

Moral disengagement in the media discourses on meat and dairy production systems

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ARTICLE INFO

Keywords:

Moral disengagement
Cognitive dissonance
Media discourses
Agri-food systems
Meat and dairy production
Responsibility shifting

ABSTRACT

Meat and dairy production and consumption are the subject of ongoing public debates that touch on various sustainability issues such as biodiversity loss, climate change, animal welfare, and social and health aspects. Despite extensive discussions specifically relating to the environmental impacts of livestock farming in conjunction with animal welfare aspects, there have been no substantial changes in production or consumption patterns. Moreover, the focus of extant research is usually on consumers' responses to public concerns around livestock production. In this study, we shed light on the discrepancy between the normative discourse and action of relevant value chain actors with the help of Bandura's theory of moral disengagement, which allows us to identify mechanisms that contribute to the perpetuation of unsustainable production and consumption patterns. In particular, we focus on the shifting of responsibility between actors in the normatively charged field of sustainable livestock production. We collected 109 media interviews on meat and dairy production and consumption from the years 2020–2022, including interviews with actors from agriculture, processing industries, and food retail. Using qualitative content analysis, we investigated the role of moral disengagement in the media discourse on meat and dairy production and explored differences between actors in terms of moral disengagement. We found that shifting of responsibility shows a quasi-circular dynamic of being shifted from all actors to all, in our case most frequently to consumers, politics, and (diffuse) economic forces. In addition, our analysis showed the use of social justifications, beneficial comparisons, and euphemistic labelling to be common mechanisms of moral disengagement, constituting a collective problem within agri-food systems.

1. Introduction

Agri-food systems have significant sustainability impacts (Oteros-Rozas et al., 2019; Campbell et al., 2017; Clark et al., 2020; Poore & Nemecek, 2018; Willett et al., 2019). Meat and dairy production and consumption play a substantial role in this context (Clark et al., 2019; Parlasca & Qaim, 2022) due to their negative impacts on climate, biodiversity, water quantity and quality, and human health. Moreover, the meat production sector is also frequently associated with poor working conditions (Ramos et al., 2020; Wagner & Hassel, 2016). These detrimental aspects have resulted in calls for the transformation of both consumption patterns and production systems towards more sustainability, which mainly implies a substantial reduction in meat and dairy consumption – in stark contrast to the current global trends (Parlasca & Qaim, 2022).

The average meat and dairy consumption levels are distributed unevenly across countries and world regions. Germany is among the countries with high meat and dairy consumption levels (Ritchie et al., 2017), and most of the consumed meat and dairy is produced domestically, even allowing for exports (Federal Statistical Office, 2019). At the same time, public debates about the impacts of meat and dairy production have been pronounced in recent years (Sanford et al., 2021; Willett et al., 2019), with health, animal welfare, and environmental reasons being generally decisive for reducing meat and dairy consumption (Mullee et al., 2017; North et al., 2021). But although there have been slight reductions in meat consumption for example in Germany (BLE, 2022), there is also substantial inertia concerning the necessary changes and thus production and consumption levels remain high, with the production of poultry even rising in the EU (BLE, 2022).

Due to the various concerns associated with the production of meat

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and dairy, people can encounter cognitive dissonance in relation to their consumption of these products (Rothgerber, 2020; Docherty & Jasper, 2023). Scholars have turned to moral disengagement theory (MDT; Bandura, 1991) to investigate the cognitive mechanisms by which individuals distance themselves from the moral consequences of meat consumption (e.g., Graça et al., 2014; Buttler & Walther, 2018; Camillerie et al., 2020). MDT describes how people can cause harm by selectively refraining from moral self-sanction (Bandura, 1991). Moral disengagement thereby refers to cognitive processes through which individuals rationalize or justify morally questionable actions, distancing themselves from the negative consequences of such. Moral disengagement occurs both when immoral actions have been committed (experienced) and when they are about to be committed (anticipated; Barkan et al., 2015). According to Bandura (1991), eight types of moral disengagement mechanisms operate when people engage in harmful behaviour (see Table 1).

MDT has been applied to the empirical study of issues such as support for military force, immoral work behaviours, and juvenile delinquency (McAlister et al., 2006; Moore et al., 2012; Shulman et al., 2011). Bandura's theory has also been invoked to explain environmental – particularly climate-damaging – behaviours and systems (e.g., Bandura, 2007; Graça et al., 2014; Peeters et al., 2019; Stoll-Kleemann & O'Riordan, 2020). As these studies tend to take an individual-oriented perspective there are also studies that investigate moral disengagement from a rather systemic perspective. There is a growing stream of research linking moral disengagement to corporate dynamics of misconduct (e.g., White et al., 2009; Barsky, 2011; Moore, 2007; see Newman et al., 2019 for a list of scandals linked to MD). Other scholars have turned to understanding how moral disengagement is working within global value chains which characteristics seem predisposed to elicit moral disengagement (Egels-Zandén, 2015; Eriksson et al., 2013; Eriksson & Svensson, 2014). These approaches analyse moral disengagement not only on the individual level but on group and organization levels, accounting for reciprocal influences between actors. Accordingly, moral disengagement involves collective processes by which different actors within a system, such as those operating within unsustainable food production, engage in moral neutralization to mitigate the moral implications associated with their respective roles (White et al., 2009). As food consumption takes place in a societal context, we must look at all actors across value chains to better understand their interactional dynamics in the maintenance of high levels of meat and dairy production and consumption. Concerning the justification narratives of high consumption levels, it's worth to look at those who are directly involved in meat and dairy production as they have the potential to shape public opinions. This might go so far that moral disengagement in the upstream supply-chain may influence consumers by shielding them from the impacts of the products they buy. Therefore, our study aims to examine

moral disengagement in the value chain focusing on the production and sale of meat and dairy products. Using media interviews as a database allows us to analyse moral disengagement in stakeholders that are not easily accessible. Existing media interviews reflect the narratives prevalent in a discourse and give us insight into content that may have influenced readers' (and consumers') risk perceptions (Carvalho & Burgess, 2005), attitudes, or actual behaviour (Happer & Philo, 2015; Happer & Wellesley, 2019). This dual role makes media particularly intriguing to study within discourses, as they not only mirror the ongoing narratives but also hold the potential to shape them. Building on MDT, we explore the following research questions: (1) How does moral disengagement play a role in the (media) discourse related to meat and dairy production? (2) Are there differences between actors along the supply chain concerning moral disengagement, and if yes, what kind of differences can be identified? (3) What are the patterns of attribution of responsibility for change and blame for the current situation among different agents?

