematisation at either level represent only a small proportion of the statements problematising avian flu both for all speakers and only for media speakers and across outlets. These findings are not compatible with the expectation of structural problematisation, either at the systemic level or at the more limited level of the industry as a structural cause.

4.4. Expectation 4: Coverage that supports an opening up of the public debate

Figure 9 and Figure 10 present the frequency counts of problem definitions and solutions endorsed respectively for the issue of avian flu by media speakers in each outlet and per year. Figure 9 shows how avian flu was defined as problematic in different terms, with the most frequent problematisations being as a human health problem, animal health problem, and economic problem. Figure 9 also shows that these problematisations varied not only across outlets, but also over time within each outlet; however, it is clear from the graphs that these problematisations do not tend to close down over time towards a single preferred problem definition for avian flu. Conversely, Figure 10 illustrates that one solution was endorsed by media speakers 90% of the time throughout the entire period under study and across all outlets: biosecurity. Equivalent figures for other framing elements show similar patterns to that of problem definition in Figure 9. Each of these, with the exception of the dominance of biosecurity as a solution, are compatible with the expectation of coverage that supports an opening up of the public debate. The findings regarding the solutions endorsed for avian influenza are instead compatible with a closing down of the public debate.

Figure 11 presents, for each of the eight framing elements included in our coding scheme, the number of different values mentioned more than once by media speakers from each outlet per year, illustrating diversity in the framing of avian flu by media speakers across outlets and over time. If coverage of avian flu had indeed privileged a preferred framing of this issue, then we would expect to find fewer different types of problem definitions over time. Conversely, if coverage increased in complexity and opened up to new
possibilities and interpretations, as we would expect for a wicked problem, then we would expect to find more different types of victims or villains over time, for instance. The graphs included in Figure 11 are not compatible with expectations of coverage that converges around the consensual framing of avian flu by media speakers in the outlets included.

On the contrary, most of the graphs for the different framing elements show variation in the number of different problem definitions, causes identified, victims, problem solvers, etc., mentioned by media speakers in their coverage of the avian flu outbreak. For most of these framing elements, and for media speakers in most outlets, there are more different

**FIGURE 9 | Yearly frequency counts of problem definition for avian flu mentioned by media speakers in each outlet.**
framing elements mentioned at the end than at the beginning of the outbreak (Figure 12), a result consistent with an expectation of coverage that supports an opening up of the public debate. Against these findings, the clear predominance of biosecurity as the solution most frequently endorsed by media speakers for avian flu presents a stark contrast. These findings are not consistent with our expectation that newspapers will open up public debate and the contrast between open description and closed solution appears, given our model, to be incoherent.

FIGURE 10 | Yearly frequency counts of solutions endorsed for avian flu mentioned by media speakers in each outlet.
Figure 4: Number of different values mentioned more than once by media speakers of each outlet, by year.

FIGURE 11 | Number of different values mentioned more than once by media speakers in each outlet, per year.
5. Discussion: Newspaper coverage about avian flu as a wicked problem and implications for our understanding of the democratic role of newspapers as forum for public debate

The conclusions that can be drawn from these results are of course circumscribed to the subset of articles that constitute the primary data for this study. These findings may be somewhat limited because these articles were drawn from a larger dataset of articles about chicken meat production. This dataset is thus by no means exhaustive, as articles that covered avian influenza exclusively from a human health perspective, for example, would not have come up in our search. It is possible that such articles do make links to other issues, thus exhibiting the kinds of connections, systemic contestation and structural problematisation that were rare in our dataset. However, research on the framing of avian influenza as a potential human pandemic has found that newspaper coverage of bird flu tends to be dominated by episodic framing, which presents single, specific event-driven cases related to a given issue, usually without providing much context, and thus impeding recognition of the interconnections between issues (Choi & McKeever, 2019; Dudo et al., 2007), which is consistent with our results. The stark findings in a dataset that should capture at least one of those connections – namely, that between avian influenza and issues related to chicken meat production –, together with available evidence of the dominance of episodic framing in coverage of avian influenza, leads us to expect that application of this methodology to a broader dataset would produce similar results, though future research should put this expectation to empirical test.
Our results do not support the expectation of newspaper coverage that mentions avian influenza together with other related issues in a manner that supports their linking and highlights their mutual entanglement. Our disappointment with this finding is sharpened by complete lack of reference to then current scientific discussion that made structural connections. While it would be unreasonable to expect that every article mentioned such entanglements and complex interlinkages – after all, wicked problems are subject to multiple and conflicting interpretations – we did expect to find that newspaper coverage reflected the connections discussed in the scientific literature available at the time, at least to some extent. Our results are not compatible with the expectation that coverage that shows how avian influenza, like other emerging infectious diseases, is entangled in complex spatial and temporal webs, in which relations change over time (Waltner-Toews, 2017). Our data, further, do not support the expectation that newspaper coverage will highlight the links between industrialized mass animal production and global distribution of cheap animal protein and the emergence of such zoonotic diseases (Waltner-Toews, 2017), or the complex interlinkages between industrial poultry production, broader environmental problems such as climate change, and zoonotic infectious diseases (Almiron & Zoppeddu, 2014; Canavan, 2019; Gilbert et al., 2017; Khan et al., 2019; Waltner-Toews, 2017). Without such interlinkages highlighted in newspaper coverage, it is easy readers form partial, more simplistic understandings of the issue that would in turn encourage solutions that have negative consequences in other domains (Van Asselt et al., 2019; Van Asselt et al., 2018).

We did not find support for the expectation that newspaper coverage would address the systemic and broader structural elements related to avian influenza in a manner that supports systemic contestation. These findings are not compatible with newspaper coverage that links the accelerated rate of outbreaks of emerging infectious diseases like avian influenza to deeper, systemic problems (Waltner-Toews, 2017). Such findings raise serious questions regarding the extent to which newspapers can indeed foster the kinds of public debate that allow us to examine and address the systemic and structural dimensions of wicked problems such as avian flu, as discussed in the scientific literature (Canavan, 2019; Gilbert et al., 2017; Leibler et al., 2009; Rohr et al., 2019; Van Asselt et al., 2019; Van Asselt et al., 2018; Waltner-Toews, 2017).

The infrequent instance of structural problematisation that we found follows logically from the general lack of connections across avian flu and other issues related to broiler production and the lack of systemic references found in our dataset, but is particularly disappointing given the availability of scientific literature on precisely this topic that was available at the time (Canavan, 2019; Gilbert et al., 2017; Leibler et al., 2009; Rohr et al., 2019; Van Asselt et al., 2019; Van Asselt et al., 2018; Waltner-Toews, 2017). They are also surprising given research on public perception of the avian influenza outbreak at the Bernard Matthews plant during in February 2007, suggesting that the public was indeed making such links between industry practices and avian influenza, amongst other public health concerns (Rowe et al., 2008).
While newspaper coverage did reflect multiple problem definitions and causal interpretations of avian influenza, which is consistent with an opening up of the public debate, this was not coupled with connections to other related issues, systemic contestation or structural problematisation and, where present, this heterogeneity did not suggest an equal diversity of solution paths. The predominance of biosecurity effectively closes down debate by highlighting a single solution (Stirling, 2008). These results lend further empirical evidence to the argument by Nerlich and Halliday (2007) that the framing of avian influenza in newspapers in early 2005 might have had the effect of obscuring the availability of options for controlling its development and spread.

Our findings are compatible with Garnier et al. (2020), who argue that the episodic nature of newspaper coverage, narrow framing and problematisation of specific aspects related to chicken meat production in relative isolation and in the absence of either structural problematisation or systemic references, effectively results in a diffusion of the public debate. Our evidence, even at the level of outlet and when controlling for the identity of the speaker, supports the argument that newspapers do not deliver the kind of coverage necessary to tackle the kinds of multidimensional, systemic, and complex problems we face (Garnier et al., 2020).

Our findings are not compatible with the expectation that newspapers provide a civic forum for a constructive, pluralistic public debate (Norris, 2000) in ways sensitive to questions of values and relations of power (Waltner-Toews, 2017). More specifically, the lack of systemic contestation and structural problematisation in coverage of avian influenza appears incompatible with an understanding of avian influenza as a wicked problem as discussed by Waltner-Toews (2017). Our findings, in a case deliberately selected to be favourable to journalists, lend evidence to those critics who argue that news media fail to hold power, and especially corporate power, to account (Curran, 2005; Curran & Seaton, 2002; Fenton, 2018; Freedman, 2014). In this sense, our findings appear consistent with studies that argue that mainstream public discourses – and news media discourses in particular – often tend to reinforce the power of animal production industries and the continued emphasis on meat production, thus perpetuating its enacted violences (Almiron & Zoppeddu, 2014; Broad, 2014; Freeman, 2009; M. Lahsen, 2017).

Wicked problems like avian flu require the creation of public spaces for managing constructive, high-quality conflicts that allow us to collectively articulate and debate such issues under conditions of scientific and political uncertainties, articulate possible outcomes and their differential effects on human and non-human stakeholders, characterize and address trade-offs, negotiate potential outcomes, and identify the structures for implementing the required changes Waltner-Toews (2017). We do not find that newspapers in general, that specific outlets, or that media speakers provide these spaces even under deliberately selected favourable conditions. On the contrary, the findings discussed here raise serious questions regarding the role of newspapers as a forum for public debate, and the ability of
news journalism to inform, facilitate (Christians et al., 2010; Fenton, 2010a; Schudson, 2003, 2008) and open up (Stirling, 2008) such debate in ways conducive to address the inherent complexity presented by wicked problems. Recalling our understanding of power as context-shaping (Hay, 1997), newspaper coverage about avian influenza effectively shapes the space of possibilities in ways that do not appear to be consistent with nor conducive to an open, constructive and informed public debate that allows for the exploration, not just of the many possible interpretations of avian flu as a wicked problem in all its complexity, but also of how different solutions stemming from such interpretations might have differential effects on human and non-human stakeholders.

This article reports on a study for which we have created, tested and operationalised a framework able to describe the performance of news media in creating a space adequate to support such a public debate, and we have used the avian influenza outbreak between 2003 and 2008 to test our framework. Given that many contemporary problems are increasingly characterized as wicked problems that confront societal and policy actors and institutional regimes, from climate change and loss of biodiversity to migration and terrorism (Termeer et al., 2019), and given the potential context-shaping power of news media as a forum for the public debate of these and other wicked problems, as we’ve argued here, it seems relevant to put this framework to a broader test. Future research should therefore apply this methodology to debates about other contemporary wicked problems and in other media outlets, including new and social media.

Further research should also investigate if and how journalistic practices and the material conditions that underpin such practices (Fenton, 2013; Freedman, 2014) might be curtailing journalists’ ability to deliver the kinds of coverage that is expected and required to address such complex phenomena and the inherent scientific, scholarly, cultural, political and economic conflicts they imply (Waltner-Toews, 2017). The stark gap between our empirical findings and the expectations derived from media scholarship that informed our efforts lend strength to the argument that we must reassess these expectations (Vos & Wolfgang, 2018) or standards against which to assess current practices (Fenton, 2010a). Further research should also re-examine the assumptions that underpin such expectations, and the conditions under which it would be reasonable to expect news media to deliver on such expectations regarding their role in democratic public debate, particularly relevant in the discussion of such wicked problems.
Something wicked
Chapter 4

Not liable:
How newspapers fail to provide the foundations needed to support a forum for accountability
News media are considered a mechanism for public accountability that is essential to functioning democracies. Accordingly, media are charged with, and granted privileges necessary, to support and facilitate processes of accountability. The ability of the media to hold powerful political actors to account has been well documented, and attributions of responsibility have been shown to be especially persuasive. However, less theoretical and empirical work has been done on cases outside of the traditional press/politics arena. One condition necessary for accountability is the identification of those who are accountable. In the case of corporate accountability, if the case of chicken meat production in the UK reported in this paper is any indicator, media tend to identify bad apples, which may then be ritualistically sacrificed, and to identify the harms produced by an industrial sector as a consequence of factors sufficiently external so as to justify transfer for redress to government. In either case, individualisation or naturalisation, the chicken meat production industry is not recognized in a manner adequate to support accountability.
1. Introduction

Chicken meat epitomizes the recent industrialization of agricultural production (Jackson et al., 2010), and has been linked to a plethora of environmental, food safety, economic, social, and ethical concerns (see for example (Caffyn, 2021; Duncan, 2001; Stuesse, 2010; van Bueren et al., 2014; Waltner-Toews, 2017)). The livestock sector is in the top three of the most significant contributors to the pressing environmental problems we face today, linked to land degradation, climate change, air pollution, water shortages, and loss of biodiversity (Steinfeld, Gerber, Wassenaar, Castel, Rosales, Rosales, et al., 2006), including a contribution of an estimated 14.5% of all greenhouse gas emissions (Bailey et al., 2014). Changes related to the intensification of animal production have been more dramatic in the chicken meat production industry than in any other livestock sector (Bessei, 2018), as the sheer number of lives affected dwarves all other animal agriculture sectors. Together, these facts underscore urgency motivating critical study of chicken meat production and its relevance in understanding broader agricultural and industrial production more generally. The well documented environmental, food safety, economic, occupational, nutritional, and ethical harms caused by industrial meat production, for which chicken is the exemplar, (Broad, 2016) demand accountability.

Despite an abundance of scientific, technical and non-profit studies and reports about the role of animal agriculture in anthropogenic climate change, public recognition that the livestock sector is a key contributor to climate change lags (Bailey et al., 2014; Kristiansen et al., 2021). Several studies have attributed this error in perception to failures in media coverage (Almiron & Zoppeddu, 2014; Kiesel, 2010; Kristiansen et al., 2021; Myanna Lahsen, 2017; R. A. Neff et al., 2009). The industry is not being adequately held to account.

In democracies, news media are fundamental to public accountability (Maia, 2009). Watchdog journalism, including to journalists themselves (Hanitzsch & Vos, 2017; Hanitzsch & Vos, 2018; Hanitzsch, Vos, et al., 2019; Vos & Wolfgang, 2018; Wolfgang et al., 2019), is an important mechanism for political (Norris, 2014) and corporate (Hanitzsch & Wahl-Jorgensen, 2019) accountability. In addition to arguing specific points, media coverage shapes public debate and sets agendas by providing the terms on which issues are understood (Entman, 2007; McCombs & Ghanem, 2001; McCombs et al., 2014). Newspapers, as exemplified by UK broadsheets, continue to be recognized as important agenda-setters (Cushion et al., 2018; Djerf-Pierre & Shehata, 2017; Harcup & O’Neill, 2017; Langer & Gruber, 2020). How issues are framed shapes the range and quality of the arguments and perspectives that inform the public debate (D’angelo, 2002; Kristiansen et al., 2021; R. A. Neff et al., 2009). Without public discussion of a problem, the public can neither form opinions nor be expected act (R. A. Neff et al., 2009). Moreover, for the public to demand accountability, they must be able to identify those responsible.
Chapter 4

Attributions of responsibility made in the media have proven especially influential forming public opinion (Iyengar, 1991). While media coverage of animal agriculture has fared poorly compared to similar contributors to climate change, it is not clear how it has failed. If “Framing shapes public dialogues about political issues” (D’angelo, 2002, p. 874), and public dialogue around chicken meat production is inadequate, then critical media scholars’ task is to understand the extent to which media framing of the chicken meat production industry is compatible with public debate that supports accountability. Therefore, the research question that guides this study is:

**To what extent was newspaper coverage of the chicken meat production industry compatible with public accountability?**

The first step necessary in creating a public debate that supports accountability is to provide terms on which those who harm are recognizable as social and moral agents who can reasonably be recognized as responsible for their actions. It is on this first step, the framing of those who harm as liable, that we have chosen to focus our efforts. For this, we conducted an two-stage framing analysis of a census of relevant newspaper articles (N=766) on chicken meat production from national circulation outlets published over 31 years.

2. **Background**

2.1. **Accountability and framing**

Accountability, most simply providing answers to those with legitimate claims (Bovens et al., 2014), is frequently studied in relation to politics. In representative democracies, citizens are to hold elected representatives accountable (Hameleers et al., 2019). This type of democratic accountability builds on the principle of ownership. A second basis for accountability is affected rights and interests. According to this principle, third parties may demand accountability when some agent harms a right or interest (Bovens et al., 2014). This second basis for accountability, which extends to all cases in which there is real or felt harm, provides the foundation by which the public may hold corporations to account.

This emphasis on problematization, “I have been harmed”, fits the first function of a frame (Entman, 1993). Frames construct particular meanings concerning issues by their patterns of emphasis, interpretation, and exclusion (Carragee & Roefs, 2004). Through these patterns of selection and salience, frames advance particular meanings and interpretations about an issue. Substantive issue framing goes beyond asking whether a frame promotes support or opposition towards a particular issue. It asks how the issue is defined in the first place (Carragee & Roefs, 2004). Framing provides the analytical tools needed for the study of problematization, a step that may be skipped when accountability is premised on ownership. The second step in accountability, common to arguments for accountability
premised on both ownership and harm, is to investigate and assess the actions of agents in order to determine the appropriateness and nature of punishment (Maia, 2009).

Since accountability of corporate actors requires demonstration of harm linked to a liable agent, the first sub-question this study tackles is: To what extent did newspaper coverage about chicken meat production identify problems related to chicken meat production for which accountability can be demanded? (RQ1)

2.2. Attributions of responsibility and victimhood

Building on the framing of social identity in a manner consistent with Entman’s conceptualization of framing, Hameleers et al. (2021) argue that frames promote particular considerations that can relate to the cause of a problem – the blame frame, which is akin to attribution of causal responsibility – or to the consequences of a problem – the victim frame, which is akin to the attribution of victimhood. Building on identity framing (Dewulf et al., 2009), we argue that agents can be framed in three different identities regarding their relation to the problem. Victims are those who suffer the consequences of the problem, villains are those who cause a problem and problem solvers are those who are supposed to fix the problem. Linking these framing elements back to processes of accountability, the existence of victims authorizes accountability.

Combination of the theory provided by those who study media framing with evidence that mediatized attributions of responsibility (Hameleers et al., 2019; Iyengar, 1991) and their judgment of corporations (Jeong et al., 2018) are persuasive provides motivation for our effort to build an analytic and methodological framework adequate to assess media success in establishing the conditions necessary for corporate accountability. The first of these steps, which is not necessary for political accountability, is the identification of victims. This identification, in addition to authorizing actions to make whole those who are harmed, creates empathy from audiences (Vossen et al., 2018) that may be necessary to secure the public support needed for remedial action (Van Gorp, 2005).

Consequently, the second sub-question is: Which agents from across the food system did newspaper coverage frame as victims suffering the consequences of problems, and as responsible for said problems? (RQ2)

2.3. Recognition as a social and moral agent

For agents to be required to answer for their actions, they must be recognized as liable. The analytical distinction between causal interpretation and attribution of causal responsibility is, thus, sensitive to the recognition of those who harm as social and moral agents. Causing a problem does not necessarily entail liability for the harm or its solution. Take, for example, the case of a worker in a chicken meat processing factory who is ordered by their supervisor to clean the scald tank once per day rather than the empirically supported three times per day, thus increasing the chance for contamination. The worker did fail to scald the tank three
times a day and this may cause harm, but the worker, who does not have the information required to determine if the change in practice is sound and who will be fired if they do not comply, is not responsible. It is, therefore, the supervisor who decided to change from three to one scalding a day to reduce labour costs, the manager who approved the decision or the board that puts profits before all else that are responsible. Going the other way, the bacteria themselves can be seen as the cause of the problem. However, it is not useful to identify the bacteria, a well understood cause, as responsible as it is not possible to demand they change their behaviour. Neither the bacteria nor the worker handling the pressure washer are recognized as agents required to answer for their behaviour.

Similarly, though wild bird migration is a cause of the spread of avian influenza, flocks of wild geese are not attributed causal responsibility. They, just like bacterial counts in a tank, are a condition that those who can be held liable are expected to manage. Such distinctions matter because people are more willing to punish when it is possible to identify an agent as responsible for a harm (Jeong et al., 2018). This recognition as a social and moral agent, as an agent that may be liable, is necessary prior to legitimate demand for redress. Most studies focus their analysis on either generic frames (Boukes, 2021), substantive issue framing (Vossen et al., 2018) or attributions of responsibility (Kim & Telleen, 2017; Kim & Willis, 2007). This study expands that analysis to encompass framing elements that speak to the four functions of frames with particular attention to the identification of liable agents. By distinguishing between causal interpretation and attribution of responsibility, this framework supports description of the extent to which the chicken meat production industry was recognized as a social and moral agent liable to be held responsible.

Therefore, the third sub-question we tackle is:
*To what extent does newspaper coverage attribute responsibility to the industry for problems to which it is causally related? (RQ3)*

### 2.4. Systemic accounts of responsibility

With our peers who study political accountability, we accept the need for an agent that can be called to account. We, therefore, bring forward the implicit focus on agency common in studies of watchdog journalism. Our shared assumption of agency is, however, challenged when underlying causes of a problem can be traced to naturalized collective practices: structural dynamics. When it is neither appropriate to recognize a cause as natural nor is it easy to identify liable agents, it is far more difficult to assign responsibility both for the harm and its redress.

The best example of an agent used to back-stop natural causes is government. Whether or not they are identified as causing a problem, they are frequently recognized as being responsible to fix it (Iyengar, 1991). When harms can be attributed to an agent, the government is no longer expected to redress harms. Following the principle of ‘you broke it you fix it’ those agents that are found to have harmed, are expected to provide redress.
The identification of liable agents, however, is more difficult when harms are attributed to structures that are neither natural nor distinct agents. Attributions of responsibility towards individual or specific companies is an individualization of responsibility. Recognition of the ‘industry’, however, as an aggregate is a structural recognition that is more compatible with a natural cause. This aggregate framing is particularly relevant when the issues discussed are not specific to particular companies or actors, but are presented as inherent to chicken meat production, or even to mass animal production, in the same way as migration is inherent to wild birds.

Our analytical framework recognizes the possibility of systemic accounts of responsibility as distinct from both public responsibility, where blameless governments are expected to repair harms, and direct responsibility, where those who break something are obliged to fix it. While a system might not be able to provide answers in the same way as an agent, such systemic accounts of responsibility are required if we are to question the transfer of costs for harms to government while profits remain in private hands. While it may be tempting simply to present structural causes as the result of individuals’ choice, which is promoted by episodic framing, this strategy undermines recognition of the interconnection of issues (Iyengar, 1991). When the instances which fuel episodic accounts are not solidly framed as symptomatic of deeper issues, they become ‘bad apples’ whose identification stops their recognition as symptomatic of those deeper systemic problems (Waltner-Toews, 2017), which permits those who benefit to continue their accumulation while shunting redress for their naturalised harms to the public purse. From this perspective, holding a system to account is not so much about calling on it to demand answers, but it is about looking for systemic explanations and, if accountability is understood as a consequential activity, calling for systemic change that fixes imbalances in which the benefits of a structure accrue to private hands while its harms become a public responsibility. When faced with such structural causes, news coverage must provide a framing that supports systemic interpretations of responsibility and highlights the interconnections across issues.

Consequently, the fourth and final sub-question is:
To what extent did newspaper coverage also include systemic accounts of responsibility? (RQ4)

3. Materials and methods

3.1. Data collection and curation

The present study analysed UK newspaper coverage of chicken meat production, and the extent to which it supports the shaping of a forum for accountability. The dataset for this study consists of a census of relevant articles from seven national circulation outlets published between 1985 (when articles where more consistently digitized) and 2016 (the year immediately prior to data collection). To construct the dataset for this research, we
selected seven of the ten highest circulation newspapers. Our study thus includes articles published in the Daily Mail, Daily Mirror, Financial Times, The Daily Telegraph, The Express, The Times, and The Guardian. These outlets boast different formats and editorial positions from across the political spectrum, and cater to a wide variety of audiences. Legacy media like The Daily Telegraph and The Guardian are influential beyond the UK (O’Neill et al., 2015). We designed, piloted, and refined a search string to retrieve the highest number of articles related to chicken meat production (excluding recipes, for practical reasons). Articles were retrieved between January 20th and January 23rd, 2017, and resulted in 2544 initial hits. These were further narrowed down using a list of inclusion and exclusion criteria designed to capture exclusively all relevant articles, to a final dataset of 766 included in the present study. For more details regarding the data collection and curation processes, please see Appendix A.

3.2. Framing analysis

Framing has proven to be an appropriate and useful analytical tool to study how social actors define issues, assign blame and attribute responsibilities (Boukes, 2021; Entman, 2009; Iyengar, 1991; Maia, 2009). Frames are not singular messages, but rather refer to patterns that involve issue interpretation, attribution, and evaluation (Matthes, 2011). Frames are understood to fulfil four functions: define a problem, identify a cause, endorse a solution, and make a moral judgment (Entman, 2009). In terms of the roles that agents are assigned with relation to the issue, this conceptualization of framing suggests roles that are relevant to our focus on accountability. In defining a problem, frames also frequently identify for whom this is a problem, identifying the victims that suffer its consequences. In identifying a cause, frames can also identify those responsible for causing the problem. Finally, in endorsing a solution, frames can also identify those responsible for bringing about the solution to the problem. Usually, the elements that make up a frame and that fulfil some or all of these functions are tied together in logically consistent ways (Matthes, 2011). So, for example, the way that a problem or issue is understood usually points towards certain evaluation. The causes that are identified for a problem often already suggest appropriate treatment. To use examples that pertain to our case of study, understanding avian influenza as an economic problem for the industry might point to how an outbreak of avian influenza could jeopardize the livelihoods of farmers and producers. Alternatively, framing avian influenza as an animal health problem focuses on the birds as victims. Finally, highlighting the potential of avian influenza to become a pandemic constructs it as a public health issue, thus constructing the public in general as victim. However, not every framing element is explicitly mentioned every time. An important assumption of framing theory is that logic that ties these elements together works to evoke those framing elements that are not explicitly stated in a news text (Van Gorp, 2005). So, for example, the proposed solutions often clue us into what is being implicitly identified as the cause of the problem. As an illustration, suggesting that consumers should just cook chicken properly implies that the problem of food poisoning is due to hygiene and safety failures in consumers’ kitchens, and not, say, due to the use of scald tanks in slaughterhouses being a key point
of campylobacter contamination or the flouting of food safety measures on factory floors. Taking another example from a recent study, Kristiansen et al. (2021) found that with regards to the contribution of animal agriculture to climate change, the preferred solution in media were changes to individual consumption; this is consistent with their finding of consumers being frequently mentioned as responsible actors.

Following Matthes and Kohring (2008), we split up a frame into its separate framing elements, which are then identified and coded through content analysis. Our framing analysis built on Entman’s (1993) conceptualization of framing as a process of selection and salience to promote a particular problem definition, causal interpretation, solution endorsement, and moral evaluation. Using these four functions of a frame as a theory-driven coding structure allowed us to identify the different framing elements that make up a frame in the news texts: problem, cause, solution, and judgment. Additionally, we also included framing elements that refer to the social identity of actors in relation to the issue (Hameleers et al., 2021), in line with Entman’s conceptualization of framing: as responsible for causing the problem (Villain), as responsible for bringing about the solution to the problem (Solver), and as suffering the consequences of the problem (Victim). Together, these framing elements allowed us to describe how a particular topic – chicken meat production – is problematized and constructed as an issue, as well as how attributions of responsibility and victimhood are assigned with regards to the issue in question.

Our framing analysis consisted in of two stages. In the first stage, we worked inductively using the aforementioned functions of a frame to identify the specific framing elements in a randomly selected subsample of 200 newspaper articles from the complete dataset. This resulted in thousands of specific values for each of the framing elements. These values were then subjected to a process of iterative abstraction to construct broader categories for each framing element. These categories were then used as the base to construct a deductive coding scheme, that is, a set of all eight framing element variables, with their respective values and codes. This coding scheme was further subjected to three rounds of piloting with separate independent coders trained for each occasion. Finally, the resulting coding scheme was translated into a complete coding handbook with detailed instructions for use in a deductive content analysis.

The second stage of the framing analysis consisted of applying the inductively developed coding handbook to the full dataset. Two independent coders systematically coded the 766 articles in random order using Atlas.ti. The results from this deductive content analysis were translated into frequency counts and co-occurrence frequency counts, which were analysed either in Atlas.ti or exported to Excel for descriptive statistical analysis. For more details and inter-coder reliability reports, please see the Appendix A and B.

Table 9 includes a list of the key concepts from the analytical framework, and how these are operationalized through a set of variables, as well as what these operational variables code for in the dataset.
Research suggests that the relevant identity in a study focusing on accountability in complex systems is an aggregate associated with the entire industry (Irani et al., 2002). However, there is a lack of consensus on how this aggregate identity can or should be operationalised. For the purpose of this study, the chicken meat production industry was defined as referring to the sector as a whole, encompassing the entire production value chain (including both conventional and alternative modes of production, such as free-range and organic), up to the point of sale to the consumer, which is categorized separately. We segmented this value chain for analytic purposes into the level of the farm (referred to as farms, farmers, producers or growers), upstream actors (those who supply farms), downstream actors (including processors, slaughterhouses, wholesalers, and companies with stakes in multiple stages of production), workers, and retailers. We also created the category industry which includes explicit references to the industry and to industry bodies when discussing those instances in the news texts which explicitly identify the industry as such, not the broader understanding of the sector, but the industry as an agent, either referring to the industry itself or to industry bodies such as the British Poultry Council.

<table>
<thead>
<tr>
<th>Analytical concept</th>
<th>Operational variable</th>
<th>Codes for</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Problematization</strong></td>
<td>Issue</td>
<td>What is being problematized or defined as problematic</td>
</tr>
<tr>
<td></td>
<td>Problem definition</td>
<td>How the issue is being problematized, the terms in which it is defined as problematic, what kind of problem this issue is</td>
</tr>
<tr>
<td><strong>Causal interpretation</strong></td>
<td>Cause</td>
<td>What is being identified as the cause of the problem</td>
</tr>
<tr>
<td><strong>Solution endorsement</strong></td>
<td>Solution</td>
<td>What is being endorsed as the solution to the problem</td>
</tr>
<tr>
<td></td>
<td>Action for solution</td>
<td>What is being identified as the action necessary to bring about the solution to the problem</td>
</tr>
<tr>
<td><strong>Attribution of victimhood</strong></td>
<td>Victim</td>
<td>Who is identified as suffering the consequences of a problem, who is being harmed, those for whom this is a problem</td>
</tr>
<tr>
<td><strong>Attribution of causal responsibility</strong></td>
<td>Villain</td>
<td>Who is identified as responsible for causing the problem</td>
</tr>
<tr>
<td><strong>Attribution of treatment responsibility</strong></td>
<td>Solver</td>
<td>Who is identified as responsible for bringing about the solution to the problem</td>
</tr>
<tr>
<td><strong>Chicken meat production industry</strong></td>
<td>Chicken meat production value chain as sector</td>
<td>A broad understanding of the chicken meat production industry as a sector, comprising the entirety of the production value chain up to the point of sale to the consumer. There is no recognition of agents or agency, collective or otherwise.</td>
</tr>
<tr>
<td></td>
<td>Chicken meat production industry as agent</td>
<td>A narrow understanding of the industry as an entity, and explicitly identified as such either by explicit reference to the industry or to industry bodies such as the British Poultry Council. This identifies instances where the industry or its bodies are recognised as agents</td>
</tr>
</tbody>
</table>
These categories were developed inductively from a randomly selected subset of the data and used to support a deductive content analysis that was promptly frustrated by the messiness of news texts from diverse speakers over a period of 31 years. News articles rarely precisely and unequivocally defined what exactly they mean when they refer to chicken meat production, the sector, the industry, farmers, producers, companies, etc. Such terms and their attached meanings are neither unequivocal nor static. For rhetorical or other purposes, some of these terms are used interchangeably, as this statement illustrates: “Britain’s poultry sector is in the midst of its annual Christmas bonanza as consumers splash out on festive supplies. But as people rush to get their meat they may be unaware of a dark side to this industry". In view of the complexity of the data, and to capture and respect the richness and messiness of the data, we have deliberately chosen not to take an either/or approach to the industry by limiting our understanding to one of these analytical categories, but rather, to permit overlap by coding each statement with the codes that plausibly answer ‘how might a reader interpret this’. We, thus, first look at the broadest category, and later disaggregate the data for analysis at a lower level of aggregation. This allows us to explore and analyze the data at different levels, while maintaining the possibility to aggregate and collapse categories when there are no analytically relevant differences. However, we maintain the possibility of analysis at a lower level of aggregation because some of these categories carry different emotional charges, or refer to agents whose degrees of freedom with regards to industry practice might (be perceived to) be very different. For example, workers in a slaughterhouse or in a chicken meat processing factory are certainly part of the chicken meat production value chain. However, they are categorized separately from other actors because their interests are sometimes opposed to those of other actors within the production chain, most notably the industry or the companies that employ them. Moreover, worker abuse and exploitation have been raised as a problem in the chicken meat production industry in particular (Stuesse, 2010), suggesting that workers have been singled out as actors whose rights and interests are harmed.

