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# What's in my mince? Reader responses to news coverage about novel plant-based protein foods

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## ABSTRACT

Plant-based protein products have recently become more prominent on Australian supermarket shelves. However, despite rapidly increasing interest in meat-free or reduced-meat diets, limited research has explored responses toward these foods. Our research analyses Facebook comments ( $n = 1384$ ) in response to two ABC News articles that covered the Australian launch of Naturli's "Minced" product in 2018. Our qualitative analysis generated seven main themes, with comments relatively evenly split between self-declared meat consumers and those who did not eat meat. Our analysis shows that social media comments can provide real-time access to what we term "critical moments" in ongoing debates as well as values, in this case related to meat and meat alternatives. Hence people's views on contentious topics relating to food are more robust and less open to persuasion than political and industry actors might hope or expect, and alternatives to use of framing approaches are required for any media analysis in domains where conflict is present.

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Plant-based protein; meat; news; media framing; Facebook comments; food values; Australia

## Introduction

Interest in meat-free or reduced-meat diets has intensified rapidly in recent years, with proponents emphasizing the health, animal welfare, and environmental benefits of reducing or eliminating meat consumption. International campaigns

for Meat Free Mondays (Backer, Charlotte, and Hudders 2014) have leveraged the star power of celebrity chefs including Jamie Oliver to encourage and normalize lower-meat diets (Friedlander and Riedy 2018). An increasing emphasis on planetary health (e.g., EAT 2019) has also encouraged many to reconsider their dietary choices in relation to environmental sustainability, and question whether meat production and consumption still align with their values. As Galusky (2014) states, "[c]hoices about what to eat expand beyond taste and become expressions of value and demands for solutions" (932).

While multivalent, and sometimes used interchangeably with terms such as attitudes, opinions, perceptions, beliefs, and ideology, values can be defined as "beliefs or conceptions that construe something to be preferable or desirable" (Thome 2015, 47). Food and dietary choices can be viewed as an expression of one's values (Connors et al. 2001), and may be influenced by a person's outlook, past experiences, and the

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people and contexts with whom they interact, including media (Ankeny, Phillipov, and Bray 2019). Although media influence over consumers cannot be straightforwardly assumed, media is nonetheless an important source of information and understanding, particularly for issues such as farm animal welfare about which audiences may have little direct experience or expertise (Packwood Freeman 2009). How media frame such topics can be a valuable starting point for analyzing the ways in which audiences are invited to construct and respond to complex, values-based food issues, as well as the role of media, industry, and political actors in seeking to shape these responses.

In order to explore how audiences respond to media reports on value-laden and contentious food-based issues, this paper analyzes online user comments related to two news stories reporting on the introduction of a new plant-based “meat,” Minced, to the Australian market in 2018. Developed by Danish food company Naturli and sold under the label “Funky Fields,” Minced combines soy and wheat proteins, coconut, almonds, tomato, porcini mushrooms, and beetroot to mimic the taste, texture, and appearance of beef mince. It is designed to be sold in the supermarket meat aisle alongside other newer plant-based meat analogues such as Beyond Meat’s Beyond Burger products, as opposed to being placed near other more traditional vegan foods such as tofu.

However, as the media coverage that we examine shows, the uptake of Minced by one of Australia’s largest supermarket chains sparked outrage from politicians and farmers’ lobby groups who objected to the supermarket’s choice of in-store location to display Minced, as well as Funky Fields’s use of a meat-related term (“mince”) to name the product. The publication of these news stories occurred at a critical time: 2018 was early in the emergence of these products on the Australian market, but prior to the 2021 Senate Inquiry into the definitions of meat and other animal products (Parliament of Australia 2021) which served to more fully delimit the terms in which plant-based “meats” could be reported and discussed in the media. Given that the media coverage of Minced occurred in a context where some political and industry actors sought to limit the market expansion of plant-based products by attempting to steer media coverage about them, audience responses to these stories in the early stages of the product’s introduction provide opportunities to understand and analyze the extent to which the new reports’ framing of key issues were accepted or contested by audiences, and to do so in real time.

The paper is structured as follows: we begin with a review of the scholarly literatures on plant-based meat products, meat consumption in Australia, and media frames, before outlining our data collection methods. We then discuss the seven main themes identified in the user comments and consider the ways in which these did – and did not – align with the news stories’ dominant frames. Through an analysis of what we term “critical moments” in the audience debate about coverage of the introduction of a plant-based meat product, we conclude that attempts by media, industry, and political actors to recruit readers to particular (negative) viewpoints about plant-based meats were only partially successful and were revealing of the limited capacity of such actors to shape the meanings of plant-based products in their own interests, particularly given the strength and relative stability of people’s underlying values. Instead, we found that people’s views on contentious topics relating to food are more robust and less open to persuasion than political and industry actors might hope or expect.

## Literature review

### *Plant-based meat alternatives*

Plant-based meat substitutes generally are vegetable-based food products that contain protein from pulses, cereals, or fungi (Hoek et al. 2011b). Some plant-based products have been available for a long time. Tofu, for example, became popular among vegetarians in Western countries starting in the middle of the 20<sup>th</sup> century (Shurtleff and Aoyagi 2014). Similarly, fungus-based products such as Quorn have been available in Europe since the 1990s and the USA from 2002 onwards (Elzerman et al. 2015). Newer meat substitutes are commonly made from legumes, such as soy, lentils, chickpeas, or lupines, which are processed into protein concentrates (Elzerman et al. 2015). However, the plant-based “meat” products that have more recently come on the market are not directly comparable to the more traditional alternatives, in part because they use different manufacturing processes that are thought to give the products “more advanced ‘meat-like’ characteristics” (Admassu et al. 2020, 16). In addition, such products are perceived by some as disrupting established boundaries associated with food categories (Jessica and Phillips 2023), namely meat and non-meat.

Research into how these newer plant-based products appeal to people’s values (or not) is limited, with the majority of scholarship focused on Europe. This work has tended to focus on consumer attributes in relation to support for plant-based products, such as food choice motivations including ethical drivers and sociodemographics (e.g., Boer, Joop, and Aiking 2014, 2017; Grasso et al. 2019; Hoek et al. 2011a), willingness to purchase (e.g., Gómez-Luciano et al. 2019), or willingness to pay more for products (e.g., Ho et al. 2022). Consumer research often compares acceptance of two or more alternative protein sources (e.g., plant-based versus in-vitro meat products, or versus insect protein: see Circus and Robinson 2019; Elzerman et al. 2011; Hoek et al. 2011b; Schösler, de Boer, and Boersema 2012; Slade 2018). Other research has explored the relationship between meat reduction and vegetarianism/veganism (e.g., Backer, Charlotte, and Hudders 2014) and sensory factors relating to reduced meat consumption (Grasso et al. 2022; Tucker 2014).

### *Meat consumption in Australia*

In countries that have traditionally high per capita consumption of meat such as Australia, a combination of growing environmental and animal welfare concerns related to animal production together with the rapidly growing availability of meat alternatives has resulted in ethical and other questions associated with meat consumption receiving increased media attention, particularly with regard to topics such as animal welfare (Buddle and Bray 2019), environmental