When applying MDT to environmental behaviour, it is important to consider that the original theory was mainly developed with a focus on acts of overt (systematic) violence, which are unquestionably immoral. Accordingly, the terms associated with the theory have a normative connotation, whereas the moral status of environmentally harmful behaviours or those that affect animal welfare is much less obvious and is subject to intensive ethical debates (Nelson & Moore, 2010; Palmer et al., 2014; Parlasca & Qaim, 2022). How strongly different aspects of environmentally harmful behaviours are being moralized varies among individuals (Krettenauer & Lefebvre, 2021), and their moral evaluation greatly depends on the ethical perspective of the observer (Markowitz & Shariff, 2012; Palmer et al., 2014). The normatively charged terminology of MDT may therefore seem exaggerated when it comes to meat and dairy production and consumption. In the context of environmentally harmful behaviours, it may be helpful to think of moral disengagement less as mechanisms that enable (obviously) immoral actions and more as mechanisms that help to resolve states of cognitive dissonance in a morally charged context.

Scholars in environmental psychology are frequently interested in environmentally harmful behaviours that the majority of the population engages in and which appear to be highly normalized (e.g., eating meat and dairy, owning and driving a car, regularly flying on holidays). MDT can enhance our understanding of the normalization of environmentally harmful behaviour, complemented by Bastian and Loughnan's (2017) action-based model that connects dissonance reduction, habit formation, social influence, and social norms in the context of meat consumption. In this context, MDT can be seen as providing more detailed descriptions of specific dissonance reduction strategies mentioned in the action-based model, with the role of passive dissonance avoidance and general emotional pathways being an extension of MDT. The authors suggest that active dissonance reduction strategies are thought to cascade based on the principle of least effort, with individuals gradually shaping their mindsets and cultures through repeated dissonance reduction (Bastian & Loughnan, 2017). This process can lead to the decline of perceived immorality in certain behaviours. Moreover, the mechanisms do not only apply to the individual's behaviour but also influence the perception of others' behaviour, legitimizing widespread practices and policies (Bandura et al., 1996). These changes in perception supposedly underlie morally questionable behaviours being exhibited without discomfort by almost entire populations, as exemplified by the high meat consumption in the Global North (Bastian & Loughnan, 2017).

Consequently, moral disengagement mechanisms are expected to emerge in moments when people experience the cognitive dissonance related to morally questionable (in)action. This has been empirically demonstrated in omnivores, who are more likely to engage in dissonance-reduction strategies when confronted with vegetarians (Rothgerber, 2014). Common rationalisations used to defend eating meat categorize it as *natural*, *normal*, *necessary*, and *nice*, known as the

Table 1
Moral disengagement mechanisms.

Mechanisms	Description
Moral justification	Presenting harmful behaviour as serving socially valuable or moral purposes
Euphemistic labelling	Using language to verbally defuse harmful behaviour
Advantageous comparison	Contrasting harmful actions with others to make them appear less harmful
Displacement of responsibility	Concealing or downplaying one's active role in causing harm by attributing responsibility to third parties and/or authorities
Diffusion of responsibility	Concealing one's own agency and responsibility when the harm is caused by a group of people, e.g., by division of labour and group decision-making
Disregard or distortion of consequences	Avoiding confrontation with the harm caused by ignoring, distorting, downplaying, or disbelieving it
Dehumanization	Depriving victims of their human qualities
Attribution of blame	Blaming victims for their own suffering

Note. Based on Bandura (1991, 1999).

4Ns (Piazza et al., 2015). With an ongoing debate about environmental crises, especially climate change, and the presence of people who use morally charged arguments about sustainability issues, one would expect people to experience conflict, if not intrapersonal, then at least interpersonal, e.g. when faced with environmental activists or veg*ns (vegetarians and vegans) who are frequently motivated by moral beliefs (Judge et al., 2022; North et al., 2021).

2. Materials and methods

2.1. Data collection

To achieve comprehensive coverage of relevant German-speaking media debates, we used the WISO database (wiso-net.de), which provides access to a large set of articles from German, Austrian and Swiss newspapers. We searched for articles containing interviews with stakeholders from the meat and dairy sectors and used the search term 'Fleisch Milch Interview' (English 'meat milk interview'). Since there is no specific word for 'dairy' in German, the whole dairy sector is covered by using the word 'Milch'. We selected articles for further analysis by screening all hits for articles containing written interviews with some kind of comprehensible question-and-answer format. Moreover, we only selected interviews if at least one section dealt with the sustainable production and consumption of meat and dairy products in a broad sense. This included both the direct discussion of sustainability issues and their indirect consideration, e.g. exchanges concerning difficulties in the production and sales system that can hinder changes towards more sustainable production, such as the issue of price pressure. We focused on interviews with actors in the conventional meat and dairy sector and thus excluded interviews conducted solely with organic farming actors, given the many additional rules related to sustainability and animal welfare that apply to organic agriculture.¹ We also excluded interviews conducted solely with politicians or NGO representatives as these are not direct part of the agri-food value chain.

2.2. Qualitative content analysis

Qualitative content analysis (Mayring, 2021; Kuckartz & Rädiker, 2023) was applied to the interviews, using mainly deductive category application, but also inductive category development. The inductive approach was mainly used to differentiate a mechanism of moral disengagement into its different forms (e.g. by specifying different subjects and objects of beneficial comparisons). The coding process began by formulating category definitions from the theoretical background of MDT. The material was subsequently processed, and the coding scheme iteratively adapted (see Fig. 1).

We submitted a first draft of the coding scheme to a consensual coding session with colleagues to identify inconsistencies in the differentiation of categories. Three selected interviews were used for this purpose. Once the coding scheme was fully stabilised, i.e. no further coding rules or categories were needed, we commenced the general revision process by coding all the material based on the final coding scheme.

Following, exploratory quantitative analyses were conducted. Specifically, we analysed the frequencies of categories and patterns of co-occurrence to uncover any potential relationships and trends in the data. This approach has complemented the qualitative content analysis and has provided a more comprehensive perspective on the findings.

¹ At the same time, we agree with Sumberg and Giller (2022) that the distinction 'conventional' vs. 'organic' or 'alternative' agriculture is, in many other cases, of "little analytical purchase" and tends to gloss over the large heterogeneity within conventional farming, while also suggesting sustainability benefits of organic farming where there may be none (Meemken & Qaim, 2018).

Additionally, half of the material was randomly selected and coded by a second coder to estimate intercoder reliability. The second coder was familiar with MDT beforehand, but not with the data or with the coding scheme developed by the first author. Her coding was thus solely based on the final version of the coding scheme and a brief introduction to the background of the data. The coding process was carried out using the software MAXQDA 2022 (VERBI Software, 2021), and the graphs were plotted using R version 4.3.0 (R Core Team, 2023), and the packages ggplot2 (Wickham, 2016), igraph (Csardi & Nepusz, 2006), and circlize (Gu et al., 2014).