Other categories present similar ambiguities. Take the category of country as an example. Countries were easy to identify in the news texts. England, Brazil, Thailand, China, France, Germany, Turkey, United States of America. These terms were easily identified by coders. However, the context and connotations in which these terms were used point to very different interpretations. Sometimes the country is used as a proxy for governments. We found that this was frequently the case when speakers were denouncing another countries’ policies. In other cases, the country was used as a proxy for the public. This was the case, for example, in statements that refer to avian influenza and its impact for a country. In phrases like ‘Britain hit by bird flu’, Britain here does not refer to the government, but rather to the entire population/society.
4. Findings

4.1. Problems that demand accountability

Newspaper coverage about chicken meat production identified sixteen categories of problematized issues. The most frequently mentioned issue category was avian influenza, as in this example: “Experts fear bird flu pandemic as Thailand reports human case”. Foodborne illness was also frequently mentioned as a problem: “For a lot of us who are fit and healthy, food poisoning is unpleasant and inconvenient—but for others it is a very serious issue”. This next example illustrates how the chicken meat production industry itself was also problematized in our dataset: “JAMIE Oliver, the television chef, electrocuted a chicken and drained its blood in front of a television studio audience as part of his campaign to highlight Britain’s poultry industry. The chef carried out his demonstration to show how the vast majority of chickens in this country are slaughtered”. Other issues that were defined as problematic, though mentioned less frequently in our dataset, include specific industry practices such as the adulteration of chicken meat and the use of antibiotics, animal welfare, global trade, policy and regulation, economics, work and employment, alternative agriculture (mostly free-range and organic chicken meat production), cheap chicken, consumption, information, religious slaughter, food preparation, and other issues. Over 70% of all the statements in our dataset mention at least one problem, and over 97% of all the articles included in this study mentioned at least one problem. Therefore, our census of relevant newspaper articles about chicken meat production did provide ample evidence of problematization; newspaper coverage then did identify and cover multiple problems related to chicken meat production, which we argue is a prerequisite for attributions of responsibility and demands for accountability.

Newspaper articles also identified a variety of victims suffering the consequences of these problems related to chicken meat production, as in this statement: “We have people dying who do not need to die, because you should not be using these drugs in food animals at all, particularly in poultry”. Eighty eight percent of the articles included in our dataset identify at least one victim. Attributions of victimhood frame someone – or something, as in the case of the environment – as a victim, and highlight their suffering the consequences of the problem. For example, the following statement highlights the harm suffered by the chickens themselves: “With more than 800million birds reared for the table every year, this evidence indicates that more than 200million suffer leg problems”. Statements such as these construct victims as a party whose rights or interests are being harmed, and because of that, are in a position of demanding accountability from those who are perceived as causing that harm, or having accountability demanded on their behalf. In this last example, Human Rights Watch is making such demands on behalf of workers, highlighting the systematic violation of worker rights in the chicken meat production industry: “workers in this industry face more than hard work in tough settings. They contend with conditions, vulnerabilities, and abuses which violate human rights”.

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Notably, 18% of the issues being problematized refer either to the industry itself or to industry practices. In this example, the industry is problematized in terms of its negative impact on human health: “the broiler chicken industry is a major food scare waiting to happen”. In another example, chicken meat production is problematized in terms of animal welfare: “Animal welfare groups say the birds are often conscious when they are about to be killed and that many suffered broken bones and other injuries during manhandling”. Such problematization of the industry is consistent with the pattern of causal interpretation, which shows that the industry and its practices were also identified as cause of the problem. 18% of all the causes identified in our dataset identify the industry or its practices as cause of the problem, as in this statement in which the journalist explains that the use of antibiotics in poultry production causes more serious human health problems: “To counter infections, poultry producers have relied increasingly on powerful antibiotics, but these are now creating even more serious problems”. Together, these findings entail that not only did newspaper coverage include problems for which responsibility can and should be attributed on account of the rights and interests of victims being harmed, but also that the industry itself was constructed as both a problem and a cause of problems related to chicken meat production. A proportion of newspaper coverage about chicken meat production thus highlights the harms inherent to this sector, and links these harms to the industry itself or to its practices. To what extent do these problematizations and causal interpretations translate to attributions of responsibility that can effectively lead to processes of accountability, by identifying those actors that are liable to be held responsible for such harms? The next section investigates the attribution of responsibility and victimhood in our dataset.

4.2. Attributions of responsibility and victimhood across the food system

4.2.1 The food system

Newspaper coverage included diverse attributions of victimhood, causal responsibility, and treatment responsibility across the food system (Figure 13). Actors from the chicken meat production value chain were mentioned frequently, in all three categories. By contrast, government was rarely mentioned as victim, and though they were sometimes attributed causal responsibility (typically with statements such as “For as long as governments encourage systems guaranteed to foster stress and gross overcrowding in poultry, the problems of widespread contamination will continue unabated”), they were most frequently attributed treatment responsibility (again, with typical statements such as “Everyone I have spoken to in these demonstrations has said they are fed up with a Government which doesn’t seem to put animal welfare on its agenda”, “the British government’s plan to tackle bird flu is characterised by surveillance and containment”, “Nick Brown, the Agriculture Minister, is under pressure to introduce routine testing of chicken imports. He is also being urged to order the labelling of all food with its country of origin”). What is more, governmental authorities were more frequently called on to solve problems related to chicken meat
production than actors from the chicken meat production value chain. The framing of inter- and supra-national authorities and organizations presented a pattern similar to that of governmental authorities, albeit they were mentioned much less frequently. Only once mentioned as victims. Inter- and supra-national authorities and organizations were constructed as responsible for bringing about the solution to the problem (for example “The EU moved swiftly to prevent chickens picking up the flu from Thai imports”) and, to a lesser extent, identified as responsible for causing it in the first place (for example, “BRITISH farmers yesterday accused European food safety officials of issuing “alarmist and unhelpful” advice about eggs and chicken that could devastate the poultry industry”).

Outside from the production value chain, the actor category which was most frequently identified as victim was the public, as these statements illustrate: “THE public is being put in danger by the Government’s failure to eradicate the strain of salmonella”, “This is an organism that can make you very ill indeed”, “Barbecue bugs that can make you suffer”, “NEARLY 100,000 Britons suffered a bout of food poisoning last year”. We also found 82 statements that attributed causal responsibility to the public (“The true cost of our obsession with cheap chicken? The lethal bacteria that can lurk inside leads to 500,000 cases of food poisoning every year... and 100 deaths”), and almost twice as many that attributed treatment responsibility to the public (“We should just eat a bit less chicken - and worry more about the conditions in which it’s produced”). Animals were also overwhelmingly constructed as victims, as illustrated by statements such as “millions of broiler fowl suffer painful deformities or die of heart disease”, “Cruelty to chickens reared on vast factory farms was condemned by MPs yesterday”, “Factory chickens to suffer under new EU rules”. Finally, consumers were also most frequently framed as victims, as in these extracts: “Consumers might be at extra risk of cancer, heart attacks or producing defects in foetuses, because millions of birds and eggs eaten each year have residues from veterinary medicines used to treat poultry diseases”, and “Shoppers are being sold chicken labelled “produced in Britain” but which is imported from countries where food safety falls dramatically short of UK standards”. Interestingly, though consumers were rarely held responsible for causing problems related to chicken meat production, they were relatively more frequently held responsible for bringing about the solution to the problem. Statements such as “It has been a difficult year for the poultry industry, and British consumers can help by buying British”, “He urged consumers to continue buying and eating British poultry, saying any downturn in sales would be damaging to farmers”, “Oliver hopes that the distressing images will persuade people to stop buying battery-reared chickens”, were five times more frequent than statements along the lines of “The Ministry of Agriculture blamed sloppy food handling by consumers”.�
4.2.2 The chicken meat production value chain

Disaggregating the chicken meat production value chain and analysing the framing of the actor categories that make up this broader category yields a much more nuanced picture. Assessing these attributions at a lower level of aggregation reveals differences in how actors from the chicken meat production value chain were framed in newspaper coverage, suggesting that, indeed, some actors were recognized as liable to be held responsible, and thus accountable, for problems related to chicken meat production. We show, for example, that farmers and the industry were most frequently framed as victims, whilst actors from the chicken meat production chain outside of the farm (most frequently a specific company or companies) and retailers were frequently attributed both causal and treatment responsibility.

Figure 14 illustrates the frequency distribution of attributions of victimhood, causal responsibility and treatment responsibility across the actor categories that make up the chicken meat production value chain, up to the point of sale to the consumer. Workers, who were mentioned least frequently, were consistently framed as victims. 85% of references to workers highlight their suffering the consequences of the problem, as these examples illustrate: “A fifth of workers interviewed reported physical abuse, being pushed, kicked or having things thrown at them by line managers”, “Evidence of widespread physical and verbal abuse of migrant workers in the meat and poultry industry that supplies Britain’s supermarkets has been uncovered”, “Its statutory inquiry found widespread abuse of agency workers, most of them migrants, in the UK meat sector, including breaches of the law and basic human rights”, “Injuries connected to poultry production are common: since 2010, 1,173 injuries related to processing have been reported to the Health and Safety Executive (HSE), including 153 incidents classified as “major”. One worker died that year”, “An Oxfam America
report issued in May called No Relief focused entirely on workers not being allowed to go to the toilet. It includes stories of laborers who said they were forced to wear diapers on the job because the penalties for taking too long in the bathroom were so severe”. The overall scarcity of attributions of causal responsibility and even less frequent attribution of treatment responsibility to workers suggest that they were not recognized as liable to be held responsible for problems related to chicken meat production.

![Frequency distribution of attributions of victimhood, causal responsibility and treatment responsibility within the chicken meat production value chain.](image)

**FIGURE 14** | Frequency distribution of attributions of victimhood, causal responsibility and treatment responsibility within the chicken meat production value chain.

Farm level actors were also portrayed as victims far more than as responsible for either causing or bringing about the solution to the problem. Statements such as “poultry farmers have been hit by high input costs”, “blow for farmers” and “producers are struggling to make ends meet” illustrate how speakers frequently constructed actors at the level of the farm as victims suffering the consequences of a problem (the most frequent problem in our dataset being avian influenza, reflecting the H5N1 outbreak between 2003-2008). Such statements portraying actors at the level of the farm as victims greatly outnumbered those that attributed causal responsibility (“the systematic misery perpetrated by Britain’s poultry farmers” or “Farmers have massively increased their reliance on drugs to pump up chicken”) or treatment responsibility (“The big producers could end the practice of ‘thinning’ densely stocked farm sheds” or “Campylobacter: costly problem producers don’t want to tackle”). Our findings suggest that newspaper coverage did not construct farmers as liable to be held responsible, and thus accountable, for problems related to chicken meat production.

Actors both upstream or downstream from the farm were more frequently framed as responsible for causing problems. Such attributions of causal responsibility to actors outside of the farm were most often levied against a specific company or companies, as in these examples: “Chicken firm axes 188 jobs” and “Monster chickens too fat to waddle around are being bred for sale to millions of shoppers. The grotesque birds, up to three times their normal size, were genetically selected by Britain’s largest chicken supplier, Grampian Country Food Group”. Causal responsibility for problems related to chicken meat production
was also attributed to processors ("Large food processors, it was revealed, were bulking up chicken destined for hospitals, schools and restaurants with beef bits, pig waste and poultry skins"), manufacturers ("Some manufacturers were injecting proteins from old animals or parts of animals which are no use for food, such as skin, feathers, hide, bone and ligaments"), and slaughterhouses ("Chicken slaughterhouses that give thousands of people food poisoning because of poor hygiene"). Speakers portrayed these same sorts of actors, companies, slaughterhouses, and processors, as victims almost as frequently as problem causers and solvers ("Processors could reconfigure factory lines to install new machinery that could flash freeze or steam-treat the surface of birds to kill the bug", “Chicken firm bans antibiotics over superbug fears”, “this disturbing practice on which manufacturers are unwilling to clamp down"). Though actors from the production chain outside of the farm were certainly mentioned as victims, they were more frequently presented as responsible for causing the problem. They, however, were not as frequently attributed treatment responsibility which suggests that these actors were, to some extent, the same as wild birds: not perceived or recognized as able or liable to solve those problems they caused.

Retail actors were frequently attributed both causal and treatment responsibility, and they were rarely framed as victims. Supermarkets, in particular, were frequently blamed for causing problems like foodborne illness, as in these examples: “Six in every ten chickens sold by supermarkets contain potentially lethal bugs that infect half a million people a year” and “With constant pressure from supermarkets to keep the price of chicken low, and the industry working on high volumes but low margins, experts say the campylobacter problem has been left unsolved for years”. Retailers in general were also attributed responsibility for causing such problems due to the pressure they exert to keep chicken prices down. “Poultry producers are getting an average of 2p less than the cost of production because of a price war between retailers and caterers”, wrote one journalist, while another one explains that “Retailers have used their concentrated buying power to drive down terms, and chicken prices have long been one of the weapons in their own competitive wars. Profits for processors depend on getting large volumes of chickens through the system at high speed and that can militate against best hygiene practice”. In a manner consistent with attributions of causal responsibility, and recognizing their effective monopsony, retailers were also attributed treatment responsibility for problems such as the use of antibiotics (“But the stores have increased pressure on suppliers to reduce the need for antibiotics”), animal welfare problems (“SIR Paul McCartney is calling on fast-food giant KFC to end ‘cruelty’ on farms supplying 750 million chickens for its restaurants worldwide”), and even labor issues (“Scandalous working conditions in industrial chicken sheds have led to a revolution. In Britain’s poultry sector the labour movement has come back to life – and forced supermarkets to act”).

The lack of attributions of victimhood and the frequency of attributions of both causal and, almost to the same extent, treatment responsibility, together entail that retailers were recognized as liable to be held responsible for both causing and solving problems related to chicken meat production in a manner that is compatible with processes of accountability.
Such attributions of responsibility signal the recognition of retailers – particularly supermarkets – as social and moral agents liable to be held responsible and thus accountable.

4.2.3 The chicken meat production industry

The framing of the chicken meat production industry as an actor stands in stark contrast to that of retailers. As Figure 14 shows, the industry itself was predominantly framed as a victim in newspaper coverage of chicken meat production. Though we did find attribution of causal and, to a lesser extent, treatment responsibility towards the industry, portrayals of the industry as a victim suffering the consequences of a problem outnumbered statements that attributed any kind of responsibility to the industry itself. Statements such as “Poultry industry faces crisis as deadly strain of bird flu strikes”, “The poultry industry has been crippled”, and “The serious fear is that the disease could spread from wild birds to domestic poultry flocks and cost the industry millions of pounds” illustrate how speakers frequently portrayed the chicken meat production industry as a victim, highlighting the negative consequences suffered by the industry. The 427 statements we found in our census characterizing the industry as victim overwhelms the 186 statements that framed the industry as responsible for causing the problem. Speakers attributed causal responsibility to the industry regarding environmental problems (“Each year the industry in Britain produces 130,000 tonnes of nitrogen from chicken droppings, as well as phosphorus, both of which damage the environment”), antimicrobial resistance (“the poultry industry helps create superbugs by treating their stomach upsets with antibiotics”), animal welfare problems (“the modern intensive broiler industry inflicts great suffering on many of the chickens”), foodborne illness (“It was the total failure of the industry setting its own standards and regulating itself that led to last year’s chicken bug scandal”), and avian influenza (“is the disease not only a direct result of intensive farming – but actually being spread by the industry?”). Finally, we found 122 statements that attributed treatment responsibility to the chicken meat production industry. In these examples, the industry was framed as the party responsible for bringing about (or being able to forestall) the solution to the human health problem of foodborne illness due to campylobacter contamination: “Poultry is the source of the majority of [food poisoning] cases, so the industry should be making every effort to ensure chickens are as free from campylobacter as possible before they reach customers”; “the industry’s failure to tackle what is the commonest form of food poisoning in the UK”. The industry is also attributed treatment responsibility with regards to avian influenza (“[Scientists] urged the poultry industry to act immediately by putting all its flocks indoors”) and animal welfare issues (“the poultry industry was under pressure to improve welfare standards”).

The framing pattern of the industry in newspaper coverage of chicken meat production more resembles that of farmers than retailers. In summary, the industry was largely framed as a victim whose rights and interests were harmed, and thus, in these representations, the industry was positioned to demand accountability rather than as an actor who is responsible for causing and, therefore, obliged to solve the problems they have created.
4.3. You break it, you fix it?

We found that only a small proportion of the statements that problematized the chicken meat production industry or that identified the industry or its practices as cause of the problem also attributed causal and treatment responsibility to the industry. Notably, almost 40% of the statements that problematize the chicken meat production industry also identify the industry and its practices as cause of the problem, suggesting that an important proportion of these problems are identified as being caused by the industry. However, the relative lack of attribution of causal or treatment responsibility, despite problematization and causal interpretation that constructed it as problem or cause, suggest that the industry was not expected to fix the problems they were acknowledged to create.

4.3.1 What accountability looks like... and what it does not

As mentioned above, problematization is understood as the first step in accountability. It is only after an issue has been defined as problematic, wrong or undesirable that demands for explanation or justification can arise (Maia, 2009). The industry and industry practices were frequently constructed as problematic in our census of relevant articles. Overall, we coded 1335 statements – 18% of all statements in our dataset – that problematize the chicken meat production industry (broadly understood here as a sector) or specific industry practices such as the use of antibiotics, the adulteration of chicken meat, breeding practices, etc. A quarter of those statements that problematized the industry or its practices also framed actors from across the chicken meat production value chain as responsible for causing the problem, but only 7% explicitly identified the industry as responsible for causing the problem (Table 10). Examples allow us to illustrate this distinction and highlight the relevance of this finding. In this first quotation, extracted from a longer statement, the poultry industry is being problematized for animal welfare harms: “The specific allegation by the poultry industry’s critics is that birds have been selectively bred to reach maturity in six weeks rather than 12. But though their muscles grow faster, their legs, hearts and lungs can’t keep up. Thus millions of broiler fowl suffer painful deformities or die of heart disease”. In this statement, the chicken meat production industry is being explicitly named as responsible for the pain and suffering of millions of birds. By contrast, in this second statement, experts discuss the animal welfare problems posed by non-battery production methods, without making any attributions of responsibility for the problems inherent to these methods: “Non-battery methods of egg and poultry production posed almost as many problems as they sought to solve, according to veterinary surgeons, animal behaviourists and poultry specialists at a symposium organised by the British Veterinary Association at the Zoological Society of London”. There were no attributions of responsibility at all in the entire article from which this statement was extracted. In other cases, though the statement problematized chicken meat production, the responsibility is attributed to actors outside of the production value chain. For example, in this quote, it is consumers who are being identified as responsible for causing harm to themselves by buying organic: “CONSUMERS often expose themselves to increased
health risks when they buy organic and free-range food, a leading vet said yesterday”. This statement is particularly interesting because, even though alternative production methods are being problematized in terms of human health, causal responsibility is attributed to the consumer and their buying choices.

**TABLE 10 | Co-occurrence frequency (absolute and relative) and coefficient.**

<table>
<thead>
<tr>
<th>Problematization of industry and practices</th>
<th>Causal interpretation points to industry as cause</th>
</tr>
</thead>
<tbody>
<tr>
<td>1335 statements</td>
<td>769 statements</td>
</tr>
<tr>
<td>Frequency count</td>
<td>Frequency count</td>
</tr>
<tr>
<td>Co-occurrence coefficient</td>
<td>Co-occurrence coefficient</td>
</tr>
<tr>
<td>Percentage Frequency count</td>
<td>Percentage Frequency</td>
</tr>
<tr>
<td>Attributions of causal responsibility</td>
<td>Attributions of treatment responsibility</td>
</tr>
<tr>
<td>Worker</td>
<td>Worker</td>
</tr>
<tr>
<td>3</td>
<td>2</td>
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<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Farm</td>
<td>Farm</td>
</tr>
<tr>
<td>64</td>
<td>35</td>
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<tr>
<td>0.05</td>
<td>0.02</td>
</tr>
<tr>
<td>5%</td>
<td>3%</td>
</tr>
<tr>
<td>Production chain outside farm</td>
<td>Production chain outside farm</td>
</tr>
<tr>
<td>122</td>
<td>63</td>
</tr>
<tr>
<td>0.08</td>
<td>0.04</td>
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<tr>
<td>9%</td>
<td>5%</td>
</tr>
<tr>
<td>Industry</td>
<td>Industry</td>
</tr>
<tr>
<td>92</td>
<td>31</td>
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<tr>
<td>0.06</td>
<td>0.02</td>
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<tr>
<td>7%</td>
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</tr>
<tr>
<td>Retailer</td>
<td>Retailer</td>
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<tr>
<td>57</td>
<td>66</td>
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<tr>
<td>0.04</td>
<td>0.04</td>
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<tr>
<td>4%</td>
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</tr>
<tr>
<td>Government</td>
<td>Government</td>
</tr>
<tr>
<td>43</td>
<td>124</td>
</tr>
<tr>
<td>0.03</td>
<td>0.06</td>
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<tr>
<td>3%</td>
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<tr>
<td>Co-occurrence coefficient</td>
<td>Co-occurrence coefficient</td>
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<tr>
<td>Percentage Frequency count</td>
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<tr>
<td>Attributions of treatment responsibility</td>
<td>Attributions of treatment responsibility</td>
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<td>Production chain outside farm</td>
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<td>Retailer</td>
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<td>Government</td>
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<td>124</td>
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<td>0.06</td>
<td>0.06</td>
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<tr>
<td>9%</td>
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</tbody>
</table>

In terms of the attribution of treatment responsibility, 15% of statements problematizing the industry identified actors from the chicken meat production value chain as responsible for bringing about the solution, but only 2% identify the industry as the responsible for alleviating or forestalling alleviation of the problem, as in this example: “The policy of naming and shaming the dirtiest companies for their campylobacter rates has been a key part of the FSA’s strategy to deal with industry’s failure to tackle what is the commonest form of food poisoning in the UK”. This statement identified the industry’s failure to even try to solve the human health problem posed by campylobacter contamination, thus implying that the industry is indeed recognized as being both able and expected to act to solve this particular human health problem. While the mechanism, the Food Standards Agency, is unusual in our dataset, this quote is typical in attributing treatment responsibility to the government. In contrast, consider the following statement:

*Dr Marc Cooper, an RSPCA farm animal scientist, said: “If people knew how the average chicken was treated before it ended up as their Sunday roast, they would probably be disgusted. Some supermarkets are selling chicken meat for as little as £2 per kilo - this can be less than it costs to produce the bird.”* Such low prices meant farmers did not get enough money to enable or encourage them to rear
the birds in acceptable conditions, he added. **Everyone has a responsibility**
to ensure chickens are reared to high standards. **We are asking supermarkets**
to stop selling standard chicken and shoppers to stop buying it. **We are**
asking shoppers to demonstrate to supermarkets that there is a demand for
higher welfare chicken by signing our petition and by showing they are willing to
pay a little bit more money for a bird that’s had a better life”

In this quote, chicken meat production is framed as an animal welfare problem and
causal responsibility is laid at the door of retailers for their selling chicken at low prices,
which makes it impossible for farmers to meet welfare standards (note that this relieves
farmers of causal responsibility).

### 4.3.2 Not liable to be held responsible

Our study also identified causes. The industry and industry practices were most frequently
mentioned as causes of problems, second only to nature or naturally occurring phenomena
(for example “**Factory farming methods** for chicken are putting human health at risk,
damaging the environment and proving cruel for birds, a report says today”). We found 769
statements identifying the industry and its practices as a cause. From these, 46% also
identified other actors from the chicken meat production chain as responsible for causing
the problem. In the following quote, farms, producers and retailers were all attributed causal
responsibility: “**A HEALTH alert was issued over shop-bought chickens yesterday after thousands**
tested positive for a potentially fatal food bug. Families are at risk of serious illness **because of**
**the way the birds are treated by farms, producers and retailers**”. Since these framing
elements tend to be tied together in logically consistent ways, it is not surprising that
almost half of those statements that identify the industry as cause of the problem explicitly
name actors from the chicken meat production value chain as responsible for causing the
problem. Following this internal consistency, we would expect to find more statements,
such as this next extract, which identified the use of antibiotics in chicken production as the
cause of human health problems and explicitly held the industry responsible for causing
this problem:

Campaigners say the emerging [superbugs is the result of the heavy use of antibiotic medicines on farm animals, such as chickens](#), over decades. In the case of poultry, day-old chicks are effectively inoculated with antibiotics to protect them from bugs. However, bacteria such as E.coli has mutated to become resistant to them, so posing a threat to the human population. Cóilín Nunan, of the Alliance to Save Our Antibiotics, said the **Government and the farming industry had failed to respond to warnings about the over-use of antibiotics. For years the poultry industry was systematically injecting day-old chicks in breeding flocks with modern cephalosporins, despite these drugs being classified as critically important antibiotics in human medicine,' he said.
Accusing the industry (and the government) of failing to respond to warnings about the abuse of antibiotics implies that the chicken meat production industry is recognized as able and expected to act in response to information about the negative consequences of its actions – injecting chicks with antibiotics. By holding the industry responsible for their failure in alleviating the problem that they created, this statement recognized the industry as an actor that can and should be called on to provide answers and explanations, thus providing rhetorical resources to support recognition of the industry as responsible to fix the problem. However, we found very few statements that held the industry responsible to fix problems resulting from the industry or its practices: only 15% of those statements that identified the industry and its practices as cause also held actors from the production chain responsible for bringing about the solution. We also found that 14% of those causal interpretations also made explicit attributions of causal responsibility towards the industry, and just 3% identified the industry as responsible for solving the problem. What is more, just 13% of statements that held the industry responsible for causing a problem, also held it responsible for bringing about the solution. In short, we found that the industry was not recognized to be responsible for the harms caused by its actions and that it was not expected to clean up its mess.

As an illustration, in this extract from The Guardian, the speaker discusses the contamination of chicken meat with campylobacter, problematized both in terms of its impact on human health and, consequently, economic impact on public finance: “It was the total failure of the industry setting its own standards and regulating itself that led to last year’s chicken bug scandal when the Food Standards Agency watchdog found nearly eight out of 10 fresh chickens bought from UK supermarkets were contaminated with the potentially lethal food-poisoning bug campylobacter, costing the NHS nearly £900m”. In this example, it is the failure of the industry to self-regulate that is identified as the cause of the problem; the industry is thus explicitly held responsible for such failure. Industry standards and self-regulation are presented as potential solutions to the problem. The fact that the industry failed to set its own standards in ways that precluded rampant contamination of chicken meat with campylobacter implies that the industry was recognized as able to bring about the solution to the problem – or, rather, prevent the problem from arising altogether. Importantly, this statement recognizes the industry as liable to be held responsible and accountable. It suggests that the industry can and should be called on to provide answers and explanations.

By comparison, governmental authorities and officials were the actors most frequently attributed treatment responsibility in statements that identify the industry as the problem or the cause of the problem; a quarter of all attributions of responsibility in these cases are levied against governmental authorities. Almost a third of all attributions of treatment responsibility that co-occur with attributions of causal responsibility to the industry identify the government as responsible for solving the problems that the industry is held responsible for causing. Therefore, even when newspaper coverage portrayed the industry as either the problem or the cause of the problem, it did not frequently attribute causal or
treatment responsibility to it. Though newspaper coverage did recognize the industry as a problem or a cause of the problem, causal and treatment responsibility was distributed unevenly across actors from the chicken meat production value chain. This relative lack of attribution of responsibility to the acknowledge source suggests that the industry was not recognized as being liable to be held responsible, and thus also unlikely to be called on to provide answers.

4.4. Systemic accounts of responsibility

Thus far, the analysis has focused on attribution of responsibility to actors. We argued that an understanding of accountability as answerability requires actors that can be called upon. However, we also recognize that such an actor-oriented understanding of accountability might not account for systemic accounts of responsibility. Holding a system to account is not so much about calling on the system to answer for its actions, as in the case of an actor, but rather about looking for systemic explanations and, understanding accountability as a consequential activity, calling for systemic change when necessary. Moreover, while the system itself cannot answer for itself or its actions in the way an actor can, actors can provide answers and explanations for their role in benefitting from, upholding, reproducing, reinforcing, contesting or failing to tackle a system or systemic dynamics.

Governments and governmental authorities are often positioned as responsible to tackle systemic issues. Along the same lines, attributions of responsibility to the industry as an aggregate also amount to societal attributions of responsibility. In our analytical framework, this is operationalized through systemic causal interpretations, systemic attributions of causal responsibility and systemic solution endorsement, and their co-occurrence with attributions of responsibility to other actors. We found that only a small proportion of newspaper coverage of chicken meat production made systemic causal interpretations, made systemic attributions of causal responsibility, or endorsed systemic solutions to problems related to chicken meat production.

4.4.1 Systemic causal interpretations

Systemic causes were one of thirteen categories of causal interpretations that we identified in our dataset. In the second stage of our framing analysis, we identified 225 statements that made systemic causal interpretations. Systemic causes included commodification (“So where did it all go wrong for the chicken? Ellis is able to identify the tipping point when poultry farming passed from the hands of the smallholder to the large-scale producer who viewed chicken as just another commodity”), globalization (“Critics of globalisation say the spread of flu proves that worldwide industries spread worldwide trouble”), industrialization (“Large food processors, it was revealed, were bulking up chicken destined for hospitals, schools and restaurants with beef bits, pig waste and poultry skins. The industrialisation of the food chain means that the search for ever-bigger profit drives companies to seek cheaper ways of producing food. So boney and bloody waste is transformed into meat for the kitchen table”), intensification (“The calamity,
according to neighbours of the farm, local councillors and the RSPCA, is directly linked to the intensive farming techniques allowed by the law in the raising of chickens for meat”), and factory farming as production system (“The EU report highlights damning failures in the UK’s chicken production system, which churns out 800 million birds a year. It suggests factory farm rearing and slaughter results in high-speed killing lines which make it difficult for official vets to examine the carcasses”). Overall, causal interpretations that identify factory farming as a cause of the problem were the most frequent systemic causal interpretations, making up almost 60% of all systemic causes mentioned. However, such systemic causes made up only 5% of all causal interpretations put forth regarding problems related to chicken meat production. Though causes referencing systemic-level dynamics or phenomena were the second most frequent causal interpretations put forth in statements problematizing the chicken meat production industry, these still represented just 11% of all causes identified in statements problematizing the industry.

4.4.2 Systemic solutions

We found 18 statements that endorsed systemic change as the solution to the problem, including the following examples: “This report shows our current food system has to change because it’s not sustainable”, “What we really need to see is (rearing) systems becoming less intensive and the price of chicken to go up a bit”. We also found 10 statements that identified systemic actions as necessary to bring about the solution to the problem, as in this next example: “International health officials fear the virus may mutate - or recombine with a human flu virus - into a form easily transmitted from person to person, triggering a pandemic that, if not controlled, could kill millions of people. To prevent this, UN agricultural experts are calling for an intensive, and expensive, effort to overhaul traditional farming practices in countries such as Vietnam, where millions of small-scale farmers raise poultry and animals in unsanitary conditions close to their homes”. These systemic references represented less than 0.8% and 0.4% respectively of all the solutions and all the actions identified as necessary to bring about the solution to the problem. These findings entail that newspaper coverage of chicken meat production rarely included systemic solution endorsement for problems related to chicken meat production.