3. Results

3.1. Description of the data

The WISO search resulted in a total of $N = 3282$ hits, including many duplicates due to the cross-publishing of articles in local newspapers. After removing irrelevant articles and duplicates, a sample of $N = 109$ interviews were used for further analysis (see SM 1 for a list of articles). The number of interviewees ($n = 122$) differs from the number of interviews, as 11 interviewees appeared more than once (ranging from 2 to 6 times) and because some interviews were conducted with several stakeholders at the same time.

Fig. 2 shows the distribution of interviews across sectors separated by the type of newspaper, showing that about half of all the interviews are with farmers, while there are fewer interviews with stakeholders from the industry (such as slaughterhouses, dairies, and other food processing industries) and retail. Interviews with stakeholders from industry and retail are proportionally more frequently conducted and published by trade journals than interviews with farmers, which are mostly published in regional dailies.

With regard to the interviewees, heterogeneity can be assumed both between and within the sectors in terms of business characteristics and socio-psychological variables. The majority of the interviewees were male-read ($n = 110$), with fewer being female-read ($n = 12$). Many of the interviews with farmers were with board members of national or regional farming associations ($N = 40$), although in some cases it is not clear whether they themselves keep livestock or not. Other agricultural interviewees were not members of a larger farmers' association, but were almost certainly involved in livestock production ($N = 23$). Of the latter, three interviews were with representatives of farmer protest groups such as 'Land schafft Verbindung'. In three other interviews, both farmers' representatives and 'regular' farmers were interviewed simultaneously. In the industrial sector, interviews were mainly conducted with CEOs of food manufacturing companies ($N = 14$), but also with butchers ($N = 3$). In the retail sector, CEOs of large grocery chains ($N = 23$), owners of grocery stores ($N = 2$), and one agricultural commodities trader were interviewed. Due to the lack of background information provided in the publications, a more detailed overview of the interviewees' characteristics cannot be provided.

The material contains a heterogeneous collection of interviews, not only in terms of the interviewees but also concerning the form in which the interviews were conducted. While the majority of the interviews appear to have been conducted orally and then transcribed and edited, there are exceptions, e.g. some interviews seem to have been conducted in written form. Again, no systematic classification can be made because the relevant information is only provided in few interviews. The overarching themes varied from interview to interview, as did the questions asked. There were also differences in the approach of the interviewers, for example in the use of suggestive questions.

Concerning the overarching themes, several prominent aspects emerged in the discussions. Farmers' protests were a recurring topic, with concerns raised about fair prices and the economic viability of agricultural livelihoods, while drought and structural changes in agriculture were also related issues. Furthermore, the COVID-19 pandemic had a significant impact in this context, with interviewees especially

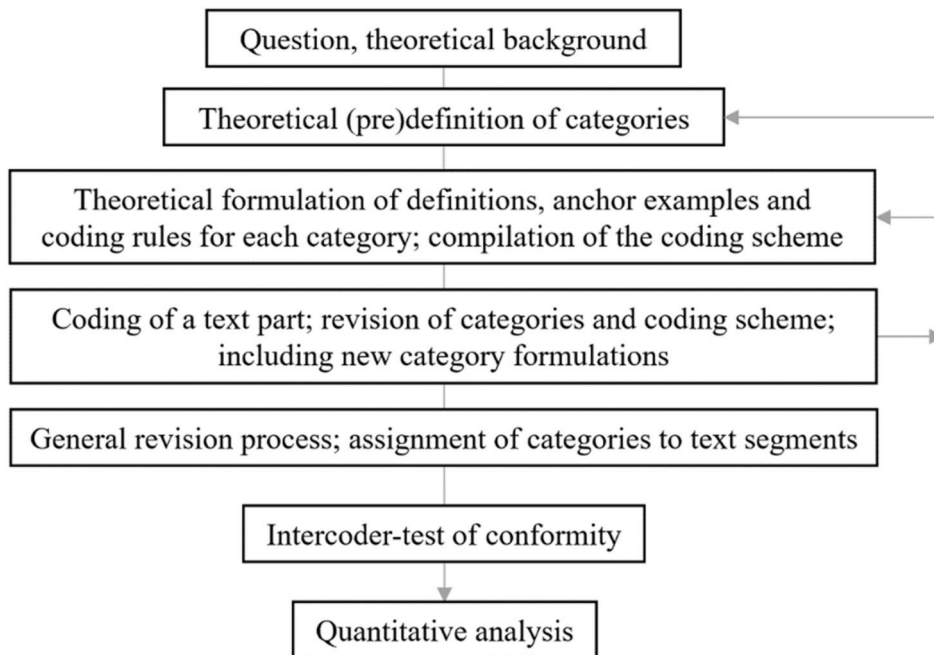


Fig. 1. Step-by-step model of content analysis using deductive and inductive category application based on Mayring (2021).

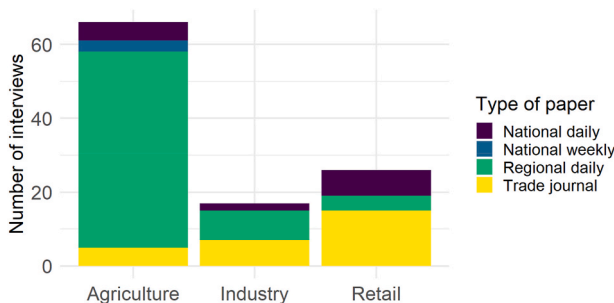


Fig. 2. Number of interviews per sector, differentiated by type of paper.

noting the impact of temporary slaughterhouse closures due to outbreaks. African swine fever and pork prices were also frequently discussed in addition to regionality, with an emphasis on the importance of supporting local agriculture. Multiple legislative initiatives were mentioned, including those related to animal welfare labelling in Germany, origin labelling in Austria, and the factory farming initiative in

Switzerland. In addition, the emergence of plant-based meat products was a prominent theme, as were concerns about the increasing costs of agricultural production, particularly due to rising diesel and fertilizer prices. Taken together, these issues reflect the complex and multifaceted challenges agriculture and the food industry are facing, especially the meat and dairy sectors.