Finally, we found but seven instances of explicit attribution of causal responsibility to the system. In this first example, the speaker identified factory farm rearing and slaughter as the cause of the problem, due to the speed these impose on the process: “The EU report highlights damming failures in the UK’s chicken production system, which churns out 800 million birds a year. It suggests factory farm rearing and slaughter results in high-speed killing lines which make it difficult for official vets to examine the carcasses”. The speaker explicitly condemned the chicken production system for such failures. In this second example, responsibility is attributed both to the factory-farming system that churns out birds and to industrial production in general, for the negative impacts on human and non-human animal health:
Ellis spares us none of the detail of the factory-farming system that churns out 96 per cent of British chickens. She gets stuck into the nitty gritty of how broiler birds spend their brief lives squatting in their own faeces, so full of antibiotics and hormones that their twisted limbs no longer support them. Graphically illustrating the parasites and diseases that industrial production has unleashed on birds -as well as on us, in the form of salmonella, virulent strands of food poisoning and, more recently, bird flu -she explains how this has led to a reliance on vaccines, hormones and protein feeds to remedy them.

Statements such as these, which explicitly hold the system responsible, were rare. Together with the small proportion of causal interpretations that point to systemic causes, these findings suggest that newspaper coverage is able to recognize systemic causes but very rarely provides systemic accounts of responsibility.

5. Discussion

This study set out to examine newspaper coverage of chicken meat production for evidence of recognition of the chicken meat production industry as a social and moral agent liable to be held responsible in a manner that is conducive to processes of accountability. Though newspaper coverage identified many problems that could lead to demands for accountability, we found that attribution of responsibility for those problems was distributed unequally across the food system, with little in the way of structural or systemic accounts of responsibility. Though newspaper coverage recognized the industry and its practices as a problem and a cause, this did not translate to an equivalent attribution of causal and treatment responsibility. What is more, newspaper coverage predominantly framed the industry as a victim.

5.1. Not liable to be held responsible

We found that the chicken meat production industry, which is the relevant aggregate identity for a structural account of responsibility, was predominantly framed as a victim. In being portrayed as victim, and especially in the absence of attributions of responsibility, not only is the industry being relieved of responsibility, it is put in a position to demand redress. The framing of the chicken meat production industry predominantly as victim alters the deliberative space in ways that are not conducive to or compatible with holding the industry accountable.

The analytic framework used in this study used Entman’s conceptualization of framing to operationalize attribution of responsibility for what is being defined as a problem. Our contrast of problematization and causal interpretations against attribution of causal and treatment responsibility found a tension in newspaper coverage: the industry is recognized as a problem and a cause, but it is not responsible for causing the problem or solving it. The industry, in short, is largely not recognized as being liable to be held responsible
for problems related to chicken meat production which means that the media are not providing an adequate forum for accountability.

5.2. Individualisation of responsibility?

We found that attributions of responsibility were divided across a variety of actors, many from across the chicken meat production value chain. Many of these attributions of causal and treatment responsibility were levied against specific actors, in ways that echo concerns raised regarding the individualization of responsibility (Barry et al., 2013; Kristiansen et al., 2021; Maniates, 2001). According to Maniates (2001), when responsibility for environmental problems is individualized, this leaves little room to examine the intersections of institutions and relations of power; importantly, this individualization narrows our environmental imagination in ways that undermine our capacity to react effectively to the grave environmental threats we face today. We argue that the limited attribution of causal and, especially, treatment responsibility towards the chicken meat production industry undermines our capacity to recognize the industry as social and moral agent, and thus effectively shields it from accountability. Such shielding from accountability is potentially further enhanced by attributions of victimhood, particularly towards farmers and towards the industry.

Our results differ from the findings of Kristiansen et al. (2021); in our dataset, consumers were not frequently mentioned as responsible actors, and certainly not more than either governments or victims. In our dataset, there was more attention on suppliers, rather than on the consumers. A possible explanation for such differences is the focus of the dataset. Kristiansen et al. (2021) focused on articles that discussed livestock and animal agriculture, and that made a strong connection to climate impacts. In contrast, our focus was on articles that discussed chicken meat production.

5.3. Limitations and future research

The aggregate effects that we discuss refer to aggregate effects of media practice as embodied in the news texts on the deliberative space, particularly given an understanding of newspapers – and news media more generally – as fora for accountability. The data, analytical framework and methods in this study do not allow us to make claims regarding conduct-shaping effects on audiences or individuals, so much as to describe the shape of the forum. Having said that, if prominence and repetition of such framing elements improve their potential for influence (Entman, 2009), by giving citizens the chance to notice, understand and store the mental association for future application (Matthes, 2011), such findings would appear to shape the space of possibilities in a manner that is not compatible with accountability. If newspaper coverage of chicken meat production frequently framed the industry as a victim, and infrequently framed them as responsible, it would be difficult for citizens to store the mental associations of recognition of the industry as liable to be held
responsible for problems related to chicken meat production, in a manner that supports the industry being called on to provide answers for their role in these problems, or be called on to solve them. If framing can indeed shift perceived responsibilities, as research suggests (Boukes, 2021; Iyengar, 1991; Jeong et al., 2018), the findings from this study suggest that media coverage shifts responsibility away from the chicken meat production industry.

Though the data and methods used in this study do not allow us to make claims regarding the effect of these attributions on audiences, recent evidence of the effects of societal attributions on the public’s perceptions that the industry is responsible – and also on their willingness to punish the industry (Jeong et al., 2018), is troubling. Further research should therefore investigate the effects of these attributions of causal and treatment responsibility and their interaction with attributions of victimhood on the public’s willingness to hold the industry to account, and call on it to provide answers, explanations and justifications, and also face reward or punishment. Future research should also subject to empirical examination whether recognition as a social and moral agent is indeed a pre-requisite for being held responsible and thus considered subject to being called on to provide answers.

Given the multitude of factors that influence news content (Reese & Shoemaker, 2016), it would be naïve to expect that every instance of journalistic practice fully enacts all journalistic values and normative expectations (Hanitzsch & Vos, 2017). We did not expect that every statement or every article would align fully with the normative expectations that justify the privileges granted the media. We certainly did find some media practice that is consistent with the normative expectations of news media. Disaggregating the analyses by outlet, for example, found important differences, with outlets like The Guardian and the Daily Mail, predominantly framing the industry as responsible for causing and solving problems related to chicken meat production; while outlets like the Daily Telegraph and especially the Financial Times rarely attributed it any responsibility, and instead overwhelmingly constructed it as a victim. However, analysing the attribution of responsibility and victimhood by outlets builds on an agential understanding of power. In keeping with a structural focus, we were interested in the aggregate effect of newspaper coverage in the creation of a forum that is compatible with accountability. Consequently, we were not so much interested in the contributions to the forum, but in compatibility of the overall attributes of that forum with holding the industry accountable. Though the findings related to problematization and causal interpretation do appear to provide the rhetorical resources necessary for processes of accountability, the more infrequent attribution of responsibility towards the industry as the aggregate identity relevant for societal accounts of responsibility that transcend individual responsibility, especially when combined with the much more frequent attribution of victimhood, do not appear to provide coherent rhetorical resources to support the holding of the industry to account.
Chapter 5

Chickens, Inc.
Was UK newspapers’ framing of the chicken meat production industry compatible with holding corporate power to account?

This chapter is accepted for publication as:

Journalism is presented as fundamental to democratic accountability in that news media are both able and expected to hold power to account. Such normative expectations, which justify the protections given journalists and news media, are most frequently studied with regards to state power as the natural object of press scrutiny. This article reports on a successful effort to conduct a replicable analysis of a paradigmatic case of corporate power, the UK chicken meat production industry, that asked whether and how newspapers hold corporate power to account. The analytic framework that we developed to support our two-stage framing analysis decomposed accountability into problematization, causal interpretation and attributions of responsibility, thus allowing us to systematically describe how newspapers shape the public debates in a large heterogeneous dataset. We examined a census of relevant articles from seven UK outlets published between 1985 and 2016 (N=766). While we were pleased to find that our method, if labour intensive, was fully workable, we were concerned to find that media practice was not compatible with holding corporate power to account. These findings raise serious concerns at the levels of this case, for media practice and for media scholarship.
1. Introduction

Since Edmund Burke, Jeremy Bentham, and James Mill, the news media have been perceived as classical actors for promoting accountability. As watchdogs, the news media scrutinize government institutions and social organizations of the private sector. By exposing scandals, government failures, or transgressions of power, the press and broadcasters compel such agents to provide answers to criticism and accept (some) responsibility for their failures, incompetence, or deceit.

(Maia, 2009, p. 373).

Journalism is presented as a fundamental mechanism for democratic accountability (Bovens et al., 2014; Carson, 2014; Norris, 2014), and defended as “an independent watchdog, a monitor of unchecked power, a tribune of the people, a defender of the weakest, a fourth estate, a public sphere” (Fenton, 2019, p. 36). State and government are most often presented as the locus of power, so government is frequently identified as the primary enemy of freedom (Christians et al., 2010), and thus the natural object of press scrutiny (Curran, 2005). Though comparatively less prominent than this monitorial role in scrutinizing politics, the monitoring and scrutinizing of business also ranks highly in the hierarchy of journalistic roles across the world (Hanitzsch et al., 2019) and is arguably part of the normative core of the journalistic profession. Critical theorists are, predictably, sceptical. They argue that news media’s failure to systematically tackle corporate power is more than a side effect of their focus on state power: it is structural (Carson, 2014; Curran & Seaton, 2002; Fenton, 2010a; Freedman, 2014).

The normative expectations by which media performance in democratic societies may be evaluated (Callaghan & Schnell, 2001) are the subject of rich and varied empirical investigations, (see, for instance, (Carson, 2014; Hallin & Mellado, 2018; Mellado, 2015)), but comparatively fewer studies focus on the extent to which these journalistic ideals materialize in practice (Mellado & Van Dalen, 2017). Consistently with the traditional liberal theory of the free press (Curran, 2005), most peer studies build on a notion of accountability grounded on the watchdog role of acting as a check on the state, and consequently focus their attention on case studies close to political power. When it comes to normative expectations of media practice with respect to corporate power, we lack even consensus on the definition, let alone standard measurement, of corporate power (Porenta, 2019). Indeed, part of the difficulty of assessing the extent to which news media effectively supports processes of accountability is that there is no agreement on what such reporting would look like.

Journalism scholarship has long paid attention to mechanisms of accountability with regards to the exercise of power, with particular interest in the role of investigative journalism (Wahl-Jorgensen & Hunt, 2012). Consequently, studies frequently focus exclusively on investigative journalism when drawing claims about the extent to which news media foster
accountability (see, for example, (Stetka & Örnebring, 2013; Waisbord, 2000). Rao (2008) for example, starts their definition of accountability as revealing information after extensive and close scrutiny. However, this strong focus on normative expectations of the role of journalism in society effectively privileges some types of journalism and reporting over others (Hanusch, 2019). Focusing such analyses solely on investigative reporting does produce insights relevant for researchers seeking to understand media practices, but this focus does not meet the requirements for studies on the role of media in setting agendas (Entman, 2007; McCombs & Ghanem, 2001; McCombs et al., 2014; Scheufele & Tewksbury, 2007) as these studies require consideration of the full spectrum of media practice. Consistent with recognition of power as context-shaping, (Hay, 1997, 2002), we hold that discussions of the extent to which the fora created by news media support corporate accountability require recognition of the full set of media behaviours on a given topic across different types of reporting.

In this study, we propose and successfully operationalize an analytical framework that allows us to examine all thematically relevant articles for evidence that speaks to whether and how newspapers hold corporate power to account. Building on insights from framing literature and accountability literature, our operationalization allows us to systematically describe how the framing of issues in diverse reporting formats shapes the range and quality of the arguments that inform public debate (D’angelo, 2002; Kristiansen et al., 2021; R. A. Neff et al., 2009), thus shaping the field that delimits subsequent actions. The action of interest to us, and for which our analysis is structured, is accountability. Our operationalization, therefore, decomposes accountability into problematization, causal interpretation and attributions of responsibility as each of these are relevant to accountability. By decomposing our interest in accountability into constituent parts, we are able to systematically describe how newspapers shape the public debates in a large heterogeneous dataset. This approach was informed by and is consistent with our underlying adoption of the understanding of power as context-shaping (Hay, 1997, 2002).

With regards to our case of study, previous research on food production chains suggests this context supports claims relevant to corporate power more generally (Clapp & Fuchs, 2009; Opel et al., 2010a). Moreover, food production is also of intrinsic interest for the increasing entanglements of food production systems with issues such as anthropogenic climate change, biodiversity loss, emergent infectious diseases, food-related zoonoses and antimicrobial resistance. Chicken meat production is therefore a paradigmatic case within agribusiness (Boyd, 2001). In UK, this industry exhibits high levels of integration and concentration (Jackson et al., 2010), and is the site of very well publicized contaminations that scientific literature available at the time unequivocally linked to industry practices, making it reasonable to expect journalists to have addressed corporate power.

Newspapers in the UK are literally the formative context within which normative expectations of news media were shaped. Indeed, the concern over the depressed watchdog role has been argued to have a decidedly Western and, more specifically, Anglo-
American normative underpinning (Stetka & Örnebring, 2013). UK broadsheets, in particular, continue to be important agenda-setters (Cushion et al., 2018; Langer & Gruber, 2020), with a proven track record of holding power to account (Felle, 2016). British journalists themselves take pride in their inquisitorial and reporting skills (Blumler & Esser, 2019). In short, British newspapers and the chicken meat production industry in the UK were chosen because this intersection provided the most likely conditions for detection of practice consistent with normative expectations that media hold power to account.

At the outset of our study we recognized that, for the media to meet their normative expectations, they must first describe corporate power in ways that are compatible with accountability. Therefore, this study sought to answer the following research question:

**Was media speakers’ framing of the chicken meat production industry in newspaper coverage from seven UK outlets between 1985 and 2016 compatible with holding corporate power to account?**

To tackle this research question, we decomposed accountability into problematization, causal interpretation and attribution of responsibility, which were turned translated into concrete, operational steps through a two-stage framing analysis. We analysed a census of articles from national circulation outlets from the UK published over 31 years (N=766), for empirical evidence relevant to news media’s normative expectation of holding corporate power to account. The remainder of the article is structured as follows: the first section introduces the case of study and the analytical framework, the second section presents the materials and methods used this study, the third section presents the main results, and the fourth and final section presents a discussion of the results and their implications, as well as addressing some of the limitations of the present study.

2. **Background**

2.1. **Journalism and holding corporate power to account**

Watchdog journalism, which is to hold governments and corporations to account for their actions (Hanitzsch & Wahl-Jorgensen, 2019; Wahl-Jorgensen & Hunt, 2012), is regarded as an important mechanism for public democratic accountability (Norris, 2014). This role is so fundamental to democracy that privileges and protections for the media are enshrined in laws and constitutions around the world (Felle, 2016). If news media discharge their responsibility to serve as watchdogs, the ideas shared through their presses must create a forum adequate to support accountability.

Whether or not one endorses this normative goal – and, given the lack of consensus and the need to make ourselves accountable, it is worth noting that we do – scrutinizing business and economic elites and holding powerful private actors accountable is part of
what journalists say they do and what they consider their role to be (Hanitzsch, Vos, et al., 2019; Strauß, 2021). It is also what functioning democracies (Ogbebor, 2020) and corporate governance (Tambini, 2010) require them to do. Empirical evidence tends to confirm the positive effects of news media on the quality of democratic and corporate governance, suggesting that an independent press does contribute to accountability (Norris, 2014). It is in recognition of this role in corporate governance – by holding companies to account, investigating illegal behaviour, and disseminating this information to the public – that journalistic rights and privileges have been granted (Tambini, 2010). It is not clear, however, what it means to hold powerful private organizations to account.

The minimal conceptual consensus on accountability entails that journalists are expected to make power answerable to others with a legitimate claim to demand an account (Bovens et al., 2014). In the case of political actors, this usually means being answerable to voters, who may punish at the polls. There is less agreement on what this means for private actors. Building on the principle of affected rights and interests, third parties may demand accountability from private organizations when some agent harms their right or interest; such demands are especially relevant in the case of private bodies that receive public funding or exercise public privileges (Bovens et al., 2014), as is the case of corporations8 (Ciepley, 2013).

The increase and concentration of corporate power and its links to numerous social, economic and environmental harms (Clapp & Fuchs, 2009; Hathaway, 2018) suggest that they should indeed be held accountable. While states are often thought responsible to control corporate (mis)behaviour, corporations influence governance and policy in their favour (Fuchs, 2005). The careful embedding of discourse is a key, yet overlooked, longer-term mechanism by which corporations can realize their interests (Hathaway, 2018). Given the heavily mediatized character of contemporary societies, this discursive or ideational power frequently operates in, with, and through media to frame issues in the public sphere. The media as a forum in which corporations shape the space of possibilities in their favour should then also be a key foci of analyses of their power (Fuchs, 2005).

The exposure of misconduct in the media is one important tool in targeting the legitimacy of business (Fuchs, 2005). Research suggests that attributions of responsibility exert a powerful hold on behaviour (Iyengar, 1991); in particular, attributions of responsibility in the media can play an important role in directing the public’s judgments and responses to corporations and the industry (Jeong et al., 2018). Therefore, journalists exposé of corporate (mis)behaviour justifies their special privileges and protections, which should counterbalance corporate power, and be a mechanism for corporate governance.

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8 For a discussion of how the corporation came to be viewed as nothing more than a nexus of contracts among private individuals in a manner which exempted it from accountability, and how reducing corporations to private contract is problematic in numerous ways, see Ciepley (2013).
2.2. Case selection: everything tastes like chicken

Agricultural food production has always attracted public scrutiny (Luhmann & Theuvsen, 2016). With recent trends of corporate consolidation in other sectors, this industry has both consolidated and been increasingly linked to a long list of negative impacts, including social, economic, environmental and other forms of injustice and inequality, increased corporate control on policymaking and society more broadly (Clapp & Fuchs, 2009; Howard, 2016) and human and non-human animal health risks. The livestock sector is one of the top three most significant contributors to some of the most serious environmental problems we face today, including anthropogenic climate change, land degradation, biodiversity loss, and air and water pollution (Happer & Wellesley, 2019; Steinfeld, Food, et al., 2006).

Chicken meat production mirrors the trends and consequences of industrialization in agri-business (Jackson et al., 2010), and changes related to the intensification of animal production haven been more dramatic in the chicken meat production industry than in any other livestock sector (Bessei, 2018). The sheer number of lives implicated in chicken meat production makes this an especially urgent case to address in light of the critiques levied against all mass animal production industries (Almiron et al., 2018).

The similar links between chicken meat production, industrial agriculture and other industrial systems, in addition to the intrinsic relevance and visibility of the negative impacts of the industry itself, and the scale of the lives effected, all make the British chicken meat production industry a relevant, appropriate, and friendly case in which to ask if newspapers are covering the industry in ways that support accountability. The British poultry industry has also been at the heart of several food scares or scandals over the period under study, as chicken meat consumption in the UK has been frequently linked with infections in humans related to Salmonella, Listeria, and Campylobacter, all three significant foodborne pathogens (Cogan & Humphrey, 2003; Meldrum & Wilson, 2007; Yeung & Yee, 2003), with Campylobacter being the largest cause of bacterial gastroenteritis in the developed world, and chicken being identified as the main source of human disease. The British poultry industry has specifically been pilloried on this issue: “It is time for the British poultry industry to hold up its hands and take responsibility for the lion’s share of this epidemic of human infection in the UK” (Strachan & Forbes, 2010, p. 666). Another salient issue in the public debate during the period under study include the use of antibiotics in animal agriculture, which has been linked to the increase in antibiotic resistance (Finlay & Marcus, 2016; Roth et al., 2019). While these, alone, would be sufficient to justify our selection of this industry as our case, they amount to not much more than footnotes when compared to the outbreak of the highly pathogenic H5N1 strand of avian influenza in the UK, which is one in longer list of emerging infectious diseases of zoonotic origin linked to global food production and with the worrying potential to spark another global pandemic (Canavan, 2019; de Krom & Mol, 2010; Gilbert et al., 2017; Rohr et al., 2019; Waltner-Toews, 2017).
The ready availability of relevant scientific evidence and examples from popular media expressing relevant concerns about chicken meat production supports our expectation that this case favours finding that the media provides a forum adequate to support accountability. One such example are the ‘campaigning culinary documentaries’ fronted by celebrity chefs Jamie Oliver and Hugh Fearnley-Whittingstall (Bell et al., 2017; Phillipov, 2016b). The media have also covered other crises related to poultry husbandry, including welfare issues related to fast-growing breeds and food safety scandals (Van Asselt et al., 2018). Finally, UK newspapers in particular have been shown to fulfil their role as watchdogs in their reporting on British politicians and authorities. They were found to create space for critical voices and contestations of the hegemonic industrial food discourse (Roslyng, 2011). With regards to the avian flu outbreak, for example, the British media played an important role in amplifying the emergent rhetoric of fear, blame and uncertainty around avian influenza, in ways that had consequences for the policy-making process and the public understanding of science more broadly (Nerlich & Halliday, 2007). All of these observations suggest that, if we are to find media discharging their responsibility to serve as corporate watchdogs anywhere, we will find evidence in coverage of the chicken meat production industry in the UK in the period we examined.

Running counter to the arguments we have just laid out, corporate actors and, notably, agri-food firms, use formal and informal channels to maintain favourable regulatory regimes (Clapp & Scrinis, 2017). Hathaway (2018) proposes a theoretical framework that considers decision-making, agenda-setting or bias-mobilization, and discursive or ideational elements of power, acknowledging that agency and structure can operate in each of these dimensions. The chicken meat production industry in the UK provides us with examples from across the range of mechanisms of influence that Hathaway (2020) identifies and classifies according to his framework. So, for example, the industry boasts a strong lobby in the British Poultry Council (BPC), which serves as the voice of the industry and whose member businesses account for the vast majority of UK production, and that illustrates agential visible mechanisms of influence. The industry is also known to strive to influence both public opinion and public policy. Perhaps the most poignant and less known example of this is the use of profits from chicken meat production to finance the establishment of the Institute of Economic Affairs (Jackson et al., 2010), an influential think-tank in British politics that exemplifies both agential hidden and structural invisible mechanisms of influence: “That the intensification of chicken production was shaped by the rise of neo-liberal political ideology is relatively well-established. Less widely recognized is the role of chicken production in the development of neo-liberalism” (Jackson et al., 2010, p. 167).

2.3. Analytical framework

For this study, we decomposed accountability into problematization, causal interpretation and attributions of responsibility, which were translated into concrete, operational steps.
through framing analysis. Problematizing, or naming something as a problem, is the first step for accountability: problematization is possible only after an issue has been defined as being inappropriate, wrong, undesirable or problematic in some way that demands for explanation, justification or resolution can arise (Maia, 2009). At minimum, knowledge about a problem is a requirement; the public cannot be expected to take a position or action on a problem until they know about it (R. A. Neff et al., 2009). In the case of news media, they may be perceived as promoting accountability by making issues visible, directing attention to and encouraging public debate about them (Maia, 2009).

For journalism to deliver on normative expectations and fulfill their critical-monitorial role of holding corporate power to account, problematization alone is not enough. Making actors answerable also requires exploration of the causes of the problem and attribution of responsibility for them (Maia, 2009). An investigation of the extent to which newspapers hold corporate power to account in our case must examine whether the chicken meat production industry is constructed and recognized as a social and moral agent that can be held accountable for its actions. Following Iyengar (1991), we distinguish between causal responsibility (attribution of responsibility for the creation of a problem), and treatment responsibility (attribution of responsibility for the resolution of the problem). Following Maia (2009), we also distinguish between identifying something as cause of a problem (causal interpretation), and attributing causal responsibility, because it is possible to cause a problem but not be subject to be held responsible or accountable for it. For example, in this particular case, it is possible to identify a specific industry practice – say, overcrowding sheds – as the cause of animal welfare problems, yet not attribute causal or treatment responsibility to any actor in a manner that would allow for them to be held accountable. It is also possible to not be responsible for causing a problem, yet be called on to solve it. Using the previous example, while industry practice may have been identified as the cause of the problem, treatment responsibility in such cases is commonly attributed to governmental authorities via calls for regulation. Therefore, we used a conceptualization of accountability that incorporates cause identification, as well as attributions of causal and treatment responsibility.

Building on the clearly stated and accepted normative expectations, and given the wealth of relevant material available to journalists, it was reasonable for us to expect newspaper coverage of chicken meat production to frame the chicken meat production industry in a manner consistent with accountability. If newspapers met normative expectations, we expected to see media speakers problematizing the chicken meat production industry in a manner that suggests that the industry is the problem. We also expected to see industry presented as a cause of the problems being discussed. Finally, we expected to see the industry as a social and moral agent that is possible and proper to hold accountable for its actions.
3. Materials and methods

3.1. Data collection and curation
To investigate if and how newspapers hold the chicken meat production industry to account, we examined newspaper coverage of chicken meat production from 1985 (when articles were more consistently digitized) to 2016 (when analysis started).

We selected seven daily newspapers from the ten highest circulation outlets in the United Kingdom: Daily Mail, Daily Mirror, The Daily Telegraph, The Express, The Times, Financial Times, and The Guardian. We included outlets with different formats and editorial perspectives, that cater to diverse audiences. We designed, piloted and refined a search string to retrieve relevant articles from LexisNexis and adapted it for outlets’ private archives for those years where data was not available on LexisNexis. The 2544 articles returned were subjected to a further relevance screening that yielded a final dataset of 766 articles. Finally, because we were interested specifically in how news media were framing the chicken meat production industry – and not how other actors are framing the industry in or through newspapers – our analyses privileged statements by media speakers: journalists (columnists, editors, and writing staff), newspapers, other media outlets (radio, television, new media, books and movies), and media in general, which amount to 2854 (almost 40%) of the 7227 statements (continuous topically constrained utterance by the same speaker(s)) found in the 766 relevant articles. Taken together, statements by journalists and newspapers in general (these identify articles without an author in the by-line, or statements attributed to a specific newspaper outlet) make up over 97% of the statements by media speakers. (More details are included in Appendix D)

3.2. Framing analysis
As demonstrated by the work of Iyengar (1991), Entman (2009), and Maia (2009), substantive issue framing is appropriate for studying accountability that depends on how social actors define events, assign blame and attribute responsibilities. Substantive issue frames construct particular and advance specific ways of seeing issues by their patterns of emphasis, interpretation and exclusion (Carragee & Roefs, 2004); these selective views on issues construct reality in way that leads to different evaluations and recommendations (Matthes, 2011). Frames are not a singular message, but rather refer to a pattern involving issue interpretation, attribution and evaluation; these frame elements are tied together in logically consistent ways (Matthes & Kohring, 2008). In their approach to frame analysis, rather than coding the whole frame, Matthes and Kohring (2008) suggest to split up the frame into the different framing elements, which can then be coded in a content analysis; this requires a frame concept that provides a clear operational definition of such framing elements. Like them, we also built on Entman’s (1993) conceptualization of framing as a process of selection and salience to promote a particular problem definition, causal
interpretation, moral evaluation, and/or treatment recommendation for an issue. We used these four functions of a frame as the basis for a theory-informed two-stage coding strategy to identify the framing elements in the news texts: problem, cause, solution, judgment. We complemented these with framing elements that refer to the social identity of actors in relation to the issue (Hameleers et al., 2021), in line with Entman’s conceptualization of framing: as responsible for causing the problem (villain), as responsible for bringing about the solution to the problem (solver), and as suffering the consequences of the problem (victim). Together, these framing elements allow us to describe how a topic – in our case, the chicken meat production industry – is problematized and constructed as an issue, and how attributions of responsibility are assigned with regards to this issue.

For our first stage, which was inductive, we worked with a randomly selected subsample of 200 articles to identify the topics that were being problematized, and used Entman’s functions to extract the specific framing elements from the news texts. The resulting values for the different framing elements were then iteratively abstracted to construct broader categories for each framing element. These categories were then used as the base for a deductive coding scheme: a set of framing element variables with their respective values and codes. This coding scheme was refined through three rounds of piloting with separate independent coders to improve internal validity, and then translated into a complete coding handbook for deductive use.

We used our inductively developed coding handbook to deductively code the full dataset, which were then systematically applied to the 766 articles, in random order. The results from the deductive content analysis were translated into frequency counts and co-occurrence frequency counts and exported to Excel for quantitative analyses. Inter-coder reliability (ICR) was calculated using Atlas.ti. To this end, two independent coders applied the coding handbook to a randomly selected subsample of 80 articles. Inter-coder reliability was calculated using Atlas.ti’s built-in Krippendorff’s c-Alpha-binary agreement coefficient. Additional details on this calculation, and our interpretation of the improbable score yielded (0.917), can be found in Appendix D. Given the size and complexity of our coding scheme, coupled with the length and breadth of our dataset, additional measures were taken to increase internal validity of our results. The first author coded over 80% of the dataset, and reviewed the coding done by a second coder.

3.3. Operationalization

Previous research on accountability in contexts of agricultural production has argued that the relevant agent to recognize is an aggregate of the entire industry (Irani et al., 2002). However, there is no agreement on how to operationalize such an aggregate identity. The relevant literature makes use of diverse strategies to conceive of and operationally represent the industry. Since we did not know if or how the industry would be conceived of or problematized, we chose to cast a wide net. We structured our analysis to capture the
full diversity of possibilities we had encountered so that our results would not be artefactual (Table 11).

Building on problematization as the first step in accountability (Maia, 2009), the first possibility for accountability is to problematize the industry. According to Entman (2007), the first function of framing is defining problems worthy of public and government attention. By constructing the industry as an issue or problem that requires attention and merits debate, it becomes contestable. This is operationalized via the issue variable, which codes for what is being defined as the problem for discussion. Further context is provided via the problem definition and victim variables, which code for the terms in which the issue is being defined as problematic and the victim(s) identified as suffering the consequences of the problem, respectively.

**TABLE 11 | Summary of operationalization of analytical framework.**

<table>
<thead>
<tr>
<th>Expectation</th>
<th>Variable</th>
<th>Codes for</th>
<th>Approach to the industry</th>
</tr>
</thead>
<tbody>
<tr>
<td>Problematization</td>
<td>Issue</td>
<td>What is being defined as the problem for discussion</td>
<td>As a sector: the chicken meat production sector as a whole.</td>
</tr>
<tr>
<td>Causal interpretation</td>
<td>Cause</td>
<td>What is being identified as the cause of the problem</td>
<td></td>
</tr>
<tr>
<td>Attribution of causal responsibility</td>
<td>Villain</td>
<td>The actor identified as responsible for causing the problem</td>
<td></td>
</tr>
<tr>
<td>Attribution of treatment responsibility</td>
<td>Solver</td>
<td>The actor identified as responsible for bringing about the solution</td>
<td>As an actor: the chicken meat production, poultry or broiler industry and industry bodies.</td>
</tr>
<tr>
<td>Victimization</td>
<td>Victim</td>
<td>The victim identified as suffering the consequences of the problem</td>
<td></td>
</tr>
</tbody>
</table>

Building on insights from substantive issue framing (Entman, 1993, 2009; Matthes, 2011), a second possibility in which the industry is constructed in a manner that speaks to holding it accountable is through causal interpretations that identify the industry as the cause of the problem. This is operationalized via the cause variable, which codes for what is being identified as the cause of the problem, as signalled by words that indicate causality (e.g. cause, have an effect, shape, influence, lead or give rise to, stem or result from, be a consequence, result, because of, due to, owing to).

These first two operationalizations speak to a broad understanding of the industry as a sector, that is, the chicken meat production sector as a whole. This includes references to the broiler, poultry or chicken meat production industry; conventional, industrial or intensive production as well as alternative production (free-range and organic); factory farming; industry practices (including husbandry, feeding, housing, and processing practices, such as adulteration of chicken meat, use of antibiotics, overcrowding, use of fast-growth breeds, etc.); industry standards; the value chain; and chicken meat production in general, as either
the problem ("in animal welfare terms, much – or even most – chicken production is a disaster") or the cause of the problem ("This is due to the misuse of antibiotics in the poultry industry").

However, neither problematization nor causal interpretation necessarily attribute causal and treatment responsibility to the industry in a manner that recognizes them as social and moral agents that can and should be held accountable for their actions. Simply put, it is possible to cause a problem but not be (held) responsible for it. Therefore, from an actor-oriented perspective, a third possibility for accountability is to construct the industry as an actor, ascribing agency in a manner that allows for the industry to be held accountable for its actions. Our analysis incorporates two possibilities in this regard, via attributions of responsibility. One possibility is for newspapers to attribute causal responsibility to the industry. This is operationalized via the villain variable, which codes for the actor(s) identified as responsible for causing the problem. The other possibility is for newspapers to attribute treatment responsibility to the industry. This is operationalized via the solver variable, which codes for the actor(s) identified as responsible for bringing about the solution. In framing the identity of the industry as an actor, whether a villain or a problem solver, there is a recognition of agency that renders the industry subject to be held accountable as social and moral agent.