Fig. 3 shows the distribution of interviews per month separated by country and the graph displays some peaks that can be attributed to specific events. First, the peak around January 2020 is likely due to both the agricultural fair Green Week in Berlin and the pro-environmental ‘Wir haben es satt’ (English ‘We’re fed up’) protests that took place at that time. The second peak in July 2020 is likely to be related to the scandal over COVID-19 outbreaks in slaughterhouses, which led to their temporary closures. The third peak, around the turn of the year 2020–2021, corresponds to a wave of protests by farmers against discounters, mainly over milk and pork prices. The fourth peak, in December 2021 and January 2022, is linked to the debate on country-of-origin labelling in Austria and animal welfare labelling in Germany. Finally, the fifth peak, around August 2022, is likely to be related to the debate on factory farming initiatives in Switzerland. These events have all contributed to increased public attention to meat and dairy

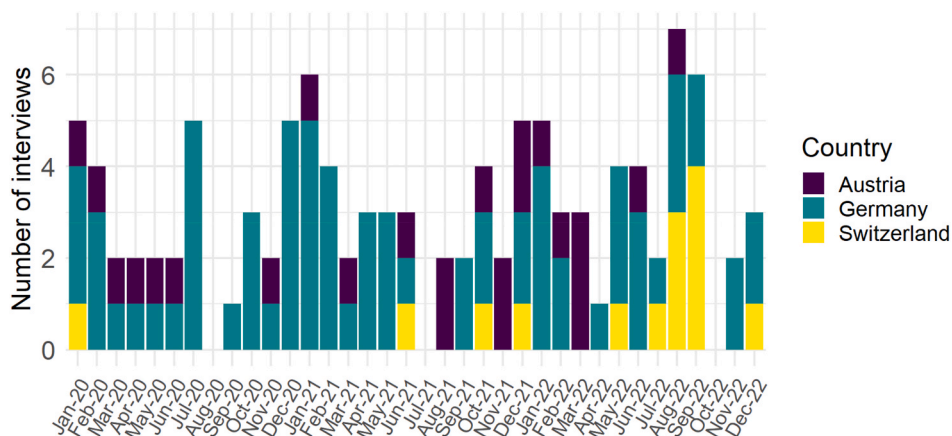


Fig. 3. Number of interviews per month, differentiated by country.

production issues at different points in the study period. This attention and the associated public discourses are reflected in our media discourse data.

3.2. Coding scheme

The final coding scheme is presented in Table 2. Slight modifications were applied to the terminologies from the original theory. Firstly, we opted for the term ‘social justification’ (originally ‘moral justification’) to avert the insinuation that any of the specified justifications carry an inherent moral connotation. Adjustments were also made to avoid the implication that every instance of ‘responsibility shifting’ (originally ‘displacement of responsibility’) suggests an inherent attribution of responsibility to the speaking individual. Finally, we chose the term ‘denigration’ instead of ‘dehumanization’, firstly because the victims in our context are not primarily humans, and secondly because (in disparaging human critics) the term dehumanization would be too harsh for what we observed.

Two mechanisms from the original MDT are not present. First, the attribution of blame was excluded from our coding scheme because the primary victims of meat and dairy production and consumption are not blameable in the way victim blaming is described in MDT (Bandura, 1991), rendering the concept irrelevant in this context. Secondly, diffusion of responsibility was included in the coding scheme but did not appear to play a role in the interviews, possibly because shifting responsibility to other groups appears to be the dominant strategy compared to diffusing responsibility within groups.

The interrater reliability analysis, including the examination of noticeable disagreements, has shown that the coding conducted by the first coder, which is the basis of the results, can be considered reliable. According to Landis and Koch (1977), the resulting Cohen’s kappa (Cohen, 1960) value of 0.85 can be assessed as an almost perfect agreement. The detailed results concerning interrater reliability can be found in SM 3.

3.2.1. Social justification

Some of the social justification categories were formulated deductively by extending the 4Ns of rationalising meat consumption (Piazza et al., 2015) to the context of meat and dairy production. Of the 4Ns, ‘necessity’ was the most present argument, mainly used by farmers, referring to the need for meat and dairy products for (global) food security or to the necessity of animal husbandry for the nutrient cycle in agriculture. People from the food industry, on the other hand, mainly used the argument that meat and dairy products are necessary for a healthy, nutritious diet.

Other arguments put forward by interviewees were ‘efficiency’, ‘freedom of choice’, and ‘social justice’. Efficiency, which refers to the use of land that cannot be cultivated and the use of plant residues that are inedible for humans, is closely related to the necessity argument, as it implicitly relies on a (global) food security narrative (Parlasca & Qaim, 2022). It was a pronounced argument, especially among farmers.

Freedom of choice was a social justification put forward by interviewees from the agricultural and retail sectors. The following examples show that it is closely related to shifting responsibility to consumers:

‘For us, it is very important that consumers decide for themselves what they eat. And for many, this includes meat.’ (A2)

‘I don’t believe that the population wants to be dictated to from above what to consume. That kind of thing doesn’t work in Switzerland. Migros always gives customers the choice of organic meat, M-Budget meat or meat substitutes.’ (L1)

Social justice, on the other hand, is a justification that takes some responsibility away from consumers and is used to oppose price increases for meat and/or dairy products. It is an argument put forward by

Table 2
Coding scheme.

MD	Category	Definition	
Social justification	Necessity	Appeals to the necessity of meat and dairy products for health or general (regional) food supply (Piazza et al., 2015), or the necessity of animal husbandry for a functioning agriculture due to the nutrient cycle.	
	Efficiency	Referring to the utilization of resources (i.e. grassland and plant waste products) that are indigestible for humans but can be utilized through cattle farming.	
	Nice	Appeals to the tastiness of meat (Piazza et al., 2015), or the enjoyment of working with animals.	
	Social justice	Appeals to poorer households on the consumer side.	
	Freedom of choice	Appeals to consumers’ freedom of choice and/or the rejection of regulations concerning diets.	
Euphemistic labelling	Existing standards	Referring to existing standards or set goals within the food system, e.g. generally high standards of production and respective controls, animal welfare aspects, the origin of fodder or other (seemingly) sustainable aspects of farming, (seemingly) sustainable products in stock, less packaging, payment of fair prices, participation in initiatives, cooperations with NGOs, regionality and/or transparency (in general or more specifically using labels).	
	BC with Latin America	Comparison with standards, production and/or consumption in Latin America.	
	BC with Europe	Comparison with standards, production and/or consumption in other European countries.	
	BC with foreign countries	Comparison with lower standards of production and/or to higher consumption in undefined foreign countries or generally on the global scale.	
Beneficial comparison (BC)	Miscellaneous	Any other beneficial comparisons with other ‘polluters’, e.g. other farm types, other retailers, or other branches (e.g. gastronomy, veg*n food production, etc.).	
	Responsibility shifting (RS)	RS to consumers	Making consumers responsible for the current food system and its change, e.g. by arguing that consumption determines the quantity and quality of production, by criticizing eating habits such as only eating high-quality parts or in general eating too much meat, or by criticizing consumers for only buying cheap products.
		RS to retail	Making retail responsible for the current food system and its change, e.g. by criticizing the concentration of market power in retail, retailers’ pricing, or advertisements of meat and dairy products.
Responsibility shifting (RS)	RS to politics	Making past, current, or future governance responsible for the current food system or its change, e.g. by criticizing policies, and demanding regulations or funding plans for sustainability-enhancing measures.	
	RS to (diffuse) economic forces	Making economic constraints and (international) market mechanisms responsible for the current food system and an apparent impossibility of transformation towards sustainable food production, e.g. by referring to	

(continued on next page)

Table 2 (continued)

		(international) competition or world market prices, by threatening the relocation of production abroad if higher national standards are set, or by referring to a lack of money for sustainability investments and the threat of structural change in agriculture.
	RS to the processing industry	Making processing industries responsible for acquiring an unfair share of revenues from agricultural production, thus restricting farmers' financial action space.
Denigration	Denigration of critics	Denigration of potential critics, such as veg*ns, activists, NGOs, general consumers, or politicians by implying that laypeople have no idea about animal farming and production processes.