Finally, it is also possible for the industry to be framed as an actor in another capacity related to the consequences of a problem (Hameleers et al., 2021), that of victim. In contrast to framing an actor as a villain or solver, and thus attributing responsibility, framing as a victim highlights an actor as suffering the consequences of the problem, in a manner that might inhibit processes of accountability. In our study, this is operationalized via the victim variable, which codes for the actor suffering the consequences of the problem.

Since we did not know beforehand how newspapers would define the industry as an actor and, in the case of a collective actor, who would be included in such an understanding, we divided the actors in the chicken meat production chain and coded at a lower level (actor, subgroup, group), while maintaining the possibility of aggregation. This allowed us to conduct the analyses at different levels for those categories of actors that would reasonably be included for an understanding of corporate power, and collapse categories where there were no analytically relevant differences. For the purpose and scope of this study, we focused on a narrow understanding of the industry as an actor, including only explicit mentions of the industry and industry bodies. (More details can be found in Appendix D)

3.4. Research questions

This study focuses on three specific research questions, each addressed in a subsection of the results. The first two specific research questions build on problematization as the first

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9 "G2: OK, they abducted my grandfather and stoned him to death. But we should still let the Turks into the EU.” The Guardian. July 28, 2005.
10 “Ban on the white stuff is making me see red.” Daily Express. May 29, 2006.
Chapter 5

step in accountability, and refer to the construction of the industry as either the problem or the cause of the problem.

\textit{RQ1. Did media speakers construct the industry as a problem and if so, how?}
\textit{RQ2. Did media speakers make causal interpretations that construct the industry and industry practices as cause of the problem and if so, how?}

The third research question builds on attributions of responsibility as central to accountability by examining the extent to which media speakers’ attributions of responsibility construct the industry as a social and moral agent subject to be held accountable for its actions. Construction of the industry solely as a victim paints the industry as suffering consequences in a manner that is not compatible with holding industry to account.

\textit{RQ3. Did media speakers explicitly attribute causal or treatment responsibility to the industry, thus constructing it as a social and moral agent subject to accountability and if so, how?}

While the literature clearly expects the behaviours our method is designed to detect, there are no clear justified expectations with respect to either the frequency or the conditions that are relevant in predicting the frequency of such behaviour. Therefore, frequency is operationalized as raw and relative occurrence and co-occurrence.

4. Results

4.1. Problematization of the industry
Out of 2854 statements by media speakers, 547 explicitly problematize the chicken meat production industry. Roughly one in five statements (Figure 15) discussed the industry in a way that suggested that this is the problem, in a manner that can lead to demands of explanation or justification and, eventually, attributions of responsibility, as part of processes of accountability (Maia, 2009). This figure was higher for those reports categorized as investigative reporting (n=29), with just over one in three articles identified as investigative journalism constructing the industry as a problem. This shows that the industry itself was problematized in newspaper coverage to varying degrees over time (Figure 16). However, the industry was not the issue that received most coverage. The issue most often problematized throughout our dataset was avian influenza, with 1027 mentions (35%). Looking at the period during which avian influenza was relevant (the H5N1 outbreak between 2003-2008) on average, we found 31 media speaker statements that problematized the industry per year (18 for the entire period of study), while there were an average of 159 mentions of avian influenza.
Other problems mentioned in our dataset include global trade, animal welfare, policy, economics, etc. (more information is provided in Appendix D). Over 93% of media speaker statements that discuss other issues related to chicken meat production do so in a way that does not suggest that the industry is a problem (more details can be found in Appendix D). For foodborne illness, the second most frequently mentioned issue at 13% of statements (and the most frequently mentioned issue in the case of investigative reports), some statements problematize chicken meat production: “A bacteria called campylobacter, found in almost three-quarters of chicken sold in the UK, is the biggest cause of food poisoning
in the UK\textsuperscript{11,12}; but statements, as indicated in the following quotation, typically made no such connection: “Salmonella is still quite likely to be an uninvited guest at some wedding feasts. Last year, \textit{salmonella poisoned} more than 600 guests at 10 wedding receptions\textsuperscript{13}. Here, foodborne illness arises from naturally occurring bacteria so is not framed in a manner that suggested that the chicken meat production industry is the problem.

4.2. Causal interpretation

Industry was identified as a cause in 16\% of the cases where causes were identified (Figure 17). Coverage that does not place industry as the primary cause and relatively evenly distributes attribution between eight other options, particularly in light of the rich scientific evidence available at the time pointing to industry, is not consistent with the expectation that newspaper coverage supports corporate accountability.

![Figure 17](image_url)

\textbf{FIGURE 17} | Percentage distribution of causes identified by media speakers.

We identified thirteen categories of causal interpretations and coded 1980 statements by media speakers that indicate causation. From those, 318 identified the industry and its practices as a cause (59 of these occurred in investigative reports). Some of these explicitly framed the poultry industry’s growth as a cause: “The \textit{huge growth in this country’s poultry industry over the last 30 years (...) has triggered} a massive increase in food poisoning”\textsuperscript{14}. The methods of industrial chicken meat production were also identified: “The \textit{idleness imposed by factory farming methods is being blamed} for soaring obesity levels among chickens, a problem that affects conventionally and organically produced meat”\textsuperscript{15}. In other cases, it was specific industry practices, “\textit{The results of selective breeding already give pause for thought: broiler chickens with such explosive growth rates that their legs can’t take

\begin{table}[h]
\centering
\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline
Category & Nature & Industry & Economy & Policy & Practical & Global trade & Information & Consumption & Systemic & Other \\
\hline
Percentage & 6\% & 23\% & 10\% & 9\% & 6\% & 6\% & 11\% & 6\% & 6\% & 6\% \\
\hline
\end{tabular}
\caption{Percentage distribution of causes identified by media speakers.}
\end{table}

\textsuperscript{11} Unless otherwise stated, emphasis in citations has been added by the authors of this publication.
\textsuperscript{12} “Dying for your Sunday roast.” \textit{The Daily Mail}. October 24, 2016.
\textsuperscript{13} “Toast for the happy couple.” \textit{The Times}. April 23, 1990.
\textsuperscript{14} “Immunity scare over drugs fed to chickens.” \textit{The Daily Mail}. May 9, 1995.
\textsuperscript{15} “‘Healthy’ chicken piles on the fat.” \textit{The Times}. April 3, 2005.
the weight”\textsuperscript{16}, or the use of antibiotics, “There is increasing concern that \textit{growth-promoting antibiotics encourage farm bugs to mutate, causing food poisoning in humans that becomes ever harder to treat}”\textsuperscript{17}. This last example illustrates the difference between constructing something as the problem or as the cause of the problem; in this case, the journalist identified a human health problem, namely foodborne illness, and identified the growth-promoting antibiotics as the cause of that problem without links to the industry.

Nature, at 23% of mentions, was the most frequently mentioned cause. These statements, for example, nominate wild bird migration, “it is likely the virus was brought into the country by migratory birds”\textsuperscript{18}, and pathogens, “The bacterium causes vomiting and diarrhoea in around 280,000 healthy people every year and can kill those with vulnerable immune systems”\textsuperscript{19}. Other attributions nominated the economy “\textit{Heavy oversupply followed by a fall in demand will push some producers out of business}”\textsuperscript{20} and policies “\textit{Under European Union rules, poultry labelled organic cannot be reared indoors. This could cause problems for producers of organic poultry}”\textsuperscript{21}.

Other causes mentioned in our dataset were categorized as economic causes, causes related to policy and regulation, causes related to practical failures (these include punctual food safety, biosecurity, traceability, or inspection and control failures), causes related to global trade, causes related to problematic or absent information, causes related to consumption (this includes consumption of chicken meat itself as cause of the problem, as well as identification of food safety failures after the point of purchase, or generally other consumer behaviours and choices as causes of the problem), systemic causes (including systemic processes such as commodification, globalization, industrialization, intensification, or factory farming in general). Other less frequently mentioned causes that have been grouped together include accidents, acts of deviance, activism, or other causes not included in the previous categories.

Investigative reports, which constitute 29 of the 766 articles reviewed presented a different percentage distribution of causal interpretations. In these reports, the chicken meat production industry was the most frequently mentioned cause; just over a quarter of all the statements by media speakers that identified any cause for problems related to chicken meat production pointed the finger explicitly at the industry.

\subsection*{4.3. Attributions of responsibility}

Media speakers seldom attributed causal or treatment responsibility to the chicken meat production industry in a manner consistent with their accountability. Media statements

\begin{itemize}
\item \textit{Cheese is murder} \textit{The Times}. January 13, 1996.
\item \textit{Farmers pump up their use of growth drugs} \textit{The Daily Mail}. January 18, 2005.
\item \textit{Death of swan confirms UK now has bird flu outbreak} \textit{The Daily Mail}. April 6, 2006.
\item \textit{Supermarket chicken bug is out of control, warns expert} \textit{The Daily Telegraph}. May 29, 2014.
\item \textit{Protection in diversity for food industry majors} \textit{The Daily Telegraph}. February 14, 1989.
\item \textit{Rules on organic poultry present big test} \textit{Financial Times}. February 21, 2006.
\end{itemize}
identifying the industry as the actor responsible for causing or bringing about the solution to the problem were rare, even when limiting analysis to those statements that also problematize or identify the industry as cause or villain, and particularly when compared to the more frequent framing of the industry as a victim (Figure 18). Media speakers most often failed to construct the industry as a social and moral agent in a manner compatible with the expectation that news media hold corporate power to account.

We found 67 statements by media speakers that framed the industry as responsible for causing the problem which is 8% of the total attributive statements. Further, 13% of the statements identifying industry as cause and just under 8% of those that problematized the industry also attributed causal responsibility to the industry. This means that the vast majority of media speaker statements that identified the industry as a cause of the problem did not present industry as accountable. Failure to construct industry as a social and moral agent is not compatible with the expectation of newspaper coverage that presents industry as subject to being held accountable for its actions. For example, while in this quote industry is presented as accountable, “(...) the environmental damage caused by industrial poultry production. Each year the industry in Britain produces 130,000 tonnes of nitrogen from chicken droppings, as well as phosphorus, both of which damage the environment”22, in the following quote a practice is the cause for neither the industry nor any other actor is accountable, “A major cause of antibiotic resistance is the careless use of these drugs in treating non-bacterial infections in humans and in preventing diseases and promoting growth in animals. As much as 70% of antibiotics developed to treat humans are sold for use in feed and water for livestock”23.

In a more poignant example, this extract hides those accountable by use of the passive voice “These chickens are reared for meat. Between March 2000 and March 2001 817m chickens

![FIGURE 18 | Percentage distribution of media speakers' framing of the industry as an actor.](image)

were reared for slaughter. Most are kept in dimly lit, crowded, windowless sheds, and have been selectively bred to reach their slaughter weight in 40-42 days (...) Roughly 2% of birds die from heart failure.\footnote{24}

We coded 28 news media statements that identified the industry as responsible for bringing about the solution to the problem, as in this example: “The policy of naming and shaming the dirtiest companies for their campylobacter rates has been a key part of the FSA’s strategy to deal with \textit{industry’s failure to tackle} what is the commonest form of food poisoning in the UK\footnote{25}. Such statements made up roughly 3\% of media speaker statements that attribute treatment responsibility. Government was more frequently framed as responsible for solving a problem even when the industry had been problematized or attributed causal responsibility. Media speakers’ coverage of chicken meat production did not highlight the industry as an actor responsible for solving the problem, even in those cases in which it was constructed as the problem or its cause.

While we found 28 statements that framed industry as a problem solver, we also found 204 statements that framed the industry as a victim (Figure 18)… a figure that nearly matches the frequency with which non-human animals are mentioned as victims. Most instances of the industry being framed as the victim relate to the avian influenza outbreak, as illustrated here: “The warning is bound to add to fears that \textit{bird flu will devastate Britain’s £3 billion poultry industry}\footnote{26}. We also found that the industry was framed as a victim of cheap imports and global trade (“\textit{Imports of east European poultry have helped drive down the price of chicken in Britain, contributing to an “unrelentingly tough” time for Britain’s chicken industry}\footnote{27}), public policies (“\textit{And it’s causing a flap in the poultry industry as farmers count the cost of the Chancellor’s decision to add the birds to taxable hot takeaway foods}\footnote{28}), and even in an article discussing animal welfare problems in the industry (“\textit{The system is at the heart of a farming industry which is struggling to make a profit and is threatened by cheap imports}\footnote{29}). Even when we exclude articles covering the outbreak of avian influenza – in which 94\% of media statements frame the industry as a victim –, almost half of all media speaker statements framed the industry as victim.

Though overall, media speakers in our dataset most frequently framed the chicken meat production industry as a victim, the framing of the industry changed both over time and

\footnotetext[24]{Jail birds: As the EU plans to phase out battery cages for hens, welfare campaigners complain that their intended replacement will be just as cruel.” \textit{The Guardian}. July 2, 2002.}

\footnotetext[25]{“Tesco director facing questions about lobbying government over dirty chicken report.” \textit{The Guardian}. November 25, 2014.}

\footnotetext[26]{“Britain backs the EU warning on raw eggs.” \textit{The Daily Mail}. October 27, 2005.}

\footnotetext[27]{“Polish birds make life tough for UK farmers.” \textit{The Daily Telegraph}. January 29, 2007.}

\footnotetext[28]{“Osborne hot chickens rap.” \textit{The Mirror}. Marco 10, 2013.}

\footnotetext[29]{“200m chickens raised in agony; Quarter of all UK hothouse birds are maimed in rush for ever cheaper meat.” \textit{The Daily Mail}. August 2, 2006.}
across outlets. For instance, Figure 19 shows that attribution of victimhood to the industry were very frequent between 2003 and 2008, illustrating how the industry was mostly framed as a victim of the avian influenza outbreak that occurred between those years. By contrast, the highest frequency of attributions of both causal and treatment responsibility occurred in 2014, during which coverage of foodborne illness – mostly due to campylobacter – was the most frequently covered issue in our dataset (and consistent with scientific evidence suggesting that poultry is the most likely cause of most human cases of campylobacteriosis (Royden et al., 2021; Wilson et al., 2008)).

Disaggregating the data by outlet also showed differences across outlets. As Figure 20 illustrates. The Guardian was the only outlet that attributed responsibility to the industry more frequently than it framed it as a victim. By contrast, The Telegraph, The Mirror and the Financial Times almost exclusively framed the industry as a victim. What is more, The Guardian alone accounts for roughly half of all attributions of both causal and treatment responsibility attributions to the chicken meat production industry in our dataset.
5. Discussion

We examined a census of relevant articles for evidence that spoke to whether and how newspapers hold corporate power to account. We found that media speakers in our dataset did problematize the industry, that they rarely constructed it as cause or attributed responsibility to it, and that they more frequently presented industry as a victim. While we did find instances of problematization and attribution of responsibility towards the chicken meat production industry that are compatible with a broader approach to accountability, particularly in investigative reports, overall, these instances represented less than 4% of our dataset, suggesting that media speakers’ contribution to the overall shape of that forum is not compatible with holding corporate power to account. Our findings raise serious concerns for this case, for media practice and for media scholarship.

The infrequency with which the behaviour expected by critical media scholars was encountered and the dilution of these instances with presentations of industry as victim do not encourage broad public acceptance of scientific understanding nor did they convey the urgency (Entman, 2010) required for the launch of accountability processes. These findings echo prior research suggesting that the framing of chicken meat production in newspaper coverage effectively supports a form of hiding in plain sight that may more effectively protect industry than coerced silence (Garnier et al., 2020).

Our findings were particularly troubling given the ready availability of relevant scientific knowledge (for example, Canavan (2019), Strachan and Forbes (2010), and Waltner-Toews (2017)), and the presence of this knowledge in popular media (Bell et al., 2017; Phillipov, 2016b). Our findings are consistent with those of Kristiansen et al. (2021) who observed that responsibility for treatment is more frequently assigned to individual consumption rather than agricultural production methods or regulations.

Media speakers did not generally frame the chicken meat production industry in a manner compatible with recognizing it as social and moral agent that is subject to be held accountable for the problems they are presented as creating (with The Guardian being a notable exception). Moreover, if we accept attributions of treatment responsibility as an important part of accountability (Maia, 2009) – the ‘you break it, you fix it’ principle – then the infrequency of this argument in media speakers’ coverage is not compatible with the expectation that news media hold industry to account.

In our study, industry was frequently presented as a victim. If the prominence and repetition of framing elements improve their potential for influence (Entman, 2009), and if the inclusion of diverse yet clearly minority perspectives is indicative of fairness, then readers would reasonably conclude that a fair examination of the chicken meat production finds industry to be the victim. This is not consistent with the expectation that news media hold corporate power to account.
Our findings have troubling implications for our collective ability to hold corporate power to account. Prior studies have shown that attributions of responsibility in the media influence the public’s attributions of responsibility for political issues, the likelihood of their holding political actors accountable (Iyengar, 1991), as well as their judgment and responses to corporations and the industry (Jeong et al., 2018). In this sense, our findings lend empirical weight to the findings of Iyengar (1991) and Maia (2009) who suggest that news media coverage effectively, though not necessarily intentionally, protects those they are to expose.

Our findings underscore the relevance of further research on the norms, practices, routines, and material environment of news production that yield the patterns we describe. Indeed, one of the limitations of the present study is that the data and research design do not support claims as to the reasons that explain the journalistic choices that result in the patterns described. However, the practical and theoretical implications of these patterns reinforces the need to better understand the conditions required for news media to deliver on the normative expectations that justify journalists’ own discursive construction of their profession’s centrality in democratic societies (Hanitzsch & Vos, 2018; Hanitzsch, Vos, et al., 2019).

Our findings do not support the argument that news media slavishly support corporate interests (Curran, 2005). The examples we found where media speakers frame the industry in ways that fully meet these expectations – most notably, The Guardian – demonstrate that there are conditions under which media speakers can and do hold corporate power accountable, thus challenging and potentially transforming power relations (Fenton, 2010a). In particular, investigative journalists did more frequently problematize the industry, however, the rarity of their contributions renders their status more the exception that makes the rule than evidence that the forum for public debate created within the media is adequate to hold power to account.

The framework and methodology used in our study found contradictions in the practice of media speakers that are incompatible with rhetorically convenient but empirically naïve essentializations. Rather, we find empirical support for the recognition of journalism as fragmented, complex, and open-ended (Waisbord, 2018) in ways that appear to be functional to short-term industry interests.

Despite the centrality of normative expectations to our understanding of journalism’s place in democracy and society, our findings echo concerns about their increasing disconnect with journalism’s realities (Hanitzsch & Vos, 2018), pointing instead to a gap between a relatively broadly accepted, if naively conceived, normative expectations and the actual conditions of news media practice (Phillips et al., 2010). In this sense, our findings lend unexpected credibility to our deliberate choice not to focus our study on investigative reporting. Our study placed those reports in context in a manner that permitted us both to recognize their merits and their limited relevance for shaping a forum for accountability. Our findings add to those voices calling for revision of journalism scholarship. Instead of reifying
and discursively reproducing normative patterns (Parks, 2020) grounded on problematic assumptions (Bennett & Pfetsch, 2018) and Western biases (Stetka & Örnebring, 2013), we should develop analytic frameworks and methodologies fit to describe media practice, and elucidate the conditions under which media practice is able to interpret normative expectations born of perhaps a simpler understanding for current disrupted public spheres (Bennett & Pfetsch, 2018) and high choice media environments (Van Aelst et al., 2017).

Taking into account the conceptual problems that restrict empirical investigations of corporate power (Hathaway, 2018) and the obstacles for systematic empirical assessment of the performance of news media (Callaghan & Schnell, 2001; Mellado & Van Dalen, 2017), we have developed and operationalized an analytical framework that allows for a systematic and replicable examination of whether and how news media holds corporate power accountable.

The dimensions of accountability that our research has successfully operationalized are not the only ones at play. Future research should find ways of making these other dimensions visible in ways that support systematic empirical analysis. Hathaway (2018), for example, argues that scholarly focus on decision-making within the political arena could effectively hamper empirical research, as failure to recognize corporate power as part of capitalist democracy can mean that decisions that are taken off the governmental agenda are also taken off the research agenda. We hope that the model provided by the methodology we have developed and successfully applied will contribute to the struggle to understand and to support media that meet the expectations that justify their privileges.
Chapter 6

General conclusion and discussion
1. Introduction

In this thesis, I examined 766 newspaper articles about chicken meat production published over 31 years for empirical evidence that spoke to the normative expectations of news media for democratic public debate. Working with a coding scheme consisting of 281 individual codes, I analysed 7227 individual statements. I aimed to investigate the extent to which these core normative expectations materialise in journalistic output in ways that support the kind of public debates necessary to identify and tackle complex societal challenges and support processes of accountability. Building on framing as an analytical tool, I developed an analytical instrument that allowed me to rigorously and systematically analyse the structuring of the public debate about chicken meat production over the period under study in, with, and through newspapers. The theoretical framework for this research builds on ideal-type normative theories of the press – particularly the notion of the Fourth Estate and social responsibility theory, and journalistic roles literature. At the intersection of these theoretical perspectives, I identified two key expectations that are of particular relevance when dealing with wicked problems: 1) the provision of a forum for and facilitation of healthy public debate, and 2) the provision of a forum for and support of processes of accountability. I then developed a set of concrete expectations for news media as a forum for public debate of wicked problems that can support processes of accountability. This analytical framework also allowed for the translation of these normative expectations derived from the theoretical framework into a set of concrete, operational expectations for the four empirical studies conducted as part of the overarching research project (Chapters 2-5). The analytical instrument developed was compatible with a multi-dimensional understanding of news media as a forum for public debate, a political actor in this debate, and as a process of mediation. It was also consistent with an understanding of power as context-shaping.

This last chapter brings together the findings from the four empirical chapters to provide an answer to the research questions, and discusses these findings in light of the broader scientific and societal context. This concluding chapter is organised as follows: the first section brings together the findings from the four empirical studies to answer the research sub-questions and the overarching research question. The second section charts the theoretical contributions. The third section discusses the methodological contributions of this thesis. The fourth section places the findings in a wider scientific and societal context. The final section discusses the limitations of the study and makes recommendations for future research.

2. Synthesis of the empirical chapters

This first section answers the four sub-questions outlined in the introductory chapter. Though each empirical chapter broadly corresponds to one research sub-question, the answers to these draw on relevant findings from other chapters, where appropriate.
2.1. Newspapers as a forum for healthy public debate

To what extent does newspaper coverage about chicken meat production comport with the normative expectation of providing a forum for healthy public debate?

Chapter 2 presented the results of a longitudinal analysis of the framing of chicken meat production in newspaper coverage. The results showed that UK outlets discussed a wide variety of issues related to chicken meat production over the period under study, and problematised these in different ways. The frequency with which these issues were discussed in newspaper coverage varied between and within issues, with some less frequently but more consistently mentioned, while others concentrated many mentions over a shorter period. Consistent with the normative expectation of news media as a forum for democratic public debate, these findings showed that chicken meat production was publicly discussed and at times noisily contested in the news by a variety of speakers.

However, Chapter 2 also showed limitations to the extent to which this forum is providing coherent frameworks for interpretation required for citizens to comprehend and meaningfully navigate the complexities and interlinkages of the multiple issues about and related to chicken meat production, and to mobilise accordingly (Lakoff, 2010; Schudson, 2003). Newspaper coverage of chicken meat production was characterised by episodic framing focusing on lower-level issues, which were not frequently linked to each other or to broader structural problems. This first empirical study found only limited evidence of structural problematisation and systemic contestation, suggesting that systemic and structural dimensions of power were seldom discussed in the dataset. I argued that without such systematic connections across issues or structural perspective, the picture that emerges is one of isolated episodes of problematisation of specific issues, consistent with polemic rather than systemic contestation. This predisposes the debate towards specific and often technical solutions, which are not fit for wicked problems. Moreover, I argued that this resulted in the diffusion of public debate as an emergent – albeit not necessarily intended – consequence, which I argued was not compatible with a sustained shift in the terms of the debate over time. These findings suggest that newspaper coverage of chicken meat production in the UK largely did not comport with the normative expectation of providing a forum for healthy public debate.

2.2. Newspapers as a forum for public debate about wicked problems

To what extent does newspaper coverage of chicken meat production support the kinds of public debate required to address wicked problems?

Building on the results in Chapter 2, Chapter 3 subjected the normative expectation of news media as a forum for public debate to more detailed empirical scrutiny. In this second empirical study, the focus was explicitly on the provision of a forum for the kinds of public
debate required to address wicked problems. I argued that the irreducible complexity, inherent tensions, and the many stakeholders and interests involved in such issues make particular demands of public debate. It needs to allow for an exploration of the complexities of these issues in ways that support an opening-up rather than a closing-down of the public debate (Stirling, 2008). I found that the problematisation of avian influenza did support an opening-up of the public debate, as coverage did not tend to converge around a single consensual definition of avian flu as a problem. Similar patterns arose with every other framing element.

The clear convergence around biosecurity measures as the preferred treatment endorsed for avian influenza, however, stands in stark contrast against the range of other framing elements mentioned in this public debate. In spite of avian influenza being problematised in varied terms, and being attributed to very different causes, most media speakers still endorsed the same type of solution. In general, coverage appears to support an opening up of the debate, except for the fact that coverage converges around a single, and rather technical, solution. If the different framing elements tend to hold together a narrative in logically consistent ways, this tension between framing that reflects a wicked problem’s defiance of definitive formulation on the one hand, and that closes down the debate around a single solution, appears contradictory. This more in-depth analysis supports the earlier findings in Chapter 2, namely that newspaper coverage of chicken meat production in the UK largely did not comport with the normative expectation of providing a forum for healthy public debate.

2.3. Newspapers as a forum for processes of accountability

To what extent does newspaper coverage of chicken meat production support processes of accountability?

Chapter 4 focused on the normative expectation of news media as fora for processes of accountability. The empirical findings presented in this chapter showed that the fora provided by newspapers supported the identification of many different issues related to chicken meat production, as well as a variety of victims that suffer the consequences of these problems. By virtue of being harmed, these victims are thus put in position to demand accountability (or have it demanded for them). If problematisation is understood as a first step in accountability (Maia, 2009), these findings suggest that the fora provided by newspapers did support processes of accountability by including sufficient rhetorical resources to support the identification of problems and harms for which accountability may be demanded. However, newspaper coverage provided substantially fewer rhetorical resources to support processes of accountability by way of causal interpretations, and even fewer still by way of attributions of responsibility.

An exploration of the attribution of responsibility and victimhood found that these were unequally distributed across the food production system. The findings showed that some
actors within the chicken meat production value chain were indeed framed in ways that are conducive to processes of accountability, as was the case of retailers and, more specifically, big supermarkets. Interestingly, Chapter 4 showed that in spite of the problematisation of issues related to chicken meat production, and of the chicken meat production industry and its practices being identified as the cause of the problem, this did not translate into equivalent attributions of causal or treatment responsibility, suggesting only limited accounts of direct responsibility towards the industry. I argued that this tension suggested that the industry was not recognised as a social and moral agent subject to being held responsible and thus accountable. Together, these findings suggest an aggregate effect on the shape of this forum that does not appear to be conducive to processes of accountability as the problematisation and causal interpretations of the industry appear to require.

Chapter 4 showed that there were accounts of public responsibility, as governmental authorities and officials were frequently attributed treatment responsibility. In contrast, we found very limited evidence of systemic accounts of responsibility. Together with the findings about the limited accounts of direct responsibility toward the industry, these findings point to a scarcity of rhetorical resources to facilitate and support processes of accountability at structural or systemic levels. Taken together, these findings show that newspaper coverage of chicken meat production included limited rhetorical resources to support processes of accountability, particularly at the systemic level.

2.4. Newspapers as a mechanism to hold corporate power to account

To what extent do newspapers hold corporate power to account in their coverage of chicken meat production?

Chapter 5 investigated the extent to which the chicken meat production industry was held to account by newspapers. The results from this study showed that though media speakers did problematise the industry and its practices, they only identified these as the cause of the problem in a small proportion of the problems discussed in newspaper coverage. Moreover, they attributed responsibility to the industry only sporadically, even in those cases in which they had already constructed the industry as the problem or the cause of the problem. In other words, even when media speakers constructed the industry and its practices as the cause of the problem, they did not hold them responsible for doing so, nor did they call on them to solve the problem. I argued that this suggested that media speakers did not generally frame the chicken meat production industry in a manner compatible with recognising it as a social and moral agent that is subject to being held accountable, even for the problems they are presented as creating. What is more, the findings reported in this chapter show that the industry was frequently framed as a victim, thereby diluting the already rare instances in which it was held responsible for causing or solving these problems.

Chapter 5 also included a brief exploration of the contribution of investigative journalism to the public debate, as this type of journalistic practice and its product are
explicitly argued as able and expected to deliver on the watchdog or critical-monitorial role at the heart of the Fourth Estate notion. This study found that, though the investigative journalism reports included in our dataset fare better in terms of holding corporate power to account – by constructing the industry as the cause of the problem, and making the consequent attributions of causal and treatment responsibility in a more systematic manner – these account for only a small proportion of our dataset, that does not appear to change the overall shape of the forum. This shows that news media are not slavishly supporting corporate interests, and that there are indeed conditions under which news media coverage can hold corporate power accountable. However, these instances were rare and sporadic, and thus the overall shape of the forum was not compatible with the expectations. These contradictions in media practice are consistent with an understanding of journalism as fragmented, complex, and open-ended (Waisbord, 2018). In this case, however, this fragmentation and complexity appear to be functional to short-term industry interests. While I did not expect that every article would fully enact the watchdog role (Hanitzsch & Vos, 2017), the relative scarcity of attributions of causal and treatment responsibility towards the industry, especially given their much more frequent portrayal as victim, not only is not conducive but might actually hinder accountability by giving the illusion that there is sufficient contestation. However, as the findings in Chapter 4 showed, many of these accounts of direct responsibility were levied against specific companies, thus resulting in an individualisation of responsibility, that allows the (corporate) structure to go unnoticed and remain largely uncontested. Overall, the findings presented in Chapter 5 are not compatible with the expectation that newspapers hold corporate power to account. Though we did find instances of coverage that comport with such expectation, these were infrequent in our dataset.

3. Conclusion

Taken together, the findings from Chapters 2 to 5 now allow me to return to the main research question. The main research question was:

*How well does newspaper coverage about chicken meat production comport with normative expectations as required to support sound public debate of complex societal challenges?*

Based on the compelling evidence presented in the empirical chapters, I conclude that the overall shape of the forum provided by British newspapers for the public debate about chicken meat production was not compatible with the expectation of coverage that provides a coherent framework of interpretation and sufficient rhetorical resources to support a healthy public debate, especially when taking into account the requirements for public debates about wicked problems. The episodic framing, the focus on specific, lower-level issues, and without systematic links being drawn between each other and to broader, structural issues, both at the aggregate level and at the level of individual outlets, are not
conducive to a public debate that supports the exploration of the irreducible complexity, inherent tensions, entanglements, uncertainties and fundamental irresolvability of wicked problems. These findings are not compatible with the subtle and complex appreciation of the interconnectedness of things, whereby issues are considered not as isolated specifics but rather in broader contexts, and that is argued to facilitate the purposes of civic communication (Blumler & Coleman, 2015). I argued that the patterns of coverage in chapters 2 and 3 points towards diffusion as an emergent political effect.

The lack of structural problematisation and systemic contestation shown in Chapters 2 and 3 is also not conducive to the exploration and understanding of the structural and systemic roots of wicked problems, in ways that can support the exploration and deliberation of systemic actions and structural changes that may be necessary to tackle wicked problems. This diffusion of the public debate that is evidenced in Chapters 2 and 3, in addition to the closing-down of the debate around a specific technical solution appears to bias the conversation towards technical solutions that do not address the systemic and structural causes and mutual entanglements that characterise wicked problems and moves it away from an exploration of deeper systemic or structural causes and solutions. Technical solutions allow the system to keep on working uncontested, and thus effectively reproduce the status quo, particularly given the scarcity of systemic references evident in all chapters. These findings suggest that the shape of the forum does not support the types of processes of accountability required by wicked problems.

Overall, the shape of the forum also appears incompatible with being a forum for accountability, and especially with structural and systemic accounts of responsibility. The findings presented in this dissertation suggest that newspaper coverage does not appear conducive to holding the industry or corporate power more broadly accountable, which is not consistent with their own problematisation of the industry and its practices. Chapter 4 showed that it also does not appear to support systemic accounts of responsibility. As shown in Chapters 4 and 5, the aggregate effect of the framing of the chicken meat production industry in newspaper coverage shapes the space of possibilities for subsequent action in ways that do not appear conducive to processes of accountability. When ‘things just happen’ but there is no attribution of responsibility for them, those in power and with responsibility are let off the hook, indicating a democratic deficit in which it is difficult for citizens to attribute responsibility due to news media’s failure to inform audiences where power and responsibility lie (Cushion et al., 2020).

Though newspaper coverage included discussion of a wide range of problems related to chicken meat production – many of which were said to be caused by the industry and its practices –, it was also shown to include limited rhetorical resources to support the identification of the industry as a social and moral agent liable to be held responsible and thus accountable. Additionally, the more frequent framing of the industry as a victim was argued to alter the deliberative space in ways favourable to the interests of the industry, rather than in ways that support their being held accountable. In other words, there appears
to be a dilution of attributions of responsibility towards the industry, in the midst of the more frequent attributions of victimhood.

In addition, the results suggesting that newspaper coverage is also not compatible with the expectation of news media as a check on corporate power, this supports the argument that newspaper coverage is conducive to corporate power hiding in plain sight, which might be more effective in protecting the industry than coerced silence. The pattern of coverage described here – especially if one were to look only at instances of investigative journalism – might give the illusion that at least some actors within the industry are being held accountable; however, the debate is predisposed towards technical solutions for specific problems, and which do not pose a challenge or threat to the system as a whole. Indeed, without a more fundamental questioning of the soundness of the market and the systems in which it is inscribed, journalists effectively serve the needs of big business over the public by allowing corporations to perpetuate and profit from the system. Coverage effectively – though not necessarily intentionally – protects those it is meant to hold to account.

4. Theoretical and methodological contributions

This thesis contributes to the rich field of studies that point to a gap between what journalism ought to do and what journalists can and actually do in practice (Eriksson & Östman, 2013; Habermas, 2006; Hanitzsch & Vos, 2018; Mellado & Van Dalen, 2014; Phillips et al., 2010). It provides an original operationalisation of the normative expectations that speaks to the public debate required for the discussion of wicked problems, which we have tested in a case study that, in hindsight, appears sadly relevant given the ongoing COVID-19 pandemic and the worsening climate crisis, to name but two examples. It also provides a novel operationalisation of normative expectations that speaks to the role of news media as mechanism and forum for accountability, particularly with regards to corporate power. The empirical findings discussed in this dissertation suggest the need to critically reassess these normative expectations as benchmarks of good journalism and the conditions under which it would be reasonable to expect news media to deliver on such expectations regarding their role in democratic public debate.

4.1. Theoretical contributions: a new approach to the gap

Well, America, it’s been a pleasure. We’re fucked. Because unfortunately, if they are the one thing that’s standing between America and chaos, we are in trouble. Because rarely has there been an institution that has such a distance between its aspirations and its execution. And thus, The Problem with the Media. The media keeps informing us how incredibly important they are to our survival because knowing keeps us free. But when given crucial informational tasks, they instead build us prisons of “What the fuck are you people talking
The findings presented in this dissertation provide strong empirical evidence of the gap that Jon Stewart is referencing in the first episode of his new show, The Problem with Jon Stewart, aptly titled ‘The Problem with the Media’. In this research project, I have shown that there is a gap between a set of normative expectations and media practice as materialised in news texts. As has been stated before, I certainly did not expect that every statement or article would enact these expectations (Hanitzsch & Vos, 2018; Phillips et al., 2010). However, the overall shape of the forum suggests that, to a large extent, these expectations are not being met. This implies that the material and symbolic conditions of journalistic practice are not conducive to journalistic output that comports with such expectations, that journalists do not share in those expectations, or that these expectations – or, rather, the theories subsequent to which these were formed – are not adequate to explain the patterns observed.

Research has demonstrated that journalists’ role perceptions do not always align with journalistic practice (Mellado & Van Dalen, 2014; Wolfgang et al., 2019). Thus, while journalistic role conceptions might align with the normative expectations – as those outlined in this dissertation – the material and symbolic conditions of journalistic practice might cause journalistic performance to diverge from the expectations. Recently, Wolfgang et al. (2019) have shown that journalists’ conceptualisation of democracy influences how they understand and legitimise their own role and place in society, and therefore how they report on political issues of public importance. However, these authors noted that these democratic intentions might potentially run up against practical obstacles in the reality of everyday news production, resulting in a gap between the journalists’ intentions and their actual practices. In this sense, our research provides a systematic empirical analysis of the extent to which normative ideals that are at the core of journalists’ own discursively constructed identity actually materialise in the product of journalistic practice.

Research has pointed towards some potential explanations: lack of skills among journalists that undermines their ability to hold corporations accountable; in addition, the lack of time, opportunity and training, coupled with the lack of funding, hinder the enactment of the critical-monitorial journalistic role (Doyle, 2006; Tambini, 2010). Studies have also contributed empirical evidence that financial or business journalists in particular do not entirely share the understanding of watchdog journalism that is common in journalism scholarship, or that this role is just not as central to their role conception as liberal orthodoxy would appear to suggest, especially when it comes to corporations and corporate power (Tambini, 2010; Usher, 2013). From a political economy perspective, the business press in simply too invested in the capitalist system to be able to offer critical reflection or meaningful analysis (Usher, 2017). The findings presented in this dissertation, and especially those in Chapter 5, lend further credibility to these critiques about a structural failure regarding the watchdog role (Usher, 2013, 2017), particularly when it comes to
holding corporate power to account. Analyses of the data disaggregated by outlet showed that the Financial Times, an exemplar of business journalism, was the outlet with the largest proportion of attributions of victimhood and the lowest proportion of attributions of causal responsibility towards the industry; it framed the industry almost entirely as a victim. What is more, these findings suggest that the critiques levelled in these studies against business journalism, might apply to journalism more generally.

However, to understand the gap between the normative expectation and journalistic practice we need to examine media power also from another starting point, which the discrepancies evidenced in the empirical chapters have laid bare. The notion of the Fourth Estate, it should be recalled, is a Fourth Estate of political power. However, as Van Aelst et al. (2008) state, there is usually little systematic reflection on what that power entails, or indeed what the underlying conceptualisation of power is. In other words, what is meant by power. The two approaches mentioned in the introductory chapter, actor-oriented approaches and structural approaches, essentially map onto the two general approaches to the conceptualisation of power (Van Aelst et al., 2008). However, the manner in which actor-oriented media studies often deploy the construct 'power', in which a presumptively coherent actor imposes their will on another, may be inappropriate. Conversely, the structural approach of much of the critical literature on media studies has not provided us with a convincing epistemological apparatus that goes beyond radical views on power which are still rooted in a behavioural and agency-centred notion of power (Hay, 1997). This common-sense and perhaps naively humanist ‘power over’ has shaped the frames through which we conceptualise, analyse, and criticise the media.

Schudson (2003) argues that part of the difficulty in conclusively establishing media effects is that we are operating with oversimplified models of how media affect society. I would add that we are also operating with oversimplified and, more specifically, excessively agential understandings of power and, by consequence, media power. Schudson somewhat hints to this as he states that media power is of a special sort, which makes it difficult to figuring out its effects. “We ask simplistic questions” (Schudson, 2003, p. 16). I posit that, rather than simplistic questions, these are questions subsequent to inadequate theories and, more specifically, understandings of power that are excessively grounded in humanistic notions of agency, which in turn are reproduced in chosen methods.

From a perspective of power as context-shaping, I was able to show that the emergent shape of this forum is neither compatible with nor conducive to the kinds of public debate that I argue are necessary to tackle complex societal challenges, they are neither supportive of nor conducive to processes of accountability. From this perspective, this thesis provides an original operationalisation of normative expectations that speaks to the public debate required for the discussion of wicked problems, which we have tested in a case study that, in hindsight, appears sadly relevant given the ongoing COVID-19 pandemic and the ongoing climate crisis, to name but two examples.
This operationalisation lies at the intersection of three strands of literature that I argue are key to the democratic role of news media as a forum for public debate and as a mechanism for public accountability. I argue that these two roles are particularly important to tackle complex societal challenges. The characteristics of wicked problems prompt a reflection on what kinds of public debate are necessary in addressing and tackling such complex issues. Chapters 2 and 3 propose a set of requirements that a forum for public debate should meet to facilitate and support sound debate. Incorporating the wicked problems conceptualisation in Chapter 3 allows for the further specification of these normative expectations for the role of news media in democratic public debate in the particularly relevant and urgent context of complex societal challenges that exhibit such characteristics, as is the case of global food production, climate change, food safety and food security, etc. Moreover, this dissertation contributes an expansion to the theory of attribution of responsibility. Building on the framing literature, and the particular conceptualisation and operationalisation of framing that incorporates insights from both issue framing and identity framing, I argue that examination of attributions of responsibility is enhanced and enriched by the incorporation of attributions of victimhood. I argue that the attribution of victimhood might shape the form of the forum in ways that are not conducive to or that effectively hinder accountability, and thus should be taken into account in analyses of news media as mechanism for public accountability.

This dissertation further expands the theory by the introduction of insights from substantive issue framing. Building on the literature on substantive issue framing (Chong & Druckman, 2007; Entman, 1993, 2003, 2009), the analytical framework used in this research incorporated the framing elements of problematization and causal identification to the analysis of attribution of responsibility (Boukes, 2021; Chang et al., 2016; Hameleers et al., 2019; Holton et al., 2012; Jeong et al., 2018; Kim & Telleen, 2017; Zheng, 2012). This expansion of the analytical framework allowed for a more nuanced analysis that highlighted an interesting tension in the findings. More specifically, by contrasting problematization and causal interpretations against the attribution of causal and treatment responsibility, the findings evidenced a tension in newspaper coverage that recognises the industry and its practices as (cause of) a problem, but does not recognise it as responsible for causing the problem or for solving it. I consequently propose an expansion to this theory by the introduction of recognition as a social and moral agent liable to be held responsible as conducive to processes of accountability.

Finally, in recognising the limitations of the actor-oriented understanding of accountability and moving away from agential understandings of power, this thesis expands the analytical framework through the introduction of systemic accounts of responsibility, as distinct from public accountability and direct accountability. While I had expected newspaper coverage about chicken meat production – or, even broader, than that, coverage about mass animal production, food production systems, or even capitalist modes of production – what I mostly found myself reading was coverage about much
more specific issues within these broader topics: about the adulteration of chicken meat with hydrolysed proteins, or about the use of antibiotics as growth-promoters, or about the economic blow to the industry posed by the outbreak of avian influenza.

Finally, this dissertation makes an important theoretical contribution towards remedying a historical imbalance in much media scholarship, which has tended to focus on state or political power, effectively allowing corporate and economic power to ‘hide in plain sight’ and go unchecked (Carson, 2014; Chiles, 2017). In a sense, then, the same criticism that applies to the news media that we study, can be levelled against the ones doing the studying. This research therefore proposes a set of normative expectations for news media as a mechanism for accountability with regards to corporate power, as well as an empirically defensible proxy for corporate power.

### 4.2. Methodological contributions: how to study the gap

The methodological instrument developed for this project allows for rigorous, detailed and systematic examination of the extent to which these normative and journalistic ideals materialise in media practice as captured by and in media texts in a large, heterogenous dataset that supports analysis at several levels of aggregation. This particular approach facilitated an operationalisation that is sensitive to and can speak to structural effects with empirical rigour, but without starting from naive assumptions of coherence of the media as actor. For example, the methodological instrument developed for this research project supported the structural approach to the analysis of the shape of the forum provided by newspapers in Chapter 2. The same instrument also allowed for an analysis of the contribution of investigative journalism to the overall shape of the forum, as shown in Chapter 5, which is compatible with an agential perspective that asks about the extent to which investigative journalism is indeed enacting a watchdog role and holding power to account. As such it circumvents received distinctions of an either/or approach to structure and agency, and is thus compatible with a multi-dimensional understanding of news media that supports both agential and structural approaches and analysis and that is consistent with an understanding of (media) power as context-shaping (Hay, 1997).

The operationalisation of normative expectations contributes methodologically by expanding the conversation into an area of increasing urgency, by looking at news media as forum for the public debate of wicked problems (Connolly, 2017; Constance et al., 2018; Gordon et al., 2016; Rittel & Webber, 1973; Termeer et al., 2019; Waltner-Toews, 2017). This operationalisation of normative expectations can be readily tested and applied to other debates about topics that are also characterised by complexity, uncertainty and conflict. As Chapter 3 shows, the methodological instrument developed for this research project supports a wealth of different analyses, and is compatible with a multi-dimensional understanding of media as forum for public debate, political actor partaking in and facilitating that debate, as well as a process of mediation.
This dissertation also makes an important methodological contribution by advancing an operationalisation of accountability through framing, as shown in Chapters 4 and 5. More specifically, as noted above, the analytical framework developed for this research incorporates insights from issue-specific and identity framing, this and the following chapter propose an operationalisation of accountability into problematisation, causal interpretation, attribution of causal responsibility and attribution of treatment responsibility, as well as the addition of attribution of victimhood informed by the identity framing literature. It also advances an operational definition of systemic accounts of responsibility. The methodological instrument developed for this research project allows for analyses at several levels of aggregation, which – as our findings attest to – yields a nuanced and complex analysis.

In addition to this, this dissertation proposes an operationalisation of the normative expectation of news media as a mechanism for holding corporate power to account. This operationalisation allows for an empirical examination of the extent to which media practice complies with the expectations derived from this critical-monitorial role in a systematic, rigorous and replicable manner, circumventing some of the conceptual problems that have previously restricted empirical investigations of corporate power (Hathaway, 2018) and overcomes some of the obstacles for systematic empirical assessment of the performance of news media (Callaghan & Schnell, 2001; Mellado & Van Dalen, 2017).

Finally, the rigorous methodological approach combining inductive qualitative and deductive quantitative analysis in an in-depth study of a paradigmatic case allowed for interesting and unexpected results to emerge from the data. Notably, these results are not compatible with mainstream theories of the role of media in democratic public debate. More specifically, these are incompatible with either/or nature of the agential and structural approaches in media scholarship. While we did find instances of coverage that comports with these normative expectations – most notably and consistently in The Guardian, and most surprisingly in the Daily Mail – these are exceptions rather than the norm. In this sense, the theory explains some instances of coverage, but not the aggregate patterns of coverage described in the empirical chapters that make up this dissertation. I was able to point out this gap by the intentional decision not to focus only on investigative journalism, and include a heterogenous dataset that included the range of journalistic products in newspaper coverage. By placing these investigative reports in the broader context of newspaper coverage as a whole, this allowed me to recognise their merit as well as their limited relevance for shaping a forum for accountability. The implication here is that we need more investigative journalism, and we need to devote more resources and create the adequate conditions for it; but perhaps more importantly, that we need to fundamentally rethink and re-evaluate the place of other types of journalistic production in shaping the public debates. We need other types of journalism and also other types of business models. In the end, current business models are fundamentally incompatible with supporting journalistic practice that comports with these normative expectations.
5. Discussion

5.1. The role of normative expectations

Normative approaches to the media are often taken for granted, and foundations are not frequently questioned; therefore, the underlying assumptions not only remain unchallenged, but are legitimised by theorisations that discursively reproduce these normative expectations without problematising or indeed questioning their underlying assumptions (Bennett & Pfetsch, 2018; Parks, 2020; Pfetsch, 2018). Much of media scholarship and journalism research in particular frequently reifies and discursively reproduces such normative patterns, focusing on Western-biased theorisations grounded on untested assumptions and descriptive analyses of what journalism is, rather than what it should or could be (Hanitzsch, 2019; Parks, 2020). While this research starts from descriptive analyses that build on such normative patterns, the point is precisely to lend empirical substance for the admittedly necessary normative discussion, supporting the epistemological necessity of rethinking and reconceptualising the democratic role of journalism for the current era (Conboy, 2017). This subsection presents a critical discussion on the broader role of normative expectations in media and communications scholarship.

Rather than reifying and reproducing normative patterns (Parks, 2020), the results presented and discussed in this dissertation suggest the need to reassess the expectations and/or standards against which we evaluate journalistic practice (Bennett & Pfetsch, 2018; Fenton, 2010a; Pfetsch, 2018; Vos & Wolfgang, 2018), and to re-examine the assumptions that underpin such expectations, and the conditions under which it would be reasonable to expect news media and journalistic practice to deliver on such expectations. The present dissertation sought to evaluate journalistic performance from the perspective of textual evidence, in ways that support challenging unsubstantiated or outdated idealisations that may contribute to the current crisis of journalism (Conboy, 2017; Curran, 2019). The findings presented in the preceding empirical chapters also suggest the need to reassess the privileges and protections afforded to news media and journalists on account of and to ensure fulfilment of these roles (Felle, 2016; Oster, 2013; Tambini, 2010). While it might be possible – and, in the current climate of media scepticism and even distrust (Cancela et al., 2021; Reese, 2021), perhaps even likely – to interpret these findings as justification for reducing the rights, privileges and protections afforded to the press, I argue instead these should be expanded. While there are efforts to protect the press from formal (state) censorship, there have not been equivalent efforts to protect it from poorly controlled business interest (Bennett, 2016). Though one could argue about their efficiency, there are rights and protections in media law to guard against state pressure and censorship, and threats from political elites and perhaps criminal interests. However, similar safeguards have not been developed to protect the press from the more subtle (self-)censorship and bias resulting from pressures related to corporate power.
Moreover, even if such rights and protections were part of legal doctrine, without the opportunities and resources to make them effective, will only go so far. To function properly, both democracy and news media require more than a formal framework of rights. They require the opportunity and means to make these effective. Legal protections are likely to provide little respite from the pressures of commercialisation, media logic, mediatisation, editorial pressures, increasing workloads and 24/7 news cycles with decreasing resources and staff, pressures introduced by user engagement metrics and ratings and stock prices, and the blurring lines between journalism and public relations (Blumler, 2014; Lewis et al., 2008; Mazzoleni & Schulz, 1999; Strömbäck, 2008). The commercial media system – and newspapers in particular – has been facing problems of declining audiences, revenues, and product quality for decades (Bennett, 2016; Entman, 2010). This suggests the need for future research to investigate the symbolic and material conditions of journalistic practice that might curtail journalists’ abilities to deliver on the expectations and result in the patterns described here.

The empirical studies presented here should thus not be seen as a futile or, even worse, an ill-intentioned exercise in which I hold news media to an impossibly high standard against which they cannot but fail, and then criticise them on such grounds. Indeed, a reviewer of one of the empirical chapters that make up this thesis argued that this was just a straw man argument. This is a valid concern that calls for a broader reflection on the role of normative theory in media studies and science more generally.

However, let me clarify first that the empirical studies conducted in this research project do not constitute a straw man argument. Firstly, a straw man is an empirical error, in the sense that it requires an empirical referent. The expectations I build on are not empirical. Rather, they come from near hegemonic norms in the field that are perhaps best understood here in the line of the Weberian ‘ideal type’. From this perspective, normative theories may not be fully realisable, yet still serve a purpose as ideal models for us to aspire to in a search for acceptable press standards (Ogbebor, 2020). As Hanitzsch and Vos (2017) have argued, it would be naïve to expect that journalistic practice as materialised in news texts fully enacted journalistic values and normative expectations, especially if one recognises journalism to be fractured, complex and open-ended (Waisbord, 2018). Journalistic work is subject to many factors that exert differential direct and indirect influences (Reese & Shoemaker, 2016), some of which impinge upon journalists’ abilities to live up to these normative expectations and standards (Mellado & Van Dalen, 2014). I certainly did not expect every statement by a media speaker to meet all of the expectations derived from the literature. However, I also did not expect the startling lack of fit that these findings evidence. This ideal type is commonly taught, often referenced in the literature and broadly accepted in professional circles, all of which suggest it was appropriate to operationalise in a study like this one. However, if these findings are any indicator, this ideal type provides a poor fit for the real world, at least in the present case of study. This, it seems, is somewhat of a problem, especially considering the fact that this ideal type that is taught to media scholars, who in turn, informed these expectations.
Secondly, even granting that it is possible for a straw man argument to reference a non-empirical expectation, the normative expectations from which I derive the set of criteria against which I contrast the data do not constitute a straw man argument, on account of the fact that journalists themselves have been socialised to accept these normative criteria as a benchmark of good journalism (Vos & Wolfgang, 2018). What is more, both in academia and in newsrooms, those who defend the role of news media in democratic societies often back their arguments with the apparently empirical claim that journalism does deliver on these ideals (despite compelling evidence to the contrary from critical media scholars). As Christians et al. (2010, p. 55) explain, “Maintaining its identity as a defender of democracy has become central in the press’s normative tradition, and the institution of the media, especially its academic wing, began a process of constantly evaluating the media’s moral performance in terms of how they are or should be defending and promoting democracy”. Indeed, most arguments that defend the freedom of the press, the importance of journalism in democratic societies, and the rights and protections afforded to journalists, are based on news media delivering on these normative expectations, as perhaps best exemplified by The Washington Post’s slogan: Democracy Dies in Darkness (Wolfgang et al., 2018). The work of Hanitzsch and colleagues (Hanitzsch et al., 2011; Hanitzsch, Hanusch, et al., 2019; Hanitzsch, Vos, et al., 2019) regarding journalistic roles around the world speaks to the relevance of contrasting the normative and cognitive role orientations to the practiced and narrated role performance of journalists. Therefore, the norms we have operationalised in this study are broadly accepted to be testable empirical facts and their presumptive ‘truth’ has symbolic and material effects.

Third and finally, as Fenton (2010a) argues, the point of contrasting empirical data against high standards (derived from literature about normative theories on the press, non-ideal type research, research on journalistic roles, and audience or citizen expectations of journalism), is not to judge it against an impossible standard of the past, but rather to understand how to improve it for the future: “this ethical horizon is still pertinent: there remains a sense that there are many things that news journalism ought to be doing - to monitor, to hold to account and to facilitate and maintain deliberation - that forms a line in the sand against which contemporary practice can be critiqued (...) We are more concerned with a time that is yet to come but is nonetheless worth aiming for”. Similarly, Phillips et al. (2010, pp. 51-52) argue that, “By considering the wider philosophical options for grounding an account of how we might expect media to act, we aim to consider the potential gap between one relatively uncontroversial set of ethical expectations which could be made of journalists and their actual conditions of practice”. I do believe that journalism should play a fundamental role in democratic societies and public debate; and I wish to contribute to our understanding of this role, where it falls short, and how we can improve it. In line with critical media studies – and critical scholarship more broadly – this research should be explanatory, practical and normative. I certainly agree that we need a standard for news quality that remains realistic, yet allows us to highlight shortcomings in current journalistic practices and
the material conditions of news production, to point towards feasible improvements, and to help us evaluate whether and how news media and journalism provide the information and the fora for public debate required for engaged citizenship and democratic life (Strömbäck, 2005; Zaller, 2003). From this critical perspective, normative theories are justified as emancipatory instruments from the status quo (Christians et al., 2010).

5.2. Holding media to account

In countries the world over, the media – and news media in particular – enjoy freedoms and protections that go beyond those afforded to individuals in their exercise of freedom of expression. These include protection of the content, production and distribution of media output, as well as protection of journalists from acts of violence and undue influence (Oster, 2013). The democratic rationale for these rights and protections afforded to the media is grounded on their watchdog or fourth estate role: “To accomplish its purpose as an independent check on the government or on other persons or institutions exercising power and to disseminate information and ideas of public interest, the media must be guaranteed effective, privileged means to gather and disseminate news” (Oster, 2013, p. 70). A second argument – also from a liberal democracy model – is the marketplace of ideas rationale, which is grounded on the media’s role as a forum for public debate, where many ideas and viewpoints can be subject to rational deliberation. From this perspective, the rights and privileges afforded to media are meant to guarantee the dissemination of more information (Oster, 2013).

The privileges and protections afforded to news media in liberal democracies are frequently argued to involve a sort of unwritten contract, whereby news media requires democracy as the only form of government that protects freedom of speech, expression and information, and an independent press; while democracy requires news media to make good use of these privileges and protections and providing the site and substance for public debate and act as a check on power (Christians et al., 2010; Strömbäck, 2005). It is precisely in recognition of their role in governance, including corporate governance, that these rights and privileges are granted (Tambini, 2010), so that news media and journalism can, safely and fully, enact these roles in the public interest. These protections, though, as the social contract notion implies, also make some demands of media, not only in the sense of performing those roles on which grounds the rights and protections were granted in the first place, but also that not (ab)use those protections to hurt, manipulate or deceive: “the media’s privileged protection is also subject to the requirement that the media does inform the public about matters of general interest and that it does contribute to the marketplace of ideas” (Oster, 2013, p. 73).

By our own understanding of accountability, these findings suggest that news media should be called to account. With regards to their role in democratic public debate, who are news media accountable to, and by what means is accountability achieved (Christians et al., 2010)?
This discussion is particularly relevant at a time when the social legitimacy and the epistemic authority – not to mention the legal protections afforded to journalists based on this – are being existentially questioned in a number of contexts (Reese, 2021; Standaert et al., 2021; Van Aelst et al., 2017) and from all sides of the political-ideological spectrum. In this context, it would be easy perhaps to interpret these findings and their discussion as a fundamental attack on journalism and news media. That certainly has been the response while presenting these results in academic conferences and other spaces of scholarly debate. I must, therefore, clarify my own intention and position.

I accept Stuart Hall (1989) suspicion of and hostility towards (media) scholarship that claims to have no political or ideological position. With Fenton (2009). I accept that scholars’ work is necessarily political and that we must declare our position. These position statements – not uncommon in certain circles, but certainly rarer across the scientific community more generally – are akin to the advocative-radical function of journalism (Hanitzsch & Vos, 2018; Standaert et al., 2021). Like journalists, we scholars are not and can not be neutral or objective observers. We are engaged and active participants in political life, we are morally bound to be aware of, to be explicit about the ideological bias that we bring to bear on our work, and to make ourselves accountable for the politics and (unintended) consequences of our work.

Peers who responded to my conference presentation were correct in their worries. My work does challenge some of the foundations on which the media relies for the privileges that they are afforded. Contrary to my initial expectations, I have found that the terms on which the media are attempting to hold corporate power to account are inadequate. My position is that it is not possible effectively to hold corporate power to account using a framework that requires agents and is dedicated to tracing the effects of their actions. If we are to hold corporate power to account, then we must use analytic methods that are sensitive to forum shaping and we must be able to describe as actors those who fall between agents and structure. The analytic method developed for and proven useful in this dissertation is equal to that task.

6. **Methodological reflection and future research**

The present thesis is not without limitations. This section addresses the most important theoretical and empirical limitations and their implications for the conclusions that can be drawn from the findings. Subsequently, I make some recommendations for future research that can address those limitations and some of the questions raised by the findings of this research.
6.1. Case study research and generalisation of the findings

The present thesis tests a specific set of normative expectations that have been immensely influential in political and media scholarship. The conceptualisation and operationalisation of these normative expectations were drawn from a classic liberal perspective of deliberative democracy, which is consistent with the liberal media system of the UK. This is relevant because how journalists understand democracy likely influences how they conceive their professional role and how they practice their craft (Reese & Shoemaker, 2016; Wolfgang et al., 2019), and because what might be considered good journalism from the perspective of one model of democracy, might not be considered as such from the perspective of a different model (Strömbäck, 2005).

The set of expectations operationalised and tested in the present thesis were formed in the UK, and thus it is reasonable to measure UK newspaper coverage against this standard. However, this is not to say that there are nor should there be other normative standards against which we evaluate news media or journalistic performance. Different democratic models, philosophical visions, political systems, media systems and historical contexts require different and at times contradictory tasks of news media and journalism (Cammaerts et al., 2020; Ferree et al., 2002; Habermas, 2006; Strömbäck, 2005). Democracy is, after all, an essentially contested concept (Blumler & Coleman, 2015).

Consequently, future research should conduct similar exercises, by investigating normative expectations subsequent to different models of democracy, as these may imply different demands upon media and journalism (Strömbäck, 2005). However, given the Western bias of media scholarship and journalism studies in particular (Hanitzsch, 2019), it would be particularly valuable for future research to focus on developing democracies or non-democratic contexts. Indeed, most journalism scholarship assumes this Western democratic perspective, frequently grounded in a liberal pluralist view (Hanitzsch, 2019).

The findings discussed in this thesis are necessarily informed by the single case that was examined. The nature of case studies implies a trade-off, which was carefully considered in the early stages of this research project. While a comparative analysis including more cases would have provided breadth and enhanced the external validity of the findings and their implications, it would have also sacrificed the depth, nuance and detail I was able to achieve with a single, in-depth case study. A single case study design then allowed for a dataset comprised of a census rather than a sample of relevant articles over a longer period of time. It also allowed for data collection over a longer period of 31 years. While these methodological choices afforded a breadth and depth of data, they certainly also implied that I could not, for example, triangulate and validate these results with other research methods or data. In this sense, future research should expand on the present study by replicating the research design and applying a similar instrument to other cases of study and, particularly, other issues that could be characterised as wicked problems.
6.2. Correlation, not causation

The methodological approach and research design of the present study do not support claims of causality. Therefore, future studies should inquire into the material conditions, structural determinants and everyday journalistic practices and norms that shape news media coverage of complex issues, and that result in the patterns described in the present thesis.

Similarly, the present study was not concerned with individual-level effects of the framing of chicken meat production. The methodology and research design do not speak to media effects on individual behaviour nor to the conduct-shaping effects on audiences, only to aggregate effect of media practice as embodied in news texts, and the context-shaping effect of these patterns on the shape of the forum for public debate. That is not to say that frame-building or framing effects are not relevant or necessary for a more comprehensive understanding of the role of news media in democratic public debate. As De Vreese (2005) has argued, frame-building, frame-setting, and framing effects at the individual and societal level are stages of the process of framing. Therefore, the results presented in this dissertation could be further expanded by research exploring the frame-building and frame-setting processes that explain the patterns of coverage discussed in this dissertation.

News texts register the material and symbolic conditions and the organisational constraints under which journalists work to produce these texts. They also register the literary forms and narrative devices that journalists use to manage increasing amounts of information in shorter periods and with less resources (Fenton, 2010a). The empirical findings reported and discussed in this thesis raise relevant and urgent questions regarding the conditions and constraints that result in the patterns described, and that future research should take up. Research on news values suggesting that the values that guide selection of potential news stories appear to be led largely by practical rather than normative considerations (Harcup & O’Neill, 2017), could provide an interesting point in entry to investigate the potential links between newsworthiness criteria in journalistic practice and our findings of diffusion as emerging political effect. From an organisational and institutional perspective, future research should also investigate the potential impact of tensions between news organisations as patrons of news journalism as an institution and as market actors, on news values that guide what is considered newsworthy (Allern, 2002).

Conducting interviews with journalists and other actors involved in news production could yield interesting insights into the material conditions, practices and norms that result in the patterns here described. Sociological or ethnographic analysis of news-making practices and the inner workings of the newsroom could also provide valuable knowledge to understand the practices, material conditions, organisational constraints, journalistic norms, journalistic role conceptions that help explain the patterns described in this dissertation. Historical approaches to journalism studies are particularly useful to evaluate journalistic performance in ways that challenge underlying assumptions that may be
outdated or unrepresentative (Conboy, 2017). Triangulating these findings with in-depth interviews with journalists or ethnographic research in newsrooms could provide valuable insights into the role of everyday journalistic practice in shaping the coverage of complex issues, particularly in debates that take place over longer periods of time. In terms of the analysis function of journalism, understanding the practical obstacles faced by journalists in providing coherent frameworks of interpretation to help citizens comprehend complex issues (Schudson, 2008) seems particularly urgent, given the wicked nature of pressing challenges like climate change, global food security, or the rise of nationalism, for example.