Note. Only categories that were applied at least 5 times in the data are listed here. Further categories are listed in SM 2, both categories of very low appearance (Distortion, RS to farmers, RS to the processing industry, BC with USA, Nice, Natural, Normal) and categories of no appearance (Denial, Responsibility diffusion [RD] between farmers, RD between consumers, RD between retailers). SM 2 also contains application rules and anchor examples.

interviewees from the agricultural sector, but also by Clemens Tönnies, the CEO of Germany's largest slaughterhouse company:

'We will get the necessary price increase through the changes, but I am strictly against producing meat only for those with higher incomes. We also have to think about the family of five or six. It should remain a common good.' (C4)

3.2.2. Euphemistic labelling

'Existing standards' is the most prominent category in the data, being present in 56.9% of all interviews, which is probably also due to its broad definition (see Table 2). It was difficult to break the category down further into distinct sub-categories, as there was considerable overlap between different sub-categories in earlier versions of the coding scheme. However, interviewees across all sectors consistently referred to existing standards, such as regionality of production, participation in animal welfare initiatives, cooperation with NGOs, and others. These standards were typically referred to in a general sense, without further specification of the specific controls or measures that were implemented. In addition, interviewees often made historical comparisons, highlighting the progress that the sector in general or their companies, in particular, had already made, while also referring to plans for further improvement. Overall, many interviewees presented themselves as aware of existing standards and stated that they were striving to improve their practices to meet the challenges facing the sector. The following example quotes the president of a German farmers' association:

'We farmers produce high-quality, local food, the means of life for our population. At the same time, we implement more and more animal welfare in the stables, practice climate protection and advocate biodiversity. (...) Soy plays no role as feed in cattle farming. German farmers cover over 90 percent of their animals' feed requirements from domestic production. More and more farmers rely on important protein crops such as soybeans and field beans coming from regional cultivation, as over 80 percent of German milk is produced GMO-free (without genetic engineering) and is also labelled accordingly. Cattle farming also contributes to the preservation of climate-protecting grassland. (...) Our animals are already doing very well. Most of the cows live in open, bright and modern barns. They can move around freely, have plenty of space and take advantage of various wellness facilities such as cow brushing. Each new barn is also a major contribution to greater animal welfare and

protection. A concept for the conversion of animal husbandry has already been in place for several years, and we continue to support it.' (L8)

In the industry sector, the introduction of vegan products into a company's product range plays a substantial role in ongoing developments, as indicated by the following remark from the CEO of a German dairy:

'In the future, we want to make 25% of our sales with plant-based alternative products. (...) We are currently introducing yogurts based on oats and cheese alternative products based on olive oil. So we're going ahead with two lines right away, one white and one yellow.' (F6)

3.2.3. Beneficial comparisons

Beneficial comparisons include comparisons with other countries or continents, as well as beneficial comparisons with others, such as other retailers or even sectors, such as catering or veg*n food production. Beneficial comparisons were made by interviewees from all professional groups.

Most of the time, rather unspecific beneficial comparisons were made, referring to high standards compared to those of other countries, which were not further specified: *'Globally, animal husbandry in Germany is in the top league'* (H8). More specifically, beneficial comparisons were made with production in Latin America, namely with production in Brazil, Argentina, Chile or generally the Mercosur states, but also with production in other European countries, namely in Spain, the Netherlands, Germany, Poland and the Czech Republic. Some beneficial comparisons with production abroad almost fall into the category of shifting responsibility to (diffuse) economic forces when the threat of production moving abroad is used as a justification for domestic production:

'The [Swiss factory farming] initiative wants more area for less animals. This also means less domestic production, but more dependence on foreign countries. And thus more imports of animal products, which are unlikely to be produced according to our strict regulations, even if the initiative wants it that way.' (K2)

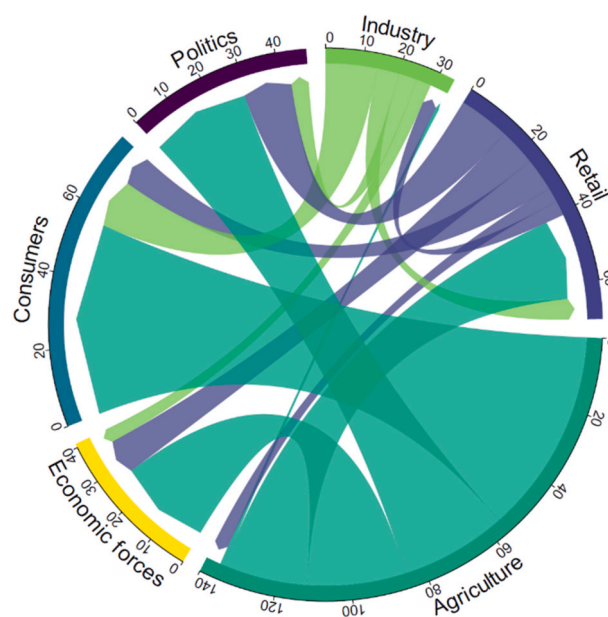


Fig. 4. Chord diagram illustrating shifting of responsibilities between actors and to (diffuse) economic forces. Arrows only originating from the actors studied in the analysis. The graph is based on the codings of the first coder.

3.2.4. Responsibility shifting

Fig. 4 shows the results regarding the shifting of responsibilities between actors. There are different trends in the prevalence of who is made responsible when differentiating between groups. In general, the shifting of responsibility to farmers and industries is rare. In the group of interviewees from agriculture, responsibility was most often shifted to consumers, followed by (in descending order) politics, (diffuse) economic forces, and retail.

'The farmer will always adapt. But again, we don't need a new law, we need a change in consumption behaviour.' (K6)

'Consumers' behaviour also plays a role here. If you only ever buy the cheapest minced meat in the discounter, you should not be surprised if working conditions in the industry are as they are. The key to change lies with the consumer.' (C2)

The following example also shows how another interviewee prioritized political measures over consumer responsibility, which was thus coded as 'RS to politics':

'We need origin and husbandry labelling on packaging. And not only for fresh meat and on the egg carton, but also for processed products. Anything else will not help. Consumers need to know what they are buying in order to make informed choices.' (D7)

In the industry group, responsibility was mostly shifted to consumers, followed by retail, politics, and (diffuse) economic forces. The following example shows how responsibility is primarily attributed to the consumers, but also describes the role of retailers, to whom some responsibility is also attributed:

'First of all, in a market economy, the consumer sets the tone. If the consumer wants a muesli tomorrow that has some rare fruit from Asia in it, then I try to organise that for him in order to serve this market. The initial problem is that the meat market – just like the milk market or the butter market, by the way – is extremely price-driven. Why? Because the trading companies that offer a low price can be sure that many consumers will throw all their good intentions overboard, go where the price is cheapest and then do their other shopping there as well. This is what the production industry has set itself up for, which still has to earn money even if a retail company makes a cheap offer. This means that the consumer has the greatest steering effect. If the consumer says tomorrow "I won't buy this cheap meat anymore", then it will no longer be produced.' (C1)

In the retailer group, responsibility was most often assigned to politics, followed by (diffuse) economic forces, consumers, processing industries and farmers. The following example shows that responsibility can be transferred both proactively for future changes and retroactively for the current state of affairs, as actors are held accountable for their role in shaping the situation. The agricultural policy of the past is highlighted here as a critical factor:

'But the basic problem is a structural one. It is also the result of twenty years of agricultural policy. Everyone has benefited from it. Farmers, processors, trade and customers. But at some point, this system reached its limits. (...) If prices are at a level in the market economy that farmers cannot live on, it is not Aldi but politics that has to take action, e.g. with a kind of special tax like the EEG or the GEMA.' (E5)

3.2.5. Denigration of critics

The denigration of critics was mostly directed at consumers, but also at politicians such as environment ministers or NGOs such as Greenpeace. Critics were demeaned by being portrayed as uninformed, thereby discrediting their criticism as untrue, as shown in the following examples. Denigrating comments mostly came from farmers and were often linked to a desire for better communication between farmers and the general public, who may have limited knowledge of agriculture:

'I would also like to see mature and more critical consumers who finally question the statements of many pseudo-environmentalists and animal rights activists and deal with actual facts.' (C9)

'But if I spend most of my time in the city, I can sometimes feel that everything in nature is dead. I recommend to the minister to spend more time in the countryside and to exchange ideas with us farmers.' (B7)

3.3. Co-occurrence of codes

Fig. 5 provides an overview of the frequency of co-occurrences within the interview dataset. The most common categories, in descending order, were 'existing standards', 'RS to consumers', 'RS to politics', 'RS to (diffuse) economic forces', 'RS to retailers', and 'BC with undefined foreign countries'. The categories with the highest frequencies also show strong co-occurrences with each other (see Fig. 6 for a more detailed overview of the code frequencies). The five most frequent co-occurrences are the pairs 'existing standards' and 'RS to consumers' (29 co-occurrences), 'existing standards' and 'RS to politics' (23), 'RS to politics' and 'RS to consumers' (19), 'RS to (diffuse) economic forces' and 'RS to consumers' (16), and 'RS to (diffuse) economic forces' and 'RS to politics' (16).

More generally, the analysis revealed that three moral disengagement mechanisms, namely euphemistic labelling, responsibility shifting, and beneficial comparisons, were particularly prominent in the interviews. In contrast, the use of social justifications was less prominent, with the denigration of critics and the downplaying of consequences being rare.

4. Discussion

Our analysis of media interviews revealed that moral disengagement plays a notable role in the discourse on meat and dairy production, whereby shifting responsibility to other actors emerged as the most common mechanism. We also observed the use of beneficial comparisons, social justifications, and references to existing standards. Although denigration of critics was present, it was not as prevalent as the other mechanisms. Similarly, distortion of consequences was virtually absent from the interviews. The aspects from which actors distanced themselves morally varied from interview to interview, including e.g. reflections on certain practices that are directly linked to animal suffering, as well as participation in a pricing system that promotes unsustainable 'factory' farming.

We found differences in moral disengagement between actors along the supply chain, although caution must be exercised in interpreting the results due to potential biases from the over-representation of farmers and under-representation of retail and food industry stakeholders in our sample. For instance, demeaning comments towards critics of the meat and dairy industry were mainly found in interviews with farmers, but as they were not frequent, our data do not allow us to draw conclusions about differences between actors in this respect. We found that references to existing standards and the use of beneficial comparisons were evenly distributed across interviewees from all three sectors. Social justifications were also used by actors from all sectors, although there were some differences in the specific narratives that were followed. Farmers tended to focus on the necessity of meat and dairy production for the functioning of agriculture and ultimately for food security, while food industry actors served the narrative that meat and dairy products are necessary for a healthy and balanced diet. Appeals to consumers' freedom of choice and a general rejection of top-down dietary regulation were mainly made by farmers and retailers. Farmers also used the narrative that low-income families cannot afford meat products as an argument against higher prices associated with more sustainable production practices. This argument was also used several times by the CEO of the largest meat processing company in Germany.

Regarding the differences in responsibility shifting between actors,

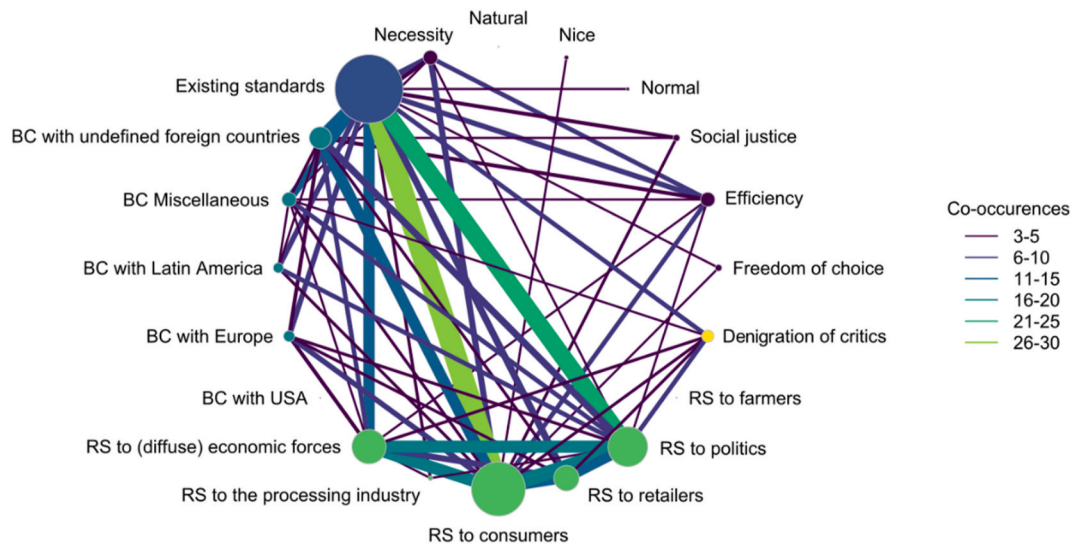


Fig. 5. Code map illustrating co-occurrences of categories. Each circle on the map represents a category, while the size of each circle corresponds to the number of its use, with larger circles indicating higher frequencies. The colours highlight the grouping into the overarching moral disengagement mechanisms. The lines connecting the circles show instances of co-occurrence, indicating the frequency with which the categories were used together. Both categories must have been present at least once within an interview for their co-occurrence to be captured, without any specific consideration of their position within the document. Co-occurrences are only counted once per document and are only displayed if they occur at least three times. The graph is based on the coding of the first coder.