Moreover, comparative research could provide relevant insights into the potential causes behind the patterns of coverage described in the preceding empirical chapters. Given these findings, and the critiques particularly from sociological and political economy approaches, comparative research in outlets not just in different types of media and platforms, but especially with different funding models and organisational legacies (Sehl et al., 2021), would be particularly valuable. Therefore, future research should replicate the studies presented here with data from a variety of journalistic formats, platforms, types and genres (Ornebring et al., 2018), as well as different funding models, including public service broadcasters (radio, television and digital).

Similarly, the results presented here could inform framing effects research to help us better understand the individual and societal effects of the patterns of coverage described in the four empirical studies that make up this thesis. One particularly relevant avenue for further research would be to test the extent to which the rhetorical resources included in newspaper coverage have individual effects. For example, one key point to investigate in future studies – using experiments or survey experiments – would be the extent to which attributions of victimhood effectively hinder processes of accountability. Similarly, focus group research could provide relevant insights into the aggregate level effects of such patterns of coverage on broader public debates.

6.3. Reliability

As explained in more detail in the empirical chapters, several techniques were implemented throughout the research project to strengthen the reliability of the instrument. These included several rounds of piloting the coding scheme with separate, independent coders, as well as many moments of peer debriefing. After each of these instances, the coding handbook was refined, either by eliminating unreliable codes, merging codes, adding examples or additional explanations. Initial rounds of coding included moments of coding together, discussing discrepancies and ambiguities, etc. Later rounds were coded separately, with discrepancies and doubts noted in memos, which were discussed after coding. In spite of these efforts, some of the variables included in the coding scheme still resulted in extremely unreliable results. This was particularly the case with some values related to the moral judgment variable. Due to the low inter-coder agreement of these variables, these were mostly excluded from the analyses.
Inter-coder agreement was calculated using Atlas.ti’s built-in tool. Due to the size of the data set and the breadth of the coding scheme, as well as how we constructed the scheme (for instance, to keep a parallel structure, we used the same actor categorisation broadly across all actor categories: speaker, victim, villain, problem-solver), this resulted in some coded that did not occur in the dataset or subsets. Though this does have implications for the reliability of the conclusions that I can draw from these findings, the resulting c-Alpha-binary agreement coefficient of 0.917 yielded in the final round of inter-coder agreement gave sufficient proof of the reliability of the overall coding scheme. Moreover, the analysis of the data resulting from the deductive quantitative analysis, as can be seen in the empirical chapters – and especially chapters 4 and 5 – was further contextualised and enriched with insights generated from the initial inductive qualitative content analysis that informed the construction of the coding scheme. Taking advantage of this required that I coded the largest portion of the dataset myself. This is certainly not ideal in terms of inter-coder reliability, but it was necessary given the time and resources available for the project and the particular research design.

Nonetheless, given the time and effort spent in developing the methodological instrument, future research should very much take advantage of that, and hopefully subject the coding scheme to much more rigorous inter-coding reliability testing, in order to further enhance the reliability of the results. It is also recommended that such a process include multiple coders, as well as rounds of intra-coder reliability assessment. Reliability of the results reported here could be greatly enhanced by means of triangulation. A future research agenda should triangulate these findings with interviews to journalists and newsroom ethnography, for example. In addition to possibly validating the results shown here, such data could shed light on the causes behind the patterns I have described.

6.4. Validity

This dissertation focuses on newspapers, a very particular type of outlets. While all of the outlets included in the study now have websites, apps and online platforms, this was not designed as a study on new media. It also does not take social media into account. It also did not include television news outlets. Though these findings might not be immediately generalisable to other media, there is research that has found that there are similarities between newspaper and television coverage. For instance, Hallin and Mellado (2018) found that television outlets performed better in terms of the watchdog and civic roles than newspapers. Kim and Telleen (2017), for example, did not find compelling evidence to suggest that television news are more likely than newspapers to focus on individual-level responsibilities. Nonetheless, future research should investigate whether other outlets – especially television and digital native news outlets – differ in terms of the extent to which their coverage comports with the normative expectations outlined in this dissertation. Specifically, it seems relevant to examine digital native news outlets and other types of new and social media outlets.
Finally, there is room to question whether normative expectations derived from clearly Western traditions and from liberal democratic models would even be appropriate in other contexts, cultures and political systems, with research suggesting that media in post-authoritarian countries in particular are perceived as falling short on these normative expectations from the established Western liberal democracies (Voltmer & Wasserman, 2014). Though literature on journalistic roles suggests that the watchdog role in particular is to a greater extent part of the normative core of journalistic role orientations in most countries and contexts (Hanitzsch, Hanusch, et al., 2019; Hanitzsch, Vos, et al., 2019), it is also possible that the normative requirements of other journalistic roles in different democratic, political or media systems outweigh those of the critical-monitorial role, resulting in patterns that differ from those discussed here. From this perspective, and from the broader perspective of contributing to de-Westernise and de-centre scientific knowledge and communication scholarship more specifically (Waisbord & Mellado, 2014), future research should investigate similar phenomena in different countries. Importantly, these investigations should go beyond simply applying these normative expectations borne out of Western and liberal democratic experience in ways that uphold the Western perspective and liberal democracy as the norm, and evaluate everything that does not comport to this ideal (even if it might comport to a different yet functional and legitimate set of norms) as divergent (Hanitzsch, 2019; Voltmer & Wasserman, 2014). Instead, future research should recognise and build on the contingent and historically situated character of such normative expectations, assessing media practice and journalistic performance against normative expectations functional to their political and media system. At times when democracy – and liberal democracy in particular – has been seriously challenged, such exercises could lead to new avenues of governance beyond liberal democracy as the dominant form, and instead allow us to imagine what democracy could become (Fenton, 2018; Fenton & Freedman, 2018; Gibson-Graham, 1996).

6.5. Positionality

My identity, my values, my experiences and my positions necessarily inform my choices and my analyses. The values and beliefs that underlie my normative position with regards to the role of news media in democratic public debate have been explicitly addressed in a previous subsection, as these necessarily inform all aspects of this research project, from the queries that prompted the research, to the research questions, research design, case and data selection, to the analyses. Being consistent with an understanding of science as inherently political, and acting consequently, requires that I make such values and positions explicit, and critically reflect on how they inform my work. Accordingly, acknowledging the politics of my research and making myself accountable for them requires that I am transparent, reflexive and critical about how my position and values inform my research.

I was born and raised in Costa Rica. I come from a country, a culture and indeed a family that eats meat. I am neither a vegan nor a vegetarian. During the course of this research project, it became glaringly obvious that my values and beliefs about the food of animal origin,
though necessarily informing my position, had not done so explicitly and intentionally. As part of this research project, I became acquainted with literature on critical animal studies, and with speciesist ideologies that (re)produce systemic oppression of human beings on other non-human animals, with mass animal production being perhaps the worst offender. It became clear that I had not designed this research project to contest such violences, nor had I asked questions intended, for example, to make the discourses underpinning such violences visible. In hindsight, it is clear that there is a missed opportunity with this research project, analytical framework and dataset, as I did not explore how non-human animals are constructed as victims in much greater detail, for instance. These concerns and questions only started coming up as the investigation – and my own learning process – progressed.

I want to add here that the normative expectations that I subject to empirical scrutiny in this dissertation necessarily reflect my own academic, professional and personal background and experiences. For example, in addition to the theoretical and historical rationale behind the choice of focusing on the UK as a case of study, this was also informed by my knowledge of this specific context and familiarity with the language. So, while I considered a comparison with The Netherlands, there was a language barrier that would have made this particular framing analysis impossible.

In the early stages of the research project design, I also considered a comparative analysis with the Costa Rican case. I wanted to use my own country as a case of study in a comparative research design. However, after careful consideration, I decided that it was not feasible to do a comparative analysis and still maintain the level of analytical breadth and depth to support a longitudinal analysis for both cases. Moreover, initial exploratory engagement with Costa Rican news outlets revealed a very limited dataset. I found that few newspapers had reliably digitised and searchable archives, which would make sampling difficult. Additionally, there were extremely few articles about chicken meat production, leaving me with too little data for the analysis and rendering the comparison neither feasible nor meaningful. I raise this point here because, in hindsight, these difficulties that I came across are just some of the obstacles that hinder the de-centring and decolonising of media scholarship – and scientific knowledge more generally. Finding relevant data and literature about the Costa Rican case was difficult, especially when compared with the ease with which I could access data and literature about the United Kingdom.

Throughout the process of this PhD, I had the opportunity to learn from critical social theories and, especially, feminist and decolonial/post-colonial perspectives. In light of this, I must acknowledge not only the limitations of the present dissertation, but also the politics of it. By choosing to focus on the UK, I passed on the opportunity to de-centre media scholarship. I chose to focus on a case that has been thoroughly studied before, particularly with regards to an under-researched case such as Costa Rica. In reflecting on the theoretical framework upon which this dissertation largely builds upon, I must acknowledge that it comports with normative ideals of news media and journalism grounded and formed in Western liberal democracies (Rodny-Gumede, 2017) and reproduces rather than challenges
Western biases pervasive in media and communication scholarship (Hanitzsch, 2019; Stetka & Örnebring, 2013). While I had strong arguments for making the choices that I did, and these resulted in the present dissertation, with all its strengths and limitations, these choices also have broader implications for scholarship. In this sense, my choices further reinforce and reproduce the hegemonic place of Anglo-American, Eurocentric and Global North biases in the academic meta-discourse, scientific knowledge and research more generally.

Future research should thus turn the focus towards new and developing democracies, or even non-democratic contexts, where the normative expectations of news media and journalistic role conceptions, as well as the conditions for media practice, differ (Chuma et al., 2017). Doing so will not only enrich the field and produce valuable insights, but also contribute to challenge the status of the West and liberal democracy as the norm. Expanding our understanding of the role of journalism, its relationship with democracy and the values that underpin it, requires that we look beyond these over-researched (and thus easily accessible) cases, and that we do so intentionally challenging and problematising the Western experience and gaze.

7. Closing remarks

Much has changed since I started this dissertation. That is a truism for any PhD project, as it is a process of becoming. Mostly, though not exclusively, becoming an independent researcher. However, in this particular case, neither the world nor myself are the same as when this project began. Since then, there have continued to be avian influenza outbreaks around the world, time and again sparking concerns about the next global pandemic, and speaking to the continued rise in frequency of emerging infectious diseases of zoonotic origin (Canavan, 2019; Gilbert et al., 2017; Khan et al., 2019; Rohr et al., 2019). In spite of warnings that these might become the next global pandemic, the pandemic we are still living through was not due to avian influenza. This time.

However, there are two changes in particular that are relevant in the context of the present dissertation and that give me cause for hope. The Guardian has changed the way they report on the climate crisis in ways that might appear small, but are quite profound (Carrington, 2019). First, they stopped using the words climate change and global warming, and started systematically talking about climate crisis. More importantly, however, the outlet now has a permanent section that reports on the climate crisis. This section is always in the newspaper, its articles highlighted across their printed editions and their digital platforms. Within this section, news about floods, destruction of the Amazon rainforest, protests that call for divestment from fossil fuel industries, droughts, record-breaking temperatures, and a long etcetera, are all systematically linked together. There is an explicit effort by the outlet to provide that systemic, structural perspective that was strikingly absent in the empirical findings discussed in this dissertation.
Secondly, and perhaps even more relevant given the topic of this project, as part of their coverage of the paper also has a new section about Animals Farmed (van Der Zee, 2018). This section presents the work of an investigative series that examines issues around modern factory farming, food production and animal welfare. Working in collaboration with the Bureau of Investigative Journalism, and thanks to a grant by Open Philantropy, “the series seeks to interrogate global practices and to examine the potential for change” (“About Animals farmed: investigating modern farming around the world,” 2018). These instances are two important steps in a direction that appears to seek to remedy some of the shortcomings highlighted in the empirical chapters of this dissertation, and illustrate ways in which news media and journalism can indeed provide fora for and facilitate public debate that overcome narrow, episodic focus on isolated incidents, and rather take the complex and systemic perspectives called for by such complex societal challenges and wicked problems.

While these initiatives are heartening, they are the actions of single outlets. If they are not taken up by other outlets, these initiative risk becoming the media equivalent of Horatio Alger stories: rags to riches tales that hide the realities of structural violence behind a comforting mythology of meritocracy.
Appendix A: Supplemental material Chapter 2

1. Methods

Our dataset consisted of relevant newspaper articles from seven high circulation, national newspapers in the United Kingdom that were published between 1985 and 2016. To decide which outlets would be included in our study, we looked at print circulation figures for daily outlets as reported by the PressGazette (Ponsford, 2016) with data from the Audit Bureau of Circulations (ABC) for the month of April 2016. We defined high circulation as those daily outlets that report more than 100,000 copies per month. Additionally, we excluded free newspapers (Metro and London Evening Standard), weekly newspapers (The Observer), newspapers that did not circulate during the entire period under study (i), newspapers that generated little relevant data (Daily Star with less than ten relevant articles for the entire period), and newspapers that were unavailable on LexisNexis for piloting (The Sun).

While this is certainly a rich dataset, it is by no means exhaustive. Because we wanted to have complete data for all outlets in order to analyse longitudinal development of the public debate of this particular topic, as well as time and resource limitations inherent to any study, we chose to exclude online-only news delivery platforms. That notwithstanding, all the newspapers included in the dataset did develop digital platforms during the period under study. These decisions certainly have implications for the conclusions we are able to draw from our findings, especially when discussing their relevance for news media more generally. While such decisions certainly impose some limitations on the claims we can make from our study, we are confident that the breadth and wealth of a longitudinal dataset is enough to allow for important conclusions to be drawn.

Most of the data was available through the LexisNexis database (some of the data from earlier dates was recovered from the newspapers archives, when unavailable via LexisNexis). However, to keep the size of the dataset manageable within the scope and resources of this project, we explicitly excluded articles about recipes. Using this search string – “chicken industry” OR “chicken production” OR “chicken consumption” OR “chicken meat” OR “poultry industry” OR “poultry production” OR “poultry consumption” NOT “recipe” –, we recovered over 2650 articles. The following tables summarize the most relevant details of the data collection process (Table 12) and the data curation process using inclusion and exclusion criteria (Table 13).
### TABLE 12 | Data collection information summary.

<table>
<thead>
<tr>
<th>Outlet</th>
<th>Primary archive</th>
<th>Dates</th>
<th>Secondary archive</th>
<th>Dates</th>
<th>Collected on</th>
<th>Articles retrieved</th>
<th>Articles included</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Mirror (or The Daily Mirror, including The Sunday Mirror)</td>
<td>LexisNexis</td>
<td>1995-2016</td>
<td></td>
<td></td>
<td>20-1-2017</td>
<td>183</td>
<td>37</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2544</td>
<td>766</td>
</tr>
</tbody>
</table>

### TABLE 13 | Inclusion and exclusion criteria.

<table>
<thead>
<tr>
<th>Inclusion (A) / exclusion (B – I) criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>A Included (in-depth or problematized treatment of chicken meat production or related issues)</td>
</tr>
<tr>
<td>B Duplicates</td>
</tr>
<tr>
<td>C Article about other poultry (turkey, duck, ostrich, pheasant, etc.)</td>
</tr>
<tr>
<td>D Article about egg or egg production</td>
</tr>
<tr>
<td>E Recipes</td>
</tr>
<tr>
<td>F Chicken mentioned tangentially (e.g. obituary about a scientist that research animal welfare in the broiler industry or an entrepreneur related to a chicken meat production company)</td>
</tr>
<tr>
<td>G Other editions (international or regional editions, secondary editions, etc.)</td>
</tr>
<tr>
<td>H No mention of chicken meat production or irrelevant mention (e.g. chicken used as a metaphor, review of a movie about chickens, television programming of a program or movie about chicken, etc.)</td>
</tr>
<tr>
<td>I Company/business (the focus is on companies that just happen to produce chicken, but the focus is on the business, corporate or financial aspect rather than on the chicken meat production aspect; for example, a company that was bought or sold, fall in stock price of a firm, etc.)</td>
</tr>
</tbody>
</table>
2. Results

As mentioned in the article, from the specific examples found in the news texts during the first stage of the framing analysis, we constructed sixteen categories of issues for the second and deductive stage of the framing analysis. Table 14 presents an overview of these categories of issues and a brief description of the more specific issues included in each category.

<table>
<thead>
<tr>
<th>Issue category</th>
<th>Includes issues related to the following</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adulteration</td>
<td>Adulteration of chicken meat with additives, injection of hydrolysed proteins to boost water retention, food fraud, unfit chicken, etc.</td>
</tr>
<tr>
<td>Alternative agriculture</td>
<td>Organic, free-range, smallholder or backyard production</td>
</tr>
<tr>
<td>Animal welfare</td>
<td>Animal cruelty, animal suffering, fast growth, mortality rates, etc.</td>
</tr>
<tr>
<td>Antibiotics</td>
<td>Therapeutic, preventive, and growth-promoter use of antibiotics, as well as issues of antibiotic resistance</td>
</tr>
<tr>
<td>Avian flu</td>
<td>Avian influenza</td>
</tr>
<tr>
<td>Cheap chicken</td>
<td>Production and consumption of cheap chicken</td>
</tr>
<tr>
<td>Chicken meat industry</td>
<td>Conventional or standard chicken production, factory farming, industry practices, industry standards, domestic industry, and the value chain</td>
</tr>
<tr>
<td>Consumption</td>
<td>Consumption of chicken meat in general, food quality, consumer food safety, consumption behaviour, etc.</td>
</tr>
<tr>
<td>Economics</td>
<td>Food costs, food affordability, food security, supply and demand, transport, etc.</td>
</tr>
<tr>
<td>Foodborne illness</td>
<td>Campylobacter, salmonella, or other illnesses caused by bacteria or toxins in food, as well as food production safety issues (before the point of purchase)</td>
</tr>
<tr>
<td>Global trade</td>
<td>Imports and exports, cheap imports, trade issues, competition from producers abroad, etc.</td>
</tr>
<tr>
<td>Information</td>
<td>Absent, false or misleading information, labelling issues, false claims about a product, etc.</td>
</tr>
<tr>
<td>Policy and regulation</td>
<td>Rules, regulation, legislation, policy, at the domestic, regional or international level</td>
</tr>
<tr>
<td>Work and employment</td>
<td>Illegal or casual labour, migration, worker rights, working conditions, exploitation, wages, etc.</td>
</tr>
<tr>
<td>Food preparation</td>
<td>Food preparation, as well as recipes and other food related issues, etc.</td>
</tr>
<tr>
<td>Other</td>
<td>Other issues not included in previous categories</td>
</tr>
</tbody>
</table>

Co-occurrence analyses at the level of both statements and articles were performed using Atlas.ti. Table 15 below shows the co-occurrence frequencies across issues at the level of articles.
TABLE 15 | Co-occurrence frequencies across issues at the level of articles.

<table>
<thead>
<tr>
<th></th>
<th>Adulteration</th>
<th>Alternative agriculture</th>
<th>Antibiotics</th>
<th>Avian flu</th>
<th>Cheap chicken</th>
<th>Industry</th>
<th>Consumption</th>
<th>Economics</th>
<th>Foodborne illness</th>
<th>Global trade</th>
<th>Information</th>
<th>Policy</th>
<th>Work</th>
<th>Food preparation</th>
<th>Religious</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adulteration</td>
<td>3</td>
<td>4</td>
<td>7</td>
<td>3</td>
<td>2</td>
<td>14</td>
<td>5</td>
<td>0</td>
<td>7</td>
<td>4</td>
<td>6</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Alternative agriculture</td>
<td>9</td>
<td>7</td>
<td>10</td>
<td>6</td>
<td>24</td>
<td>7</td>
<td>2</td>
<td>9</td>
<td>4</td>
<td>1</td>
<td>8</td>
<td>0</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>6</td>
</tr>
<tr>
<td>Animal welfare</td>
<td>14</td>
<td>5</td>
<td>23</td>
<td>68</td>
<td>14</td>
<td>9</td>
<td>12</td>
<td>6</td>
<td>9</td>
<td>12</td>
<td>7</td>
<td>2</td>
<td>1</td>
<td>6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Antibiotics</td>
<td>8</td>
<td>7</td>
<td>26</td>
<td>8</td>
<td>3</td>
<td>26</td>
<td>11</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>1</td>
<td>0</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Avian flu</td>
<td>4</td>
<td>24</td>
<td>8</td>
<td>17</td>
<td>12</td>
<td>19</td>
<td>6</td>
<td>38</td>
<td>2</td>
<td>0</td>
<td>10</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cheap chicken</td>
<td>31</td>
<td>10</td>
<td>7</td>
<td>8</td>
<td>6</td>
<td>3</td>
<td>1</td>
<td>3</td>
<td>4</td>
<td>0</td>
<td>1</td>
<td></td>
<td></td>
<td>0</td>
<td>1</td>
<td>11</td>
</tr>
<tr>
<td>Industry</td>
<td>29</td>
<td>15</td>
<td>43</td>
<td>20</td>
<td>10</td>
<td>15</td>
<td>14</td>
<td>5</td>
<td>0</td>
<td>15</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consumption</td>
<td>3</td>
<td>16</td>
<td>6</td>
<td>5</td>
<td>2</td>
<td>4</td>
<td>3</td>
<td>0</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Economics</td>
<td>9</td>
<td>12</td>
<td>4</td>
<td>8</td>
<td>4</td>
<td>0</td>
<td>1</td>
<td>4</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Foodborne illness</td>
<td>9</td>
<td>9</td>
<td>18</td>
<td>6</td>
<td>11</td>
<td></td>
<td>0</td>
<td>11</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Global trade</td>
<td>7</td>
<td>14</td>
<td>4</td>
<td>2</td>
<td>0</td>
<td>4</td>
<td></td>
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<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Information</td>
<td>4</td>
<td>4</td>
<td>1</td>
<td>1</td>
<td>4</td>
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<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Policy</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Work</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Food preparation</td>
<td>0</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
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<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Religious</td>
<td>0</td>
<td></td>
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</tr>
<tr>
<td>Other</td>
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</tbody>
</table>

We used a similar formula to calculate co-occurrence coefficients at the level of the article. The results of this co-occurrence analysis are set out in Table 16. In contrast to the co-occurrence coefficients at the level of statements presented in Table 2, co-occurrence coefficients for issues across articles are slightly higher. In addition to higher co-occurrence of industry and animal welfare issues already discussed (0.3 at the level of articles), we found higher co-occurrence between cheap chicken as an issue and animal welfare issues, reflected in a co-occurrence coefficient of 0.17. That is to say, that out of the 107 articles that mentioned animal welfare issues, only 23 mention the issue of cheap chicken, which was mentioned in 53 articles. Cheap chicken issues were also mentioned in 31 of the 188 articles that mentioned the chicken meat production industry or its practices as issues.
Finally, the main body of our article explains that our analysis of descriptive data on the longitudinal development of the issues did not provide evidence consistent with a structural shift in the topics that were problematized during the period under study. Analysis of the other framing elements provided a similar picture, as we could find no cumulative trends showing a consistent increase or decrease in the relative frequency of any of the variables analysed (Figures 21 through 25).
FIGURE 21 | Annual difference in mentions per problem definition.
<table>
<thead>
<tr>
<th>Category</th>
<th>Nature</th>
<th>Industry</th>
<th>Economic</th>
<th>Policy</th>
<th>Practical</th>
<th>Information</th>
<th>Global trade</th>
<th>Consumption</th>
<th>Systemic</th>
<th>Other</th>
<th>Deviance</th>
<th>Accident</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>-1</td>
<td>-0.5</td>
<td>0</td>
<td>0.5</td>
<td>1</td>
<td>-1</td>
<td>-0.5</td>
<td>0</td>
<td>-1</td>
<td>-0.5</td>
<td>0</td>
<td>-1</td>
</tr>
<tr>
<td></td>
<td>-1</td>
<td>-0.5</td>
<td>0</td>
<td>0.5</td>
<td>1</td>
<td>-1</td>
<td>-0.5</td>
<td>0</td>
<td>-1</td>
<td>-0.5</td>
<td>0</td>
<td>-1</td>
</tr>
<tr>
<td></td>
<td>-1</td>
<td>-0.5</td>
<td>0</td>
<td>0.5</td>
<td>1</td>
<td>-1</td>
<td>-0.5</td>
<td>0</td>
<td>-1</td>
<td>-0.5</td>
<td>0</td>
<td>-1</td>
</tr>
<tr>
<td></td>
<td>-1</td>
<td>-0.5</td>
<td>0</td>
<td>0.5</td>
<td>1</td>
<td>-1</td>
<td>-0.5</td>
<td>0</td>
<td>-1</td>
<td>-0.5</td>
<td>0</td>
<td>-1</td>
</tr>
<tr>
<td></td>
<td>-1</td>
<td>-0.5</td>
<td>0</td>
<td>0.5</td>
<td>1</td>
<td>-1</td>
<td>-0.5</td>
<td>0</td>
<td>-1</td>
<td>-0.5</td>
<td>0</td>
<td>-1</td>
</tr>
</tbody>
</table>

**FIGURE 22 | Annual difference in mentions per cause.**
FIGURE 23 | Annual difference in mentions per solution.
FIGURE 24 | Annual difference in mentions per action for solution.
FIGURE 25 | Annual difference in mentions per moral value.
Appendix B: Supplemental material Chapter 3

1. Materials and methods

Table 17 presents an overview of the final dataset included in the present study, showing the number of articles included from each outlet by year.

<table>
<thead>
<tr>
<th>Table 17</th>
<th>Articles included in dataset by year and outlet.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2003</td>
</tr>
<tr>
<td>Daily Express</td>
<td>0</td>
</tr>
<tr>
<td>Financial Times</td>
<td>0</td>
</tr>
<tr>
<td>The Guardian</td>
<td>0</td>
</tr>
<tr>
<td>Daily Mail</td>
<td>1</td>
</tr>
<tr>
<td>The Mirror</td>
<td>0</td>
</tr>
<tr>
<td>Daily Telegraph</td>
<td>0</td>
</tr>
<tr>
<td>The Times</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>2</td>
</tr>
</tbody>
</table>

We chose to focus on avian influenza, first, because it was a clear outlier in the dataset for the overarching research project, in the sense that it generated by far the most coverage out of all the topics found in our dataset. Out of the 766 articles included in the complete dataset, 275 (36%) mentioned avian influenza. At the level of the statement, we coded 2684 statements that mentioned avian influenza, which made up 37% of the 7227 statements coded for the entire research project. By comparison, the next issue that generated the most coverage was foodborne illness, which appeared in 996 statements and 162 articles, which represent 14% and 21% of the total dataset, respectively. Furthermore, because the high volume of coverage of avian influenza found in our dataset responds to the outbreak of the highly pathogenic H5N1 strand of avian flu between 2003 and 2008, it was possible to construct a data subset that allowed for the analysis of yearly variation in coverage of this issue, in a manner that supported the testing of our expectations regarding the extent to which newspaper coverage supports the sort of public debate required by wicked problems such as avian influenza. Moreover, focusing on the most extensively covered issue by media speakers and disaggregating the data by outlet allowed us to control for issues, speakers and outlets in a manner that put previous findings of diffusion to a more stringent test to discard them as an artefact of the methodological design due to the multiplicity of issues, speakers and outlets present in the complete dataset, which was analysed in a previous publication (Garnier et al., 2020).

As explained in the main body of the article, for the purpose of this study, we focused on coverage of the issue of avian influenza and how it was framed by media speakers. However, our dataset included a great variety of other speakers. Table 18 details the categories of all
Appendix

actors included as speakers in the coding handbook at multiple levels, and applied during the deductive content analysis of the dataset. The actors and categories included in this table are also used for the identity framing element variables of victim, villain and solver, with the addition of animals, nature/the environment, and the system, where applicable. Moreover, we coded for the identity of the speaker making the statement whether it was a direct or indirect statement. Direct statements refer to an explicit utterance by a speaker, as in this example: “Shoppers in the UK are good at assessing the real risk when faced with hype. This is not a food safety issue. People can’t catch avian flu,” said Peter Bradnock, chief executive of the British Poultry Council” (Arnold et al., 2005). Indirect statements refer to statements attributed to a speaker by someone else – which, in our dataset, is usually the journalist – as in the following quote: “The British Poultry Council said that, unless quickly contained, an outbreak of bird flu would be ‘very damaging’ to the industry which is responsible for the livelihoods of 50,000 workers” (Macrae, 2005). Both of these statements were coded as statements by an industry body as speaker (the British Poultry Council).

TABLE 18 | Actor categorisation.

<table>
<thead>
<tr>
<th>Group</th>
<th>Subgroup</th>
<th>Actor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Farm</td>
<td></td>
<td>Farm/farmer</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Transporter</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Agriculture general</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Alternative farmer/producer</td>
</tr>
<tr>
<td></td>
<td>Production chain (upstream and downstream, outside farm)</td>
<td>Breeder</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Hatcher</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Supplier</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Processor</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Slaughterhouse</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Wholesaler</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Food industry</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Company general</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Shareholder</td>
</tr>
<tr>
<td>Business</td>
<td>Chicken meat industry general</td>
<td>Industry</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Organic industry</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Free-range industry</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Industry body</td>
</tr>
<tr>
<td></td>
<td>Business association</td>
<td>National Farmers’ Union</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Other business association</td>
</tr>
<tr>
<td></td>
<td>Other business</td>
<td>Other business</td>
</tr>
<tr>
<td>Worker</td>
<td></td>
<td>Worker</td>
</tr>
<tr>
<td></td>
<td>Retailer</td>
<td>Supermarket</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Restaurant</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Retailer general</td>
</tr>
</tbody>
</table>

176
From all the specific issues mentioned in the news texts, we constructed a list of sixteen categories of issues being problematised. Table 19 lists the issue categories included in the coding handbook, along with the brief description of what each category includes. In constructing the subset of data used for this study, we only included those articles that mention the issue of avian influenza. However, we did not exclude other issues because we were also interested in examining the extent to which newspaper coverage of avian

<table>
<thead>
<tr>
<th>Group</th>
<th>Subgroup</th>
<th>Actor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Executive</td>
<td>Local authorities</td>
<td>Government general</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Prime Minister</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Ministries</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Department of Environment, Food and Rural Affairs</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Food Standards Agency</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Veterinary Medicines Directorate</td>
</tr>
<tr>
<td>Legislative</td>
<td>Parliament</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Shadow Cabinet/Minister</td>
<td></td>
</tr>
<tr>
<td>Judicial</td>
<td>Courts</td>
<td></td>
</tr>
<tr>
<td>Inter- and supranational</td>
<td>European authorities</td>
<td></td>
</tr>
<tr>
<td></td>
<td>International organizations</td>
<td></td>
</tr>
<tr>
<td>Consumers</td>
<td>Consumer</td>
<td></td>
</tr>
<tr>
<td></td>
<td>NGO Animal welfare</td>
<td></td>
</tr>
<tr>
<td></td>
<td>NGO Consumer</td>
<td></td>
</tr>
<tr>
<td></td>
<td>NGO Environment</td>
<td></td>
</tr>
<tr>
<td></td>
<td>NGO Other</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Trade union</td>
<td>Unite</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Other union</td>
</tr>
<tr>
<td>Civil society</td>
<td>Activist</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Celebrity</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Expert</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Professional association</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Community</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Religious organisation/group</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Other civil</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Society</td>
<td>The public</td>
</tr>
<tr>
<td></td>
<td></td>
<td>You/Us</td>
</tr>
<tr>
<td></td>
<td>Country</td>
<td>Country</td>
</tr>
<tr>
<td>Media</td>
<td>Journalist</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Newspaper</td>
<td></td>
</tr>
<tr>
<td></td>
<td>TV broadcaster</td>
<td></td>
</tr>
<tr>
<td></td>
<td>New media outlet</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Other media outlet</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Media general</td>
<td></td>
</tr>
<tr>
<td>Science/Scientific community</td>
<td>Science/Scientific community</td>
<td></td>
</tr>
<tr>
<td>Source</td>
<td>Source</td>
<td></td>
</tr>
<tr>
<td>Critics</td>
<td>Critic</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>Other</td>
<td></td>
</tr>
</tbody>
</table>
influenza also mentions other related issues, thus reflecting the entanglements that characterise wicked problems and which are found in the scientific literature available at the time.

**TABLE 19 | Issue categorisation.**

<table>
<thead>
<tr>
<th>Category</th>
<th>Specific issues included</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adulteration</td>
<td>Includes adulteration, additives, foreign proteins, food fraud, content or process tampering, and unfit chicken</td>
</tr>
<tr>
<td>Alternative agriculture</td>
<td>Includes organic, free-range, smallholder and backyard production</td>
</tr>
<tr>
<td>Animal welfare</td>
<td>Includes animal cruelty, animal suffering, fast growth, meat-eating, mortality rates, where the focus is on animal welfare</td>
</tr>
<tr>
<td>Antibiotics</td>
<td>Includes both therapeutic and growth-promoter use of antibiotics</td>
</tr>
<tr>
<td>Avian flu</td>
<td>Includes bird flu</td>
</tr>
<tr>
<td>Cheap chicken</td>
<td>Includes references to cheap domestic and imported meat</td>
</tr>
<tr>
<td>Chicken meat industry</td>
<td>Includes conventional production, factory farming, industry practice, industry standards, domestic industry, and the value chain</td>
</tr>
<tr>
<td>Consumption</td>
<td>Includes food quality, consumer food safety, consumption behaviour, etc.</td>
</tr>
<tr>
<td>Economics</td>
<td>Includes production costs, food affordability, food security, supply and demand, and transport</td>
</tr>
<tr>
<td>Foodborne illness</td>
<td>Includes Campylobacter, Salmonella, Listeria, other illnesses caused by pathogens or toxins in food, production food safety, etc.</td>
</tr>
<tr>
<td>Global trade</td>
<td>Includes imports and exports, cheap imports, trade issues, competition from producers abroad, etc.</td>
</tr>
<tr>
<td>Information</td>
<td>Includes absent, false or misleading information, labelling issues, false claims about the product, etc.</td>
</tr>
<tr>
<td>Policy and regulation</td>
<td>Includes rules, regulation, legislation, policy, at both domestic, international and EU level</td>
</tr>
<tr>
<td>Work and employment</td>
<td>Includes illegal or casual labour, migration, worker rights, working conditions, wages, etc.</td>
</tr>
<tr>
<td>Food preparation</td>
<td>Includes recipes, food preparation, food-related, etc.</td>
</tr>
<tr>
<td>Religious slaughter</td>
<td>Includes religious slaughter, halal or kosher chicken meat, etc.</td>
</tr>
<tr>
<td>Other</td>
<td>Other topic not previously included</td>
</tr>
<tr>
<td>NA/NR</td>
<td>Does not apply/Non recognizable</td>
</tr>
</tbody>
</table>

In addition to the issue, the coding handbook includes eight other framing elements which can be understood as variables: problem definition, victim, cause, villain, solution, action for solution, solver, and moral judgment. The values refer to the different categories for each of these framing elements. So, for example, the framing element that identifies the solution endorsed for a problem has values that include alternative production methods (free-range, organic, etc.), food safety, biosecurity measures, improvement to industry practice, transformation of the production system, informed consumer, domestic production, changes in our relation to food, dietary changes, and others. Each value has a corresponding code applied by the coders. Furthermore, some of these values can be aggregated into subgroups and groups, such as those that refer to the framing of the identity of stakeholders as victims, villains or solvers, as illustrated in Table 8.
Through these framing element variables, we could unpack how each of these issues was defined as problematic in different ways. The combination of the issue variable with the problem definition variable captures how each issue can be defined as a problem in different terms. The victim variable further identifies the actor who is identified as suffering the consequences of the problem. To complicate the matter, some of these issues can also be defined as the cause of another problem, or as the solution to yet another problem, exemplifying the kinds of entanglements and feedback loops characteristic of wicked problems. The article explains how avian flu is subject to multiple problem definitions in a manner that speaks to the lack of a definitive problem formulation characteristic of wicked problems. Another example from the issues that appear in our dataset and are also subject to different problematisations is the use of antibiotics in chicken meat production. In our dataset, we found statements that construct the use of antibiotics as a human and/or non-human animal health problem because of its potential role in the rise of antimicrobial resistance. From this perspective, use of certain types of antibiotics in chicken meat production compromises the effectiveness of antibiotics used in both human and non-human animal medicine. Other actors constructed the use of antibiotics as growth promoters as an animal welfare problem. The use of antibiotics in chicken feed to make its digestion more efficient results in a rapid weight gain, which puts the chicken at risk of a host of painful and even life-threatening conditions. However, we also found actors who identified the use of antibiotics as the solution to both animal health and animal welfare problems, particularly with regards to therapeutic use to treat disease in flocks. Yet others mentioned the use of antibiotics as a solution to human health problems, as they can reduce the incidence of pathogens like Salmonella and Campylobacter in chickens.

Another issue than was defined as problematic in different ways is the adulteration of chicken meat. We found that the practice of injecting chicken meat with hydrolysed proteins was sometimes defined as an information problem; from this perspective, the problem was that the additional water content injected into the chicken meat was not declared on the label, and thus the consumer was unaware of the water content of the meat. We also found that the practice was problematised in terms of human health, as some claimed that because these proteins had been extracted from cow and pig meat, bones, blood, etc., there was a theoretical risk of BSE or similar types of diseases entering the human food chain. Furthermore, the use of beef and pork proteins injected into chicken meat was also defined as a problem because some religions forbid the consumption of these animals.

With regards now to the operationalisation of systemic contestation, the main body of the article explains that we found systemic references for four of the framing elements included in the coding scheme; and illustrated this using the example of systemic case identification. Similarly, systemic references for the identification of a villain include attributions of blame to the system. As for the solutions, systemic references identify the transformation of the production system being endorsed as the solution to the problem,
and they include references to a new or different food production system, mass animal production system, food processing system, agricultural production system, etc. Finally, systemic references with regards to the actions necessary to bring about the solution refer to calls for transformative change at the systemic level as necessary to solve the problem, including references to initiatives to changing the production system, ending mass animal production, changing the agricultural production system, changing to a less intensive production system, etc.

2. Results and examples

As mentioned in the main body of the manuscript, we found that the majority of statements that problematise avian influenza do not include references to other issues related to chicken meat production. Moreover, we found that most of the other issues that were mentioned alongside problematisations of avian influenza, especially in the case of media speakers, referred to global trade or policy issues directly related or stemming from the avian influenza outbreak. For example, most statements problematising global trade do so in terms of potentially diseased meat imported from affected areas: “As birds started dying, the cover-up began Britons may have been eating meat from infected areas for months” (Uhlig, 2004). Policy issues, on the other hand, usually relate to policy measures to deal with the outbreak, as in the following quote: “Dutch order on avian flu may breach EU rules” (Rennie, 2005). Few statements problematised both avian influenza and factory farming practices of the industry, as in the following example from The Guardian: “Incubators for disease: Avian flu and factory farms are much more closely linked than is often thought” (Farndon, 2007).

Table 20 summarizes the co-occurrence frequency counts between avian influenza and every other issue that was coded for. Overall, the frequencies are low. Furthermore, co-occurrence coefficients were 0.00 for all but one pair of issues; only the co-occurrence of avian influenza and policy issues had a co-occurrence coefficient of 0.01, as calculated by Atlas.ti.

With regards to systemic contestation, the only one of the 541 statements about avian influenza in the Financial Times that mentions a systemic action as necessary to bring about the solution to avian flu reads: “International health officials fear the virus may mutate - or recombine with a human flu virus - into a form easily transmitted from person to person, triggering a pandemic that, if not controlled, could kill millions of people. To prevent this, UN agricultural experts are calling for an intensive, and expensive, effort to overhaul traditional farming practices in countries such as Vietnam, where millions of small-scale farmers raise poultry and animals in unsanitary conditions close to their homes. Traditional live bird markets and contact between different bird species are also believed to help the disease spread” (Kazmin, 2005).
TABLE 20 | Co-occurrence frequency counts between avian influenza and another issue, by speaker category.

<table>
<thead>
<tr>
<th>Issue</th>
<th>Media speakers</th>
<th>Non-media speakers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adulteration</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Alternative agriculture</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>Animal welfare</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Antibiotics</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Cheap chicken</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Industry</td>
<td>8</td>
<td>7</td>
</tr>
<tr>
<td>Consumption</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Economics</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Foodborne illness</td>
<td>3</td>
<td>10</td>
</tr>
<tr>
<td>Global trade</td>
<td>13</td>
<td>18</td>
</tr>
<tr>
<td>Information</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Policy</td>
<td>43</td>
<td>19</td>
</tr>
<tr>
<td>Work</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Other</td>
<td>3</td>
<td>2</td>
</tr>
</tbody>
</table>

The one statement about bird flu in The Times that does mention the system as the villain responsible for causing avian flu is referring to a book called Planet Chicken, by Hattie Ellis: “Ellis spares us none of the detail of the factory-farming system that churns out 96 per cent of British chickens (...) Graphically illustrating the parasites and diseases that industrial production has unleashed on birds – as well as on us, in the form of salmonella, virulent strands of food poisoning and, more recently, bird flu – she explains how this has led to a reliance on vaccines, hormones and protein feeds to remedy them” [emphasis added] (Shepard, 2007).

Examples of such systemic causes are headlines such as “Why factory farms and mass trade make for a world where disease travels far and fast: Experts fear flu virus may spread to other countries and mutate, threatening a human pandemic” (Lawrence, 2004) or “But are they [wild birds] really to blame? Or is the disease not only a direct result of intensive farming - but actually being spread by the industry?” (Blythman, 2006).

An example of such structural problematisation can be found in the following statement from The Daily Mail, referring to the culling of birds due to the outbreak of avian influenza in a Bernard Matthews farm, linking animal welfare issues and avian influenza as a human health problem to the industrialisation of agriculture in factory farming: “it both reveals and arises from the way we have industrialised our agriculture to provide us with cheap food. (...) More than half of all the world’s pork and poultry, and 43 per cent of its beef, is raised on factory farms. This is not just an issue of animal welfare. It has a direct link to human health risks. The practice seems to have played an important, if little-known, role in the spread of the bird flu which has arrived in Britain” (Lean, 2007).
The following text provides an example of a statement by a media speaker – in this case, journalist Felicity Lawrence, consumer affairs correspondent for The Guardian – that does mention avian influenza together with other issues. Specifically, aside from a problematisation of avian influenza, the speaker also mentions the issue of global trade, framing it as an economic problem for the British poultry industry caused by the cheaper imports from countries with lower labour costs like Thailand and Brazil. In another statement, the same journalist also problematises avian influenza, European Union level policies in response to an avian flu outbreak in the Netherlands, and the presence of banned antibiotics in imported chicken.

The latest animal health crisis to arise after avian flu claimed its first human life in Thailand forms part of a pattern that has gone along with industrialisation and mass transportation of livestock. Animal disease now travels far and fast in types of farming and food distribution that make it very hard to control.

Thailand exports large quantities of chicken to the UK and other countries in Europe. According to figures from the Department for the Environment, Food and Rural Affairs, the UK imported 36,649 tonnes of poultry meat from Thailand in the first 10 months of last year, a 50% increase on the previous year.

The outbreak has raised two separate concerns: that the flu might spread to flocks in other countries, resulting in large-scale losses; and that it might have implications for human health. If the virus mutates it might be possible for humans catching it to pass it on to other humans, threatening a flu pandemic.

In the age of global trade, retailers and manufacturers source their raw materials where they are cheapest. The British poultry industry has struggled to compete with prices from south-east Asia and Brazil where labour costs are much lower.

Thailand and Brazil have seen the rapid industrialisation of livestock in the last few years as they have pushed for export-led growth. Many UK producers meanwhile are barely able to cover the cost of production, as prices have fallen in supermarkets.

The distances involved mean that little fresh meat on sale in the UK is sourced from Thailand, but poultry for ready meals and other processed foods such as nuggets is increasingly being bought frozen on the global market. (…)

Although there were tight restrictions on the movement of live animals, eggs and chicks during the Dutch [avian influenza] crisis, the EU did not ban exports of meat from Holland. The ban on Thai meat appears to be more of a warning to the Thais to get their house in order than a response to risk to consumers. A new case of chicken from Thailand testing positive for nitrofurans, antibiotics banned in the EU because they are thought to be cancer-causing, came to light recently. [emphasis added] (Lawrence, 2004)
This text is illustrative of newspaper coverage that does speak to an understanding of avian influenza as a wicked problem. First, it demonstrates that it is possible for a single media speaker to highlight how a wicked problem is subject to multiple definitions; Lawrence defines avian influenza as an animal health problem, an economic problem, and a human health problem in ways that are not mutually exclusive. Moreover, global trade and mass transportation of livestock are also linked to avian influenza, exemplifying the kinds of entanglements that characterise wicked problems. The statements above also illustrate systemic contestation, as the journalist identifies industrialisation and mass transportation of livestock as causes of the problem that is avian influenza. Notably, the identification of industrialisation as systemic cause is linked both to the issue of avian influenza and to the issue of global trade, exemplifying the operationalisation of structural problematisation used in this study as a systemic cause linked to more than one issue.
Appendix C: Supplemental material Chapter 4

Table 21 and Table 22 present the frequency counts of media and non-media speaker statements by outlet that mention systemic elements.

**TABLE 21 | Frequency counts of media speaker statements by outlet.**

<table>
<thead>
<tr>
<th>Outlet</th>
<th>Problematise industry</th>
<th>Systemic causal interpretation</th>
<th>Industry as cause</th>
<th>Systemic solution</th>
<th>Systemic action</th>
<th>Systemic attribution of responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Guardian</td>
<td>228</td>
<td>37</td>
<td>114</td>
<td>2</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>Daily Mail</td>
<td>100</td>
<td>32</td>
<td>75</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>The Times</td>
<td>94</td>
<td>24</td>
<td>59</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Daily Telegraph</td>
<td>58</td>
<td>10</td>
<td>33</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Financial Times</td>
<td>24</td>
<td>8</td>
<td>13</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Daily Express</td>
<td>23</td>
<td>1</td>
<td>12</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>The Mirror</td>
<td>19</td>
<td>2</td>
<td>12</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

**TABLE 22 | Frequency counts of non-media speaker statements by outlet.**

<table>
<thead>
<tr>
<th>Outlet</th>
<th>Problematise industry</th>
<th>Systemic causal interpretation</th>
<th>Industry as cause</th>
<th>Systemic solution</th>
<th>Systemic action</th>
<th>Systemic attribution of responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Guardian</td>
<td>568</td>
<td>77</td>
<td>268</td>
<td>8</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>Daily Mail</td>
<td>240</td>
<td>52</td>
<td>172</td>
<td>2</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>The Times</td>
<td>214</td>
<td>35</td>
<td>138</td>
<td>3</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Daily Telegraph</td>
<td>140</td>
<td>25</td>
<td>89</td>
<td>2</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Financial Times</td>
<td>78</td>
<td>18</td>
<td>42</td>
<td>3</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Daily Express</td>
<td>55</td>
<td>14</td>
<td>35</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>The Mirror</td>
<td>37</td>
<td>4</td>
<td>23</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
1. **Background**

Human and non-human health risks for chicken meat production center around emerging zoonotic infectious diseases such as foodborne illness (Meldrum & Wilson, 2007), human campylobacteriosis (Strachan & Forbes, 2010), avian influenza (Canavan, 2019; Leibler et al., 2009; Rowe et al., 2008) and the development of antimicrobial resistance due to (ab)use of antibiotics (Morris et al., 2016; Waltner-Toews, 2017). In terms of individual lives, chicken meat production dwarves all other land animal production industries, with almost 69 billion chickens slaughtered around the world in 2018 alone (FAO, 2020a).

Food production in Britain has become a highly charged issue with much at stake (Ingram et al., 2013). Additionally, mass animal production industries have been increasingly scrutinized and contested for their environmental impact (Leinonen et al., 2012), including the destruction of biodiversity and contribution to anthropogenic climate change (Almiron & Zoppeddu, 2014; Roni A Neff et al., 2009). Furthermore, the increasing incidence of food-related zoonoses such as bovine spongiform encephalopathy (BSE or mad-cow disease), avian influenza, or swine flu, and foodborne illness caused by pathogens such as Salmonella, Campylobacter, etc. have also sparked discussions about food safety in mass animal production (Cogan & Humphrey, 2003; Gul et al., 2015; Humphrey et al., 2007; Wang & de Beville, 2017).

Chicken meat production in the United Kingdom has been steadily increasing, from 465 million chickens slaughtered in 1985, to 1,137 million in 2018 (FAO, 2020b), with an average of roughly 21 million chickens and hens slaughtered every week (DEFRA, 2020).

2. **Materials and methods**

2.1 **Data collection and curation**

Our dataset consisted of relevant newspaper articles from seven high circulation, national newspapers in the United Kingdom that were published between 1985 (just before the Wapping revolution (McNair, 2003)) and 2016 (the year immediately prior to data collection). Data prior to 1985 was not systematically archived in LexisNexis for several of the outlets included. To decide which outlets to include in our study, we referred to print circulation figures for daily outlets as reported by the PressGazette (Ponsford, 2016) with data from the Audit Bureau of Circulations (ABC) for the month of April 2016. We defined high circulation as those daily outlets that report more than 100,000 copies per month. Moreover, we excluded free newspapers (Metro and London Evening Standard), weekly newspapers...
(The Observer), newspapers that did not circulate during the entire period under study (i), newspapers that generated little relevant data (Daily Star with less than ten relevant articles for the entire period), and newspapers that were not available on LexisNexis for piloting (The Sun).

Our study therefore included output from Daily Mail, The (Daily) Mirror, The Daily Telegraph, The (Daily) Express, The Times, Financial Times, and The Guardian. These outlets have different editorial perspectives, different formats, and cater to a wide variety of audiences. The diversity of outlets included in our dataset responds to our effort to minimize the bias of each individual paper in the overall sample, while maintaining the possibility of analyzing the data by outlet, as in the present publication.

We designed, piloted and refined the final search string used to retrieve articles to recall the highest number of articles related to chicken meat production (excluding recipes, for practical reasons) using LexisNexis. The search string used to retrieve relevant articles was: “chicken industry” OR “chicken production” OR “chicken consumption” OR “chicken meat” OR “poultry industry” OR “poultry production” OR “poultry consumption” NOT “recipe”.

Articles were retrieved between January 20th and January 23rd, 2017. Most of the data used in the present study was available through the LexisNexis database. In those cases in which data was unavailable via LexisNexis, as in some of the earlier dates, the data was retrieved from the outlet’s private archives. The search string recovered over 2650 articles. This initial dataset was further refined through a set of inclusion and exclusion criteria, such that our initial result of 2650 articles was reduced to a dataset of 766 articles. The following tables summarize the most relevant details of the data collection process (Table 23) and the data curation process using inclusion and exclusion criteria (Table 24).
### TABLE 23 | Data collection information summary.

<table>
<thead>
<tr>
<th>Outlet</th>
<th>Primary archive</th>
<th>Dates</th>
<th>Secondary archive</th>
<th>Dates</th>
<th>Collected on</th>
<th>Articles retrieved</th>
<th>Articles included</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Mirror (or The Daily Mirror, including The Sunday Mirror)</td>
<td>LexisNexis</td>
<td>1999-2016</td>
<td></td>
<td></td>
<td>20-1-2017</td>
<td>183</td>
<td>37</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2544</td>
<td>766</td>
</tr>
</tbody>
</table>

### TABLE 24 | Inclusion and exclusion criteria.

<table>
<thead>
<tr>
<th>Inclusion (A) / exclusion (B – I) criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A</strong> Included (in-depth or problematized treatment of chicken meat production or related issues)</td>
</tr>
<tr>
<td><strong>B</strong> Duplicates</td>
</tr>
<tr>
<td><strong>C</strong> Article about other poultry (turkey, duck, ostrich, pheasant, etc.)</td>
</tr>
<tr>
<td><strong>D</strong> Article about egg or egg production</td>
</tr>
<tr>
<td><strong>E</strong> Recipes</td>
</tr>
<tr>
<td><strong>F</strong> Chicken mentioned tangentially (e.g. obituary about a scientist that research animal welfare in the broiler industry or an entrepreneur related to a chicken meat production company)</td>
</tr>
<tr>
<td><strong>G</strong> Other editions (international or regional editions, secondary editions, etc.)</td>
</tr>
<tr>
<td><strong>H</strong> No mention of chicken meat production or irrelevant mention (e.g. chicken used as a metaphor, review of a movie about chickens, television programming of a program or movie about chicken, etc.)</td>
</tr>
<tr>
<td><strong>I</strong> Company/business (the focus is on companies that just happen to produce chicken, but the focus is on the business, corporate or financial aspect rather than on the chicken meat production aspect; for example, a company that was bought or sold, fall in stock price of a firm, etc.)</td>
</tr>
</tbody>
</table>
Though the final set of articles included certainly constitutes a rich and relevant dataset, it is by no means exhaustive. Because we wanted to have complete data for all outlets in order to analyze longitudinal development of the public debate of this particular topic (Garnier et al., 2020), and given the time and resource limitations inherent to this and any study, we chose to exclude online-only news delivery platforms. That being said, all the newspapers included in the dataset did develop digital platforms during the period under study. Moreover, legacy media still dominate the most visited news websites, and feature prominently on sites like Google and Facebook (Curran, 2019). However, it is certainly a limitation of the present study that we only included some of the national circulation outlets, and focused on newspapers, for reasons discussed in the manuscript. It is possible that coverage differs in other sources, such as television news or other digital native news media outlets, for example. It would be immensely valuable to apply this analytical framework to other sources and platforms of news media, and especially in other geographical contexts. Though the methodological design of this research project certainly imposes limitations on the conclusions we can draw from our findings, particularly when discussing their relevance for news media more generally, we are confident that the breadth and wealth of such a longitudinal dataset is enough to allow for important conclusions to be drawn.

2.2 Inter-coder reliability

Inter-coder reliability (ICR) was calculated using Atlas.ti. To this end, two independent coders applied the coding handbook to a randomly selected subsample of 80 articles. Despite this subsample accounting for 5% of the total dataset, the multiple specific issues that came up in the dataset, each subject to different framings as captured by nine framing element variables and their respective values, resulted in almost 300 individual codes. The size and complexity of our coding scheme, coupled with the length and breadth of our dataset, resulted in some of these codes not occurring in the subsample used for inter-coder agreement tests, impeding computation of their ICR values. Therefore, ICR scores for individual codes vary from 0 to 1. Under these circumstances, additional measures were taken to increase internal validity of our results under these circumstances. The first author coded over 80% of the dataset, and reviewed the coding done by a second coder. Furthermore, in case of doubt, we erred on the side of caution, meaning that we only coded what was explicitly mentioned in the text. We used Atlas.ti’s built in Krippendorff’s c-Alpha-binary agreement coefficient analysis tool to calculate ICR, which yielded a score of 0.917 for those codes used in the ICR subsample. This unexpectedly high inter-coder agreement result is partly a result of the way in which Atlas.ti calculates inter-coder agreement, which only takes into account those codes that were applied, and excludes those that were not applied.

2.3 Actor categorisation

As explained in Chapter 5, for the purpose of this study, we focused mainly on coverage of the chicken meat production and how it was framed by media speakers. However, our
dataset included a great variety of other speakers. Table 25 presents an overview of the categories of all actors included as speakers in the coding handbook at multiple levels, as they were applied during the deductive content analysis of the dataset. The actors and categories included in this table also guide the analysis of attribution of responsibility, as they were also used for the identity framing element variables of actors identified as victim, actors identified as responsible for causing the problem (villain) and actors identified as responsible for bringing about the solution (solver), with the addition of animals, nature/the environment, and the system, where applicable.

**TABLE 25 | Actor categorisation.**

<table>
<thead>
<tr>
<th>Group</th>
<th>Subgroup</th>
<th>Actor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Farm</td>
<td></td>
<td>Farm/farmer</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Transporter</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Agriculture general</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Alternative farmer/producer</td>
</tr>
<tr>
<td>Business</td>
<td>Production chain (upstream and downstream, outside farm)</td>
<td>Breeder</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Hatcher</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Supplier</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Processor</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Slaughterhouse</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Wholesaler</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Food industry</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Company general</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Shareholder</td>
</tr>
<tr>
<td></td>
<td>Chicken meat industry general</td>
<td>Industry</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Organic industry</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Free-range industry</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Industry body</td>
</tr>
<tr>
<td></td>
<td>Business association</td>
<td>National Farmers’ Union</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Other business association</td>
</tr>
<tr>
<td>Worker</td>
<td></td>
<td>Worker</td>
</tr>
<tr>
<td>Retailer</td>
<td></td>
<td>Supermarket</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Restaurant</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Retailer general</td>
</tr>
<tr>
<td>Executive</td>
<td></td>
<td>Local authorities</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Government general</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Prime Minister</td>
</tr>
<tr>
<td></td>
<td>Ministries</td>
<td></td>
</tr>
<tr>
<td>Government</td>
<td></td>
<td>Department of Environment, Food and Rural Affairs</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Food Standards Agency</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Veterinary Medicines Directorate</td>
</tr>
<tr>
<td>Legislative</td>
<td></td>
<td>Parliament</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Shadow Cabinet/Minister</td>
</tr>
<tr>
<td>Judicial</td>
<td></td>
<td>Courts</td>
</tr>
<tr>
<td>Inter- and supranational</td>
<td></td>
<td>European authorities</td>
</tr>
<tr>
<td></td>
<td></td>
<td>International organizations</td>
</tr>
<tr>
<td>Consumers</td>
<td></td>
<td>Consumer</td>
</tr>
</tbody>
</table>
The identity of these actors, whether in the capacity of speaker or as victim, villain or problem solver, was identified by several means. First and foremost, we used the explicit identification in the text as the primary way of coding for the identity of an actor. In the case of non-media speakers, the most frequent explicit reference to the identity comes from the journalist introducing or referring to a speaker. Thus, for example, statements attributed to workers include the following: “Furious workers at the company yesterday accused bosses of keeping them in the dark,” and “The Portuguese worker said he had not been provided with any information, adding: “I am scared because of the flu and most importantly because we know the factory is very important. A lot of people work there and some are scared to leave their jobs. Tomorrow I am going to go to work.” Experts were most often also identified or referenced as such by journalists, as in these examples: “Although CJD emerged from beef, experts say there is evidence of related diseases affecting other meat-producing animals if they are forced into cannibalism,” “Experts say worker abuse pervades the poultry industry, but the

31 Unless otherwise stated, emphasis is added by the authors of the present publication.
33 “Could we face the return of CJD?” The Daily Mail. November 01, 2011.
monitoring situation is likely to get worse under Donald Trump’s administration. Experts insist that scarcely a line of these regulations will bring us safer eggs or meat. But so great will be the cost of complying with them that, as one put it last week, “within two or three years, it is virtually certain they will put upwards of 50,000 people out of work.”

Another way of identifying speakers was through self-identification in the case of letters to the outlet. To illustrate, Martin Potter wrote a letter to The Daily Telegraph, published on June 2nd, 2003, and in which he is identified as a member of the Royal Society for the Prevention of Cruelty to Animals (RSPCA), and is thus coded as an animal welfare NGO speaker. Another way of identifying speakers in through the accompanying information in the case of opinion articles whose author is not affiliated with the outlet’s editorial board. For example, the final line of an opinion article published in The Guardian’s Features page identifies the author, Patrick Holden, as the chair of the Soil Association, an environmental NGO, and thus the speaker is coded as such.

In the case of media speakers, the identity of the different actors was identified through a variety of ways. Similar to non-media speakers, reference by the journalist to other media outlets was also the most frequent way of identifying TV broadcasters, new media and other media. Examples include statements such as, “AN antibiotic used to fight infection in chickens is said to be drastically reducing human resistance to food poisoning. In extreme cases, it could even cause death, a TV documentary will claim tonight,” “Twitter users responding to a question about the contribution KFC has made to British life since it became the first big American fast-food brand on these shores with answers ranging from “the urban myth of a friend of a friend finding a fried rat in their bucket” to “hearts attacks”, “obesity”, “campylobacter”, “the urban myth of four-winged chicken” and “litter on every high street”,” “The Xinhua news agency said 14,000 birds in and around the farm had been slaughtered and all other fowl within a five-mile radius quarantined” and “Six months ago, Quick Frozen Foods International magazine said an avian flu outbreak in China was a “godsend” for Thailand’s Charoen Pokphand Foods”.

Newspaper outlets made up the second most frequent category of media speakers. Newspapers were identified as speakers also through explicit reference by journalists (most of these are journalists from the same outlet), as in this example: “The Daily Mail revealed in August that 59 per cent of chickens in shops are contaminated with the bug.” Editorials and other articles without an identifiable author were also attributed to newspapers as media speakers.

Journalists were the most frequent category of media speakers. For the purpose of

this research, this category includes journalists, columnists, writing staff and editorial board. The main way of identifying journalists is via the byline of each article. Unless otherwise stated (as in the case of letters and opinion articles), the authors of newspaper articles and columns are identified as journalists, whether or not they have professional or academic training as such. As mentioned above, newspaper articles without identifiable author(s) were attributed to the newspaper.

Our analysis coded the identity of the speaker for both direct and indirect statements. Direct statements refer to an explicit utterance by a speaker themselves, as in this example: “As a recent Guardian editorial points out, ‘Antibiotic resistance may not seem as urgent as terrorism or the NHS funding shortfall. But it is actually a threat that could kill many more people and degrade the quality of civilised life much more’.”

Indirect statements refer to statements attributed to a speaker by someone else – in our dataset, it is usually the journalist reporting or referring to what another actor has said – as in the following quote: “One Russian financial newspaper has speculated that the poultry import move is leverage against American threats to ban Russian steel imports.”

In our content analysis, both of these statements were coded as statements by a newspaper as media speaker. An example of a direct statement by a television outlet is “A Channel 4 spokesman said last night: ‘At the time Hugh made that remark [about not being allowed on to chicken farms] it was true. That was why Hugh set up his own intensive farm. It was only when we came nearer to the end of the experiment that we were given access.’”

By contrast, an example of an indirect statement by a television outlet is “Channel 4 News said the consignment had left with the full knowledge of the Department for Environment, Food and Rural Affairs.” Both of these were coded as television outlets as media speakers.

2.4 Operationalization

As Table 25, the most specific level at which we coded for the industry is that of explicit references to the chicken meat production industry. However, the industry body, the British Poultry Council, could reasonably be argued to be part of the industry. Therefore, while it is coded for separately, we collapse these two actors into a broader category, when that collapse has no analytically relevant effects.

Similar logic can be applied to most actors within the production chain. References to specific or generic farms, farmers, growers or producers were coded separately as actors at the farm level of the production chain. References to actors that are downstream (like breeders and feed suppliers) or upstream (like slaughterhouses or processing plants) from the farm but still part of the chicken meat production chain were coded separately, with a code that also includes references to individual companies that are vertically integrated.

44 “Russia poised to drum out US chicken imports.” The Times. March 5, 2002.
45 “Hugh spent three days at our chicken farm... but it was all edited out.” The Daily Mail. January 13, 2008.
and thus have a stake in several steps of the production chain, such as Cargill, Faccenda, or Bernard Matthews. Therefore, the entire chicken meat production chain has been divided for analytic purposes into three groups: actors at the level of the farm, actors downstream and upstream from the farm, and the industry itself (understood here as explicit mentions of the industry or industry bodies). Together with other businesses outside the chicken meat production chain, and business associations, they make up the business category. All these actor categories can be analyzed separately or collapsed into a broader category for the industry, depending on whether or not analyses reveal significant differences in how they were covered by newspapers. Workers of chicken processing plants, on the other hand, while certainly part of the chicken meat production chain, are unlikely to be included in any understanding of corporate power. Therefore, they are coded for separately and not included in general understandings of the industry.

3. Results

3.1 Problematization of the industry

At the broadest level of analysis and including all the speakers in our dataset, we found that 188 articles, roughly a quarter of the 766 in our dataset, problematize the chicken meat production industry in one way or another, thereby constructing it as an issue. Twelve of these articles were coded as investigative reporting, which means that just over 40% of investigative reports problematized the chicken meat production industry. Figure 26 presents a similar figure to that included in the main body of the manuscript, focusing this time on those articles categorized as investigative journalism. In contrast to the overall findings, we found that avian influenza was not an outlier in investigative reports. In these articles, the issues most frequently problematized were foodborne illness, followed by the adulteration of chicken meat, and the industry and other industry practices.