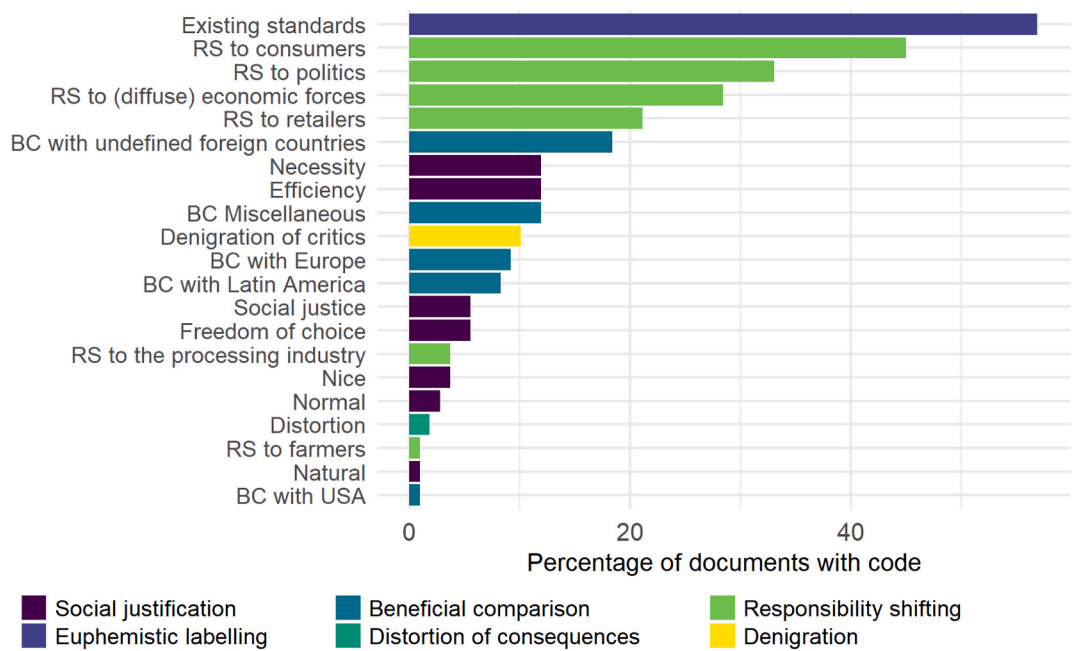


Fig. 6. Frequencies of codes. Occurrences are only counted once per document. The graph is based on the coding of the first coder. See SM 3 for a display of code frequencies differentiated by actors.

we found that actors from all sectors shift responsibility to all others. There appear to be differences in responsibility shifting between actors at the group level, but also within sectors, with individual respondents shifting responsibility to one or more other actors. Farmers mainly shifted responsibility to consumers, as did respondents from the food industry. Retailers, on the other hand, mainly put the blame on politics and less on consumers. This pattern is in line with the retailers’ narrative of free consumer choice, in which they present themselves as representatives of consumer interests. This difference is not surprising, given that retailers directly interact with consumers, and thus have an interest in not alienating them by direct criticism, whereas the interactions of farmers and the food industry with consumers are mostly indirect

(usually via retailers). The shifting of responsibility occurred both in a forward-looking way, in terms of changes that respondents felt needed to be made, and in a retrospective way, in terms of blaming someone or something for the current situation. In the latter case, the shifting of responsibility to diffuse economic forces seems to play an important role, whereby any space for action seems to be denied when individuals refer to ‘the power of the market’.

The issue of responsibility shifting is emerging as a pervasive problem within the meat and dairy production system. It illustrates collective moral disengagement, where moral disengagement is no longer just the moral exoneration of an individual but a group property that results from complex group dynamics or global value chain characteristics

(Eriksson et al., 2013; White et al., 2009). It is extremely difficult or even impossible in practice to assign responsibility in complex systems. However, different actors in a system shifting responsibility to others can hinder progress towards more sustainable food production, contributing to the undesirable resilience of the system (Oliver et al., 2018). In our data, the most prominent aspect of this problem is the tendency to shift responsibility disproportionately to consumers. Although consumers can initiate purchase-driven change, there are numerous barriers to their ability to make responsible purchasing decisions, including affordability constraints, misleading labelling tactics (Clark et al., 2016) and, more generally, social dilemmas (Olson, 1965). Furthermore, consumers have also been found to morally disengage, e.g. through means-end justifications or diffusing responsibility because the individual consumer does not feel they have the power to change anything (Ang et al., 2019; Camilleri et al., 2020), or through shifting responsibility back to actors within the production system or to politics (Klink-Lehmann et al., 2022). This dynamic of quasi-circular responsibility shifting maintains a status quo that limits changes towards sustainability. In the media interviews, the problem of responsibility shifting was indeed acknowledged by some, although relatively few actors from different sectors recognised the interconnectedness of the food production system and advocated for systematic, holistic changes including their own practices. While the need for communication between actors was typically emphasised, how to address the issue of responsibility shifting in food production systems remains a question for further research. It is likely to require a comprehensive and holistic approach that recognises the interconnectedness of actors throughout the supply chain and their shared responsibilities. More specifically, we see a need for stakeholders to not be content with attributing responsibility and blame to others, but to be open towards solutions and to critically question the assumed lack of *action space* (for an introduction to the concept, see Gütschow et al., 2021).

This goes hand in hand with the need for acknowledging different moral issues associated with agricultural production, which need to be navigated jointly instead of being played off against each other. Some of the described social justifications show the existence of multiple moral standpoints in the field. Different legitimate foci on issues such as food security, food prices, farmers' income, animal welfare, water quality, or climate change lead to a lack of consensus about what is just and fair, especially in livestock production (de Olde & Valentinov, 2019). Accordingly in our study, as the heterogeneous stakeholders prioritized different issues in their media interviews, it seemed impossible to narrow down 'the problem' to just one single framing issue. Environmental aspects seemed to quickly be deprioritised in relation to other seemingly more pressing problems, which in some cases even operate as 'killer arguments' for unsustainable management practices, partly reflected in the lack of discussion about environmental sustainability issues, to the point of anti-environmental statements, e.g. against environmental policies or activists. This *do-gooder derogation*, meaning the putting down of morally motivated others, has been shown to be related to the feeling of being morally judged, e.g. by veg*ans (Minson & Monin, 2011). The existence of different foci and moral standpoints has multiple implications for the development of interventions or policies, and for further research, since opposing rationalisations are based on these standpoints. Reduced rationalisation of eating meat has shown to partially mediate reduced meat consumption in an intervention study by Dakin et al. (2021). Future interventions aimed at reducing meat consumption should consider the various narratives and justifications presented in the discourse to avoid convenient resolutions for people that are drawn to specific justifying narratives. Further research should look at the extent to which consumers also take up the specific agricultural arguments, how they perceive conflicts between agriculture and food retail and whether or where they see their own role in it. In future studies, considered rationalisations should be extended beyond the 4Ns (Piazza et al., 2015) to include the social justifications found relevant in our analysis (freedom of choice and social justice). A fundamental

understanding of disengagement narratives and justifications is crucial for anticipating which interventions and policies are likely to be effective and which to elicit reactance as it is common in the context of meat consumption (Niehues & Klöckner, 2016; Bolderdijk et al., 2018). This includes a comprehensive understanding of influential stakeholder perspectives and why they prioritise different issues in order to anticipate possible backlash, e.g. against environmental policies.

The part of the agri-food system related to meat and dairy production is exemplary for moral disengagement due to its relatively strongly morally charged debates, though we expect moral disengagement to also play a role in other parts of the agri-food system. In fact, it most likely plays a role in every case of moral conflict that includes a powerful industry and a product that people enjoy, for example, has moral disengagement also been observed in the context of the tobacco industry (White et al., 2009) and among cocaine users (Sumnall et al., 2022). Despite differences in theoretical background and cultural context, many of the narratives we found are in line with the frames found in a study by Sievert et al. (2022), who analysed media articles concerning meat reduction in five English-speaking countries in the Global North. This alignment not only strengthens the reliability of our findings but also suggests that the identified narratives may extend beyond the discourse in our German-speaking study context.

While we found MDT to be helpful in analysing obstacles to sustainability in food systems, we also must acknowledge an important caveat related to the language used by MDT as the terms used to describe the MDT constructs are highly evaluative, reflecting the original application context (Bandura, 1991). However, in the context of our study, we were mostly unable to determine whether the arguments used by the actors in the meat and dairy production system were valid or not. For instance, coding a statement as euphemistic labelling does not imply that we were able to establish the extent to which companies exaggerated their commitment to environmental responsibility for marketing and in which cases they really were committed. It was clear that some of the practices and standards mentioned by the interviewees were likely to be legitimate, while others may have been exaggerated or misleadingly presented. However, based solely on the information gathered in this study it was impossible to determine which companies or interviewees were genuinely implementing effective management practices, highlighting the importance of scientific research or civil society actors evaluating the effectiveness of management practices with comprehensive methodologies and data sources. Here we also see a barrier for change in consumption behaviour, as consumers are exposed to a large amount of labels (both figurative through media and literal through products labels) from manufacturers who claim ethical production, leading to an information overload (Verbeke, 2005). One approach to solving this overload could be the use of multi-level labelling systems (Weinrich & Spiller, 2016) like the Nutri-Score system implemented in several European countries by now (Egnell et al., 2018).

While there are several advantages to media analysis, there are also limitations to using media interviews rather than original interviews. First, the perspectives of the interviewees may not always be neutral, and there are differences in the way the interviews are conducted, which limits the comparability of the data. Furthermore, whether moral disengagement mechanisms are evoked depends not only on the interviewee but also on what is being discussed and how. In addition, we do not know if any editorial changes were made to the interviews before publication, and some information may have been altered or removed.

Concerning the method of qualitative content analysis, our study demonstrates the importance of using a well-defined coding scheme and providing clear definitions and examples for each category. Despite overall satisfactory results regarding the interrater reliability of our coding scheme, our results also show that certain categories, such as 'RS to (diffuse) economic forces', 'BC miscellaneous' and other rather rare categories, may require more attention to reduce diffusion. In contrast, 'existing standards' was a category that we defined rather broadly, but which showed a remarkably high level of interrater agreement.

Although splitting this category into smaller sub-categories would potentially result in a lower interrater agreement, we believe it is still worth considering, as it could provide more detail and insight into the mechanism of euphemistic labelling. We decided not to subdivide the category, as the in-depth analysis of euphemistic labelling was not the focus of our study. To gain a deeper understanding of the mechanism, further research should be conducted that distinguishes between different forms of reference to existing standards in the food system. In general, since we have taken a broader view of the theory, further research should examine the specific mechanisms in more detail and go beyond the analytical level to explore possible interventions.

5. Conclusion

In an attempt to apply MDT to the discourse concerning the production and marketing of meat and dairy products, we have shed light on those moral disengagement mechanisms that contribute to the perpetuation of unsustainable production and consumption patterns. In our work, we show that moral disengagement constitutes a collective problem within agri-food systems, which is particularly reflected in the mutual shifting of responsibility between actors. The complexity of the problem is amplified by the presence of different moral foci which result in the use of justifications for holding up unsustainable management practices. Our research implies that MDT can be helpful in gaining an understanding of the psychological and social obstacles to sustainability in food systems. We hope that our work will stimulate wider application of MDT in the field and research concerning how the observed obstacles can be overcome.

Funding

This research was supported by the state graduate funding 'Landesgraduiertenförderung' Mecklenburg-Vorpommern to the first author.

(No) ethical statement

We exempted the study from ethical approval because we used publicly available interview data from newspapers and professional journals. It can be assumed that the interviews were published with the consent of the interviewees.

CRediT authorship contribution statement

Charlotte Schübler: Writing – review & editing, Writing – original draft, Visualization, Investigation, Formal analysis, Conceptualization. **Susanne Nicolai:** Validation. **Susanne Stoll-Kleemann:** Supervision. **Bartosz Bartkowski:** Writing – review & editing, Writing – original draft, Supervision, Conceptualization.

Declaration of generative AI and AI-assisted technologies in the writing process

During the preparation of this work the authors used DeepL and ChatGPT in order to assist the translation of originally German text into English, specifically the translation of quotes. After using these tools, the authors reviewed and edited the content as needed and take full responsibility for the content of the publication.

Declaration of competing interest

We have no conflict of interest to declare.

Data availability

Data will be made available on request.

Acknowledgements

We thank the reviewers for their comments and suggestions.

Appendix A. Supplementary data

Supplementary data to this article can be found online at <https://doi.org/10.1016/j.appet.2024.107269>.

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