As mentioned in the main body of the manuscript, we also found statements that mentioned all of the topics that occurred in our dataset in ways that did not construct the industry as a problem. An example of the framing of foodborne illness in a manner that does not problematize the industry is the following quote from “The bacterium causes vomiting and diarrhoea in around 280,000 healthy people every year and can kill those with vulnerable immune systems"47. In this statement, the journalist also frames foodborne illness as a human health problem caused by a bacterium.

Appendix

The following statement exemplifies problematization of the industry in terms of animal welfare: “The broiler chicken industry is probably the most sordid in the country (...) Overbreeding to produce the copious white breast meat consumers find so ‘versatile’ produces birds with crippled legs and weak hearts who live in pain”48. In this next example, the industry is problematized in terms of human health, that is, it is constructed as a human health problem: “Intensive broiler farming has serious implications for humans. Between 1992 and 1999, 20% of all reported food borne sicknesses in the UK were related to poultry consumption”49. The following quote illustrates the problematization of the chicken meat production industry as both a human health and an animal welfare problem: “The Ross 308 has been specifically bred to grow twice as fast as any chicken that could be found on a British farm two or three generations ago. Many of these birds suffer lameness or die from heart failure - and this is not just bad news for the chicken, it’s bad news for us. Such a short and unhealthy life means our chicken meat contains nearly three times more fat than it used to. Welcome to modern food production.”50.

Our dataset also contained examples that problematize specific practices of the chicken meat production industry. The following quote, for example, problematizes the practice of adulterating chicken meat, framing it as a quality problem: “CUSTOMERS are being fobbed off with low-quality chicken pumped full of chemicals, water and even pig skin. About 40 per cent of the imported chicken sold by catering suppliers undergoes heavy processing. The meat that results is so rubbery and tasteless it is known in the trade as ‘plastic chicken’”51. That same

49 “Education: Learning: Jail birds: As the EU plans to phase out battery cages for hens, welfare campaigners complain that their intended replacement will be just as cruel. John Crace looks inside at the life of the average hen.” The Guardian. July 2, 2002.
50 “Reality Bites; It might look inviting, but do you really know what goes into your food, where it’s come from, or how long its been on the shelf? Jon ungoed thomas reports on the shocking truth.” The Times. May 30, 2010.
practice is constructed in this next quote as an information problem: “Applying labels to novel foods is often a good way of balancing the opposing wishes of producers and consumers. But the reality is complex. In this case the labels that the agency wants, describing what was contained in the meat, would be read by wholesalers, not by the public. It is those who eat chicken injected with beef that need to be told about it”52.

Finally, this extract from The Daily Telegraph illustrates the problematization of chicken meat production industry – and mass animal production in general – by framing it as an economic problem:

Inefficiency is an understatement. Potatoes need 500 litres of water to produce 1kg of food, wheat needs 900, maize 1,400, rice 1,910, soya beans 2,000, chicken 3,500 and beef 100,000. If nations can't provide even the basic grains to sustain their poorest people, how can they utilise land to grow grain for animals that then waste most of the food value of the original grain? And how can the poor afford to buy chicken or beef in the first place? The broiler chicken industry is a perfect example. In 1981, 31 million birds were slaughtered. By the turn of the century, it was roughly 800 million, but this has had no impact on human hunger. The meat boom has also had an enormous impact on developing countries, which have become dependent on imported grain53.

Both in the case of animal welfare issues and foodborne illness issues, our coding handbook was designed to recognize instances in which problematization of these issues are also indirectly problematizing the chicken meat production industry, either by coding the industry as issue when the problematization of chicken meat production industry is explicit, or by coding for causal interpretations (when the industry is framed as the cause of the problem) or attributions of responsibility (when the industry is framed as the actor responsible for causing or solving the problem).

Our analysis recognizes the construction of the industry as an issue to include explicit problematization of the chicken meat production industry as in the following example: “The broiler chicken industry is probably the most sordid in the country”54. They also include more general mentions of chicken meat production as a problem, as in the following extract, in which the journalist problematizes intensive chicken meat production in terms of human health: “Intensive broiler farming has serious implications for humans”55. Problematization of the industry also includes problematization of alternative chicken meat production (free-range, organic, etc.), and problematization of practices, two of which were frequently

52 “Comment & Analysis: Leader: Fowl food: We need to know what we are eating.” The Guardian. May 24, 2003.
55 “Education: Learning: Jail birds: As the EU plans to phase out battery cages for hens, welfare campaigners complain that their intended replacement will be just as cruel. John Crace looks inside at the life of the average hen.” The Guardian. July 2, 2002.
Appendix

problematized in our dataset: the adulteration of chicken meat, usually with hydrolyzed proteins, and the use of antibiotics as growth promoters.

Our framing analysis of newspaper coverage of chicken meat production also found other issues being defined as problematic. This study conducted an inductive content analysis as the first stage of the analysis. From all the specific issues mentioned in the news texts, we constructed a list of sixteen categories of issues being problematized, which could then be applied in a second and deductive content analysis. Table 26 lists the issue categories included in the coding handbook, together with a brief description of each category.

Some of these co-occur with framing of the industry as a victim, as in the case of avian influenza. Other issues also co-occur with problematization of the industry, such as foodborne illness or animal welfare issues. These could be argued to indirectly or implicitly problematize the industry. However, during the first stage of our framing analysis, we found that it was not always the case that the industry itself was also being problematized in the discussion of animal welfare, for example. In several newspaper articles about animal welfare as an issue, only some of the statements referred to the chicken meat production industry (in which case the industry was then also coded as an issue). Other statements in those articles mentioned animal welfare issues but did not reference chicken meat production at all. To illustrate, the following quote discusses animal welfare not with regards to the industry or even chicken meat production in general, but with regards to consumption of lamb: "We may have leached all sentiment from our attitudes to unfamiliar members of our own species, but you won’t catch us denying empathy to a lamb. We want, emotionally we need, to spare it from torment. The trouble for many of us is that we also want to grill its cutlets"56. In another example, this statement is actually problematizing changes to animal welfare because it makes chicken meat more expensive for consumers: "Welfare changes would mean small increases in the price consumers pay for chicken - Britons eat nearly 800m, most home produced, and consumption accounts for two-fifths of all meat eaten in this country"57. Finally, other statements mention animal welfare issues in relation to a specific actor rather than the industry, as in the following statement: "KFC is facing a boycott organised by an animal welfare group following claims of cruelty to millions of chickens"58. In this last case, the problematization relates to a specific fast food chain, which in our design is categorized under retailers, and not included in our narrower understanding of the chicken meat production industry.

TABLE 26 | Issue categorization.

<table>
<thead>
<tr>
<th>Category</th>
<th>Specific issues included</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adulteration</td>
<td>Includes adulteration, additives, foreign proteins, food fraud, content or process tampering, and unfit chicken</td>
</tr>
<tr>
<td>Alternative agriculture</td>
<td>Includes organic, free-range, smallholder and backyard production</td>
</tr>
<tr>
<td>Animal welfare</td>
<td>Includes animal cruelty, animal suffering, fast growth, meat-eating, mortality rates, where the focus is on animal welfare</td>
</tr>
<tr>
<td>Antibiotics</td>
<td>Includes both therapeutic and growth-promoter use of antibiotics</td>
</tr>
<tr>
<td>Avian flu</td>
<td>Includes bird flu</td>
</tr>
<tr>
<td>Cheap chicken</td>
<td>Includes references to cheap domestic and imported meat</td>
</tr>
<tr>
<td>Chicken meat industry</td>
<td>Includes conventional production, factory farming, industry practice, industry standards, domestic industry, and the value chain</td>
</tr>
<tr>
<td>Consumption</td>
<td>Includes food quality, consumer food safety, consumption behaviour, etc.</td>
</tr>
<tr>
<td>Economics</td>
<td>Includes production costs, food affordability, food security, supply and demand, and transport</td>
</tr>
<tr>
<td>Foodborne illness</td>
<td>Includes Campylobacter, Salmonella, Listeria, other illnesses caused by pathogens or toxins in food, production food safety, etc.</td>
</tr>
<tr>
<td>Global trade</td>
<td>Includes imports and exports, cheap imports, trade issues, competition from producers abroad, etc.</td>
</tr>
<tr>
<td>Information</td>
<td>Includes absent, false or misleading information, labelling issues, false claims about the product, etc.</td>
</tr>
<tr>
<td>Policy and regulation</td>
<td>Includes rules, regulation, legislation, policy, at both domestic, international and EU level</td>
</tr>
<tr>
<td>Work and employment</td>
<td>Includes illegal or casual labour, migration, worker rights, working conditions, wages, etc.</td>
</tr>
<tr>
<td>Food preparation</td>
<td>Includes recipes, food preparation, food-related, etc.</td>
</tr>
<tr>
<td>Religious slaughter</td>
<td>Includes religious slaughter, halal or kosher chicken meat, etc.</td>
</tr>
<tr>
<td>Other</td>
<td>Other topic not previously included</td>
</tr>
<tr>
<td>NA/NR</td>
<td>Does not apply/Non recognizable</td>
</tr>
</tbody>
</table>

Table 27 presents the co-occurrence frequency counts and coefficients of media speaker statements that mention other issues and media speaker statements that mention the industry as either a problem or the cause of a problem. While there is variation across issues, co-occurrence coefficients are generally low. Table A.4 shows that media speakers’ problematization of the chicken meat production industry most frequently occurred in statements that also mention animal welfare issues, followed by foodborne illness issues. So, for example, of 141 media speaker statements that mention animal welfare issues, 44 (31%) also problematize the industry, and 61 (43%) frame it as the cause of the problem. By comparison, of 1027 media speaker statements that mention the issue of avian influenza, only 11 (1%) also problematize the industry, and 30 (3%) also mention the industry as the cause of the problem. Out of 116 media speaker statements that mention economic issues, just one – less than 1% – also mentions the industry as a problem and one as the cause of the problem.
Media speakers defined the industry as problematic in different terms. From media speakers’ statements that problematized the industry, we coded 463 co-occurring problem definitions (Figure 27). We found that the most frequent problem definition used by media speakers, occurring in ¼ of the instances, was that of a human health problem. For example: "We all know the horrors of battery farming. Now a devastating report finally reveals just how poisoned our favourite food really is - and the terrifying consequences for our health"\(^59\). The second most frequent problematization of the chicken meat production industry was in terms of animal welfare (21%), as in this headline: “Cruel truth of the chicken factories: Destined to live for a miserable 6 weeks, this astonishing series of pictures shows the monstrous growth rate of the modern broiler”\(^60\).

The victims identified by media speakers when constructing the industry as an issue are consistent with their problematization of the industry most frequently as an animal welfare and a human health problem; as Figure 28 shows, over half of all victims identified by news media when discussing the industry as an issue refer to non-human animals, that is, to the chickens themselves, as in the following quote: “No amount of hard-headed realism about the nature of modern farming can disguise the fact that for the 820million chickens destined for the British dinner plate each year, it is nothing short of torture”\(^61\). Almost 20% of the victims mentioned by media speakers in their problematization of the industry refer to actors from

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59 “We all know the horrors of battery farming. Now a devastating report finally reveals just how poisoned our favourite food really is - and the terrifying consequences for our health . . .” The Daily Mail. August 16, 2005.
61 “Cruel truth of the chicken factories; Destined to live for a miserable 6 weeks, this astonishing series of pictures shows the monstrous growth rate of the modern broiler.” The Daily Mail. November 23, 2001.
civil society or the public in general. Interestingly, the industry itself and other actors from the chicken meat production chain are also mentioned as victims.

![Figure 27](image-url)

**FIGURE 27** | Percentage distribution of problem definitions mentioned by media speakers in statements that mention the industry as issue.

![Figure 28](image-url)

**FIGURE 28** | Percentage distribution of victims mentioned in media speaker statements problematizing the industry.

### 3.2 Causal interpretation

At the more general level of articles and including all speakers, we found that 302 articles – almost 40% of the complete dataset – mention the industry or its practices as causes of the problem, which suggests that there is some recognition of the industry and industry...
Appendix

practices being at the root of problems related to chicken meat production. This was especially the case in investigative reporting. As Figure 29, shows, investigative journalists pointed the finger at the industry, which was the most frequently mentioned cause of problems related to chicken meat production. By contrast, nature, which was the most frequently mentioned cause in the overall data, only made up 7% of causes identified by media speakers in investigative reports.

![Figure 29](image)

**FIGURE 29 | Percentage distribution of causes identified by media speakers in investigative reports.**

Figure 30 illustrates the percentage distribution of problem definitions that co-occur with causal interpretations by media speakers that construct the industry as cause of the problem. In other words, it shows the types of problems that media speakers say are caused by the chicken meat production industry. These results are consistent with previous findings, in that human health and animal welfare problems make up the majority of problems caused by the industry. Together, they account for over half of all problem definitions mentioned in media speaker statements that identify the industry as cause of the problem.

![Figure 30](image)

**FIGURE 30 | Percentage distribution of problem definitions co-occurring with the identification of the industry as cause by media speakers.**
7.1. Attributions of responsibility

At the broader level of the article and including all speakers, we found that 409 articles, just over half of all the articles in our dataset, frame the industry as an actor, either as victim, villain or problem solver. This is more than twice as many articles that are framing the industry as an issue. We found that 265 articles (35%) include mentions of the industry as a victim, 125 as a villain (16%), and 93 include mentions of the industry as a solver (12%).

As discussed in the main body of the article, we found that media speakers framed the industry as a victim more frequently than they did as a villain or as a problem solver. In our dataset, we found 1500 statements by news media identifying a victim of a problem related to broiler production; and 206 (14%) of those identified the industry as the victim. An interesting example is the following quote from a journalist from The Daily Telegraph, who frames the injuries and death of chickens as an economic cost suffered by the British poultry industry, rather than the birds themselves: “The chickens are cught [sic] in the dark when they are half-asleep to avoid panic – and injuries and deaths which cost the British poultry industry an estimated £30 million a year”\(^{62}\). Actors from all levels of the production chain, from the farm to the industry as a whole, were most often framed as victims of the issue of avian influenza. In part, the dominance of constructions of the industry – and all actors within the production chain – as victim, reflects the coverage of the highly pathogenic strain of avian influenza, which produced an explosion of articles. The dominance of the framing of the industry as a victim is such that even in statements by media speakers that mention human health problems, actors across all levels of the production chain are more frequently identified as victims than as villains. Indeed, actors across all levels of the production chain were most often framed as victims in relation to economic problems, followed by animal and human health problems.

Moreover, we found 815 statements by media speakers identifying a villain. 68 (8%) of these identified the industry as the villain responsible for causing a problem related to chicken meat production, as illustrated in the following quote that identifies the industry as villain responsible for spreading avian influenza: “But are they [wild birds] really to blame? Or is the disease not only a direct result of intensive farming - but actually being spread by the industry?"\(^{63}\).

Finally, we coded 867 statements by media speakers identifying an actor as problem solver. Out of those, 29 (3%) statements identify the industry as the actor responsible for bringing about the solution to the problem, as exemplified by this statement from The Guardian framing the industry as the actor bringing about a solution to an animal welfare problem: “The British poultry industry is introducing slower growing breeds of chickens in response to consumers’ demands for more welfare-friendly farming”\(^{64}\).

We found that just over 10% of statements by media speakers that attribute causal responsibility to the industry, less than 3% of those that identify the industry as cause of the problem, and just over 1% of those that problematize the industry, also attribute treatment responsibility to the industry. By comparison, we found that over 7% of statements by media speakers that problematize the industry, 11% of those that identify it as a cause, and 12% of those that attribute causal responsibility to the industry, also attribute treatment responsibility to governmental authorities.
Bibliographic references


References


References


References


Fenton, N. (2010a). Drowning or waving? New media, journalism and democracy. In N. Fenton (Ed.), New Media, Old News: Journalism and Democracy in the Digital Age (pp. 3-16). SAGE Publications Inc. https://doi.org/10.4135/9781446280010.n1


References


References


References


References


Uhlig, R. (2004, January 24, 2004). As birds started dying, the cover-up began Britons may have been eating meat from infected areas for months, reports Robert Uhlig. *The Daily Telegraph*. https://advance.lexis.com/api/document?collection=news&id=urn:contentItem:4BHY-M0T0-010F-T3DG-00000-00&context=1516831


References


Summary

News media are tasked with and expected to fulfil a set of roles that are fundamental to the democratic process, including those of supplying citizens with the information necessary to be free and self-governing, providing a forum for inclusive public discussion, providing the government with the necessary information to make decisions in the common interest sensitive to public sentiments, and acting as a watchdog that holds all significant forms of power to account (Cammaerts et al., 2020; Kovach & Rosenstiel, 2014; McNair, 2003; Mellado & Van Dalen, 2017; Strömbäck, 2005; Vos & Wolfgang, 2018). It is partly on account of these important roles that news media and journalism are argued to be the lifeblood and pillar of a democracy (Fenton, 2010a), and are afforded privileges and protections in accordance with this (Tambini, 2010).

Despite general agreement on the merits of this goal, there is little empirical evidence suggesting it approximates the democratic role historically played by newspapers. Critical media scholarship is sceptical about the extent to which the normative expectations of the Fourth Estate notion are – or indeed could be – compatible with media practice. While there is evidence regarding a potential gap between the ideal and described practice (Abdenour et al., 2021; Eldridge & Steel, 2016; Habermas, 2006; Hanitzsch & Vos, 2018; Willnat et al., 2019), most scholarship focuses on topics in the political arena (Hallin & Mellado, 2018; Standaert et al., 2021). There is comparatively less empirical research on the role of news media in democratic public debate regarding topics outside of this more traditional press/politics arena, where the conditions for such normative expectations might differ.

Therefore, the present thesis subjects these normative expectations to rigorous and systematic empirical scrutiny through a paradigmatic case of corporate power in agribusiness: chicken meat production in the UK. This allows for an investigation into the extent to which these core normative expectations about the role of news media in democratic public debate materialise in journalistic output in ways that support the kind of public debates necessary to identify and tackle complex societal challenges, such as those linked to global food production, and support processes of accountability.

The present study looks at the intersection of three core strands of media scholarship – normative theories of the press, the notion of the Fourth Estate, and journalistic roles literature –to derive two core notions normative expectations that are compatible with the requirements necessary to support sound public debate of complex or wicked problems: that of news media as forum for sound public debate and as mechanism for public accountability.

The overarching research question that drives this research project is: How well does newspaper coverage about chicken meat production in the UK comport with normative expectations as required to support sound public debate of complex societal challenges?
Framing provides us with an analytical tool to describe the structuring of public debate in newspapers and to assess the extent to which the patterns described comport with the normative expectations outlined in ways that support healthy public debate and processes of accountability in the case of wicked problems. Building on the structure provided by framing, I develop a research design and methodological instrument that speaks to a structural understanding of the role of news media as a forum, actor, and process, without neglecting individual agency, and also without starting from an untested presumption of their coherence as an actor or assumptions of humanist agency.

To subject these normative expectations to empirical scrutiny, I combine two different yet complementary research methods into a two-stage framing analysis. The first stage consisted in an inductive qualitative content analysis using the four functions attributed to frames (Entman, 1993, 2009) as sensitising concepts. Working inductively with a subset of the data, I constructed broader categories for each of the framing elements. The findings from this first stage of the analysis informed the construction of a coding handbook, that allows for analysis of a large, heterogenous dataset at different levels of aggregation. The second stage consisted in a deductive quantitative content analysis, in which the coding handbook was systematically applied to the entire dataset, consisting of a census of 766 relevant newspaper articles from seven national circulation outlets published over 31 years.

Each empirical study operationalised a concrete set of expectations that could be subjected to empirical scrutiny using the same methodological instrument.

Chapter 2 is a longitudinal analysis of the framing of chicken meat production in newspaper coverage that investigated the extent to which it comported with the normative expectation of providing a forum for healthy public debate. While the findings show that chicken meat production was publicly discussed and at times noisily contested in the news by a variety of speakers, overall, newspaper coverage of chicken meat production was characterised by episodic framing focusing on lower-level issues, which were not frequently linked to each other or to broader structural problems. This results in the diffusion of public debate as an emergent – albeit not necessarily intended – consequence, which is not compatible with a sustained shift in the terms of the debate over time.

Building on the results in Chapter 2, Chapter 3 subjects the normative expectation of news media as a forum for public debate to more detailed empirical scrutiny. This second empirical study focuses on the provision of a forum for the kinds of public debate required to address wicked problems. The irreducible complexity, inherent tensions, and the many stakeholders and interests involved in such issues make particular demands of public debate. It needs to allow for an exploration of the complexities of these issues in ways that support an opening-up rather than a closing-down of the public debate (Stirling, 2008). Chapter 3 shows that British newspapers did not deliver the kind of coverage necessary to tackle wicked problems, as coverage of avian influenza failed to make systematic connections across to other issues in a way that would support their linking and highlight
their mutual entanglement. Results speak to a lack of systemic contestation and structural problematisation that does not support recognition or exploration of the systemic roots of wicked problems. While newspaper coverage reflected multiple problem definitions and causal interpretations of avian influenza, which is consistent with an opening up of the public debate, this was not coupled with connections to other related issues, systemic contestation or structural problematisation and, where present, this heterogeneity did not suggest an equal diversity of solution paths. The predominance of biosecurity effectively closes down debate by highlighting a single solution (Stirling, 2008). This more in-depth analysis supports the earlier findings in Chapter 2, namely that newspaper coverage of chicken meat production in the UK largely did not comport with the normative expectation of providing a forum for healthy public debate.

Chapter 4 examines newspaper coverage of chicken meat production for evidence of recognition of the chicken meat production industry as a social and moral agent liable to be held responsible in a manner that is conducive to processes of accountability. Though newspaper coverage identified many problems that could lead to demands for accountability, responsibility for those problems was attributed unequally across the food system, with little in the way of structural or systemic accounts of responsibility. Moreover, though newspaper coverage recognized the industry and its practices as a problem and a cause, this did not translate to an equivalent attribution of causal and treatment responsibility. What is more, newspaper coverage predominantly framed the industry as a victim. This tension suggests that the industry was not recognised as a social and moral agent subject to being held responsible and thus accountable. Together, these findings suggest an aggregate effect on the shape of this forum that does not appear to be conducive to processes of accountability as the problematisation and causal interpretations of the industry appear to require.

Chapter 5 investigates the extent to which the chicken meat production industry was held to account by newspapers. Results show that though media speakers did problematise the industry and its practices, they only identified these as the cause of the problem in a small proportion of the problems discussed. Moreover, they attributed responsibility to the industry only sporadically, even in those cases in which they had already constructed the industry as the problem or the cause. While we did find instances of coverage that comports with such expectation – particularly in investigative reports –, these were infrequent in our dataset, and thus overall, media speakers’ contribution to the overall shape of that forum is not compatible with holding corporate power to account.

Together, these four empirical studies contribute to and expand on the literature on the normative expectations of news media in democratic public debate through further specification and operationalisation of these normative expectations, in a manner that eschews received distinctions between structural and agential approaches and that speaks to a multi-dimensional understanding of media. Beyond its inherent empirical value and
urgency, investigating an original and paradigmatic case within food production raises questions relevant to other complex societal challenges that can be characterised as wicked problems, and allows me to put the focus on the accountability of corporate power.

The findings of these empirical studies provide strong evidence of the gap between described media practice and a set of normative expectations that lie at the heart of journalistic role conceptions and common-sense and scholar notions of the democratic role of news media. The results presented and discussed in this dissertation suggest the need to reassess the expectations and/or standards against which we evaluate journalistic practice (Bennett & Pfetsch, 2018; Fenton, 2010a; Pfetsch, 2018; Vos & Wolfgang, 2018), and to re-examine the assumptions that underpin such expectations, and the conditions under which it would be reasonable to expect news media and journalistic practice to deliver on such expectations, supporting the epistemological necessity of rethinking and reconceptualising the democratic role of journalism for the current era (Conboy, 2017).
Acknowledgements

We’ve all heard the saying, it takes a village to raise a child. Well, it also takes a village to bring a PhD to completion. (Not) Funnily enough, both childbearing and doing a PhD come to a dramatic – and usually traumatic – climax. After what feels like an eternity, though you are absolutely done, you still have what is likely the most difficult part ahead. Just when you think you cannot possibly do it anymore, you have to somehow muster enough strength for that final push. And afterwards, basking in the glory and pride of what you’ve achieved and made, you get to go home, and heal your physical and emotional wounds. Admittedly, the final product is not exactly what you had in mind. Both of these experiences are processes of becoming. Becoming a mother, becoming an independent researcher. In this sense, I guess they are never really done. Whether as a parent or a researcher, we are always in a way works in progress. Anyway, I digress. My point was, that, in both cases, support is absolutely crucial. So, let me take a moment here to acknowledge and reiterate my heartfelt thanks to all those who’ve made this process if not always necessarily easier, definitely a whole lot more fun. To those who made it harder, well, I get to acknowledge my own effort, because I made it in spite of the obstacles (and my own insecurities).

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I spent a great deal of time (and emotional strain) coding for this project. And I was lucky to have the help of Tanja, who was my student assistant for too short a time. Tanja, thank you for reading so many newspaper articles about chicken, for helping me refine the coding handbook, and for having a great time together doing so. I’ve also very much enjoyed and learned from the students I taught or supervised throughout these years. You were such a breath of fresh air, and a great source of energy. I could have done this in less time had I not spent this time teaching, but I would be all the worse off for it. I have no regrets. Thank you for what you’ve taught me as well, for all the enriching experiences, for the motivation to be a better teacher, researcher and person, and ultimately, for helping me discover a passion (and apparently talent) for teaching.
This project allowed me to meet many wonderful individuals, but there are four that have been instrumental to my wellbeing and growth. Four strong, determined, beautiful and wonderfully flawed women, that have taught me, inspired me, helped me, and supported me every step along the way. My dearest, wonderful cucumbers. I have learned and grown so much from each one of you. **Kelly**, you are one of the strongest humans I’ve ever met. Your determination and organization skills are phenomenal. From you, I’ve learned to be (more) direct, and to speak up for myself. **Mirjam**, you are the kindest and most resilient person. Your empathy and respect for others is inspiring. From you, I’ve learned to be more empathetic and patient, including with myself. **Mariola**, I’m not entirely sure you are aware of the depths of your kindness, humility and wisdom. You are absolutely hilarious and fiercely loyal. From you, I’ve learned that there’s so much beauty and strength in vulnerability and kindness. **Paola**, you are a brave, committed and incredibly passionate woman. I admire the strength of your convictions and your commitment to the causes you are passionate about. From you, I’ve learned to be stronger, unapologetic, and assertive. I am so grateful that I got to share this journey with you, to have been able to support and be there for each other, through emotional breakdowns, existential crises, publications, defenses, births, wins, losses, and so much more. We’ve laughed together, cried together, and grown so much. You will always have a place in my heart, my cucumbers. Right next to the scars left by the many anxiety attacks and to the left of where my self-confidence used to be.

Finally, I want to thank my friends and family back home in Costa Rica. You’ve shaped my life in more ways that we know, and I would not be the woman I am today without you. **Mami** y **Papi**, gracias por todo lo que me han enseñado, gracias por educarme en valores, gracias por el ejemplo. Gracias por todos los sacrificios que han hecho, gracias por todas las oportunidades que nos han dado, gracias por empujarme a ser mejor y por apoyarme y apoyarnos como familia. Encontrarme como persona, como profesional, como mamá, encontrar y construir mi lugar en el mundo, no siempre han sido procesos fáciles ni indoloros, pero los valores que nos inculcaron me han dado gran parte de la fuerza y convicción para hacerlo. **Isa**, me cuesta poner en palabras lo mucho que te admiro. Sos una mujer brillante, talentosísima, trabajadora, entregada, fuerte, súper creativa, valiente e incansable en la lucha social. Gracias por inspirarme y por cambiar el mundo. **Ale**, estoy feliz de tenerle en la familia. He aprendido muchísimo de vos. Gracias por tu creatividad, tus cortes de pelo y tu perspectiva. Gracias a ambas por ayudarme con el diseño de la tesis! **Abuelita Leti**, gracias por la familia tan linda que has hecho y en que me tocó crecer. Estoy feliz de poder celebrar con vos! A toda mi familia, abues, tis, primes, gracias por todo. **Abín**, **Abuelito Alberto**, **Abuelita Cloti**, me hacen falta y querría poder compartir este logro con ustedes. Sé que estarían orgullosísimos! Y a mi familia escogida, mis querís amiguis, el petit comité y politburó de la Casa Club. **Amelia, Diego, Guido, Susy, Diego, Taro**. A mis amigas de la vida, **Monse** y **Sammy**. Infinitas gracias. Gracias por los años de amistad. Gracias por enseñarme y apoyarme. Gracias por permitirme crecer juntas. Les adoro y les extrañó más de lo que puedo expresar.
Finalmente, a los chicos de mi vida. **Eduardo**, mi amor, les dos sabemos que no habría podido hacer esto sin tu apoyo. Has creído en mí hasta cuando yo no tenía fuerzas para creer en mí misma. Sos una persona maravillosa y soy absolutamente dichosa de poder compartir mi vida con vos. Gracias por ser un compañero, amigo, papá, esposo y ser humano ejemplar. Te admiro más de lo que te podés imaginar. Gracias por apoyarme y aguantarme siempre, pero sobre todo durante estos últimos meses para poder sacar esta tarea. No fue (ni soy) fácil, y has sido absolutamente generoso y entregado con nosotros. Gracias, gracias, gracias.

Y por último, **Bruno**, mi Pitubrio hermoso. No tenés una idea de lo feliz y dichosa que soy de ser tu mamá. Me has enseñado tantísimo, Bru! Me abriste la puerta a una dimensión de emoción y sentimientos que no sabía que existía siquiera. Me has enseñado un amor de una profundidad que no conocía. Me has enseñado a ser más paciente, curiosa, amorosa, organizada, fuerte y compasiva. Sos un ser humano divino y no me canso de admirarte y quererte y disfrutarte. Gracias por hacerme una mejor persona, chicos!
About the author

Marie Garnier Ortiz was born in San José, Costa Rica on May 14th, 1983. She grew up in San José, with her parents and sister.

She is a passionate and engaged early career scholar, with an interdisciplinary background in economics, history and political communications. She has a BSc. in Economics from the University of Costa Rica and an MSc. in Politics and Communication from the London School of Economics and Political Science.

Marie did an internship for the Division of Social Development at the Economic Commission on Latin America and the Caribbean. She also worked as a consultant for the Division of Institutional Modernisation of the Inter-American Institute for Cooperation on Agriculture, and as advisor for the Public Utility Regulation Authority (Autoridad Reguladora de los Servicios Públicos, ARESEP) in Costa Rica.

Following her graduate studies in the UK, Marie moved to the Netherlands with her partner, and began her doctoral studies at the Strategic Communication Group at Wageningen University and Research. During her PhD, Marie was involved in teaching undergraduate, graduate and doctoral courses, and supervision of bachelor and master students, discovering her passion for teaching.

Marie is currently working as a Lecturer at the Political Communication and Journalism group in the Communication Science Department at the University of Amsterdam. Her research focuses on questions of news media, journalism, media power, normative expectations, and democratic public debate. Her future teaching and research agenda is geared towards critical, feminist and decolonial media and journalism studies.

She lives in Wageningen with her husband Eduardo and their child, Bruno.
List of publications

Peer-reviewed publications


Other publications


# Completed Training and Supervision Plan

**Marie Garnier Ortiz**  
Wageningen School of Social Sciences (WASS)

<table>
<thead>
<tr>
<th>Name of the learning activity</th>
<th>Department/Institute</th>
<th>Year</th>
<th>ECTS*</th>
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<td><strong>A) Project related competences</strong></td>
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<td>WASS Introduction</td>
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<td>Etmaal van de Communicatie, NeFCA, Amsterdam</td>
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<td>“The Chick Diffusion: the Role of newspapers in the public debate and contestation about chicken meat production in the United Kingdom, 1985-2016”</td>
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<td>Negotiating Environmental Limits Masterclass</td>
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<td>Co-organisation and participation in the Paper Support Seminar Series for PhDs and postdocs</td>
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**Total** 37

*One credit according to ECTS is on average equivalent to 28 hours of study load
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MIND THE GAP
Newspapers as a Forum for Democratic Public Debate on Food Production

Marie Garnier Ortiz
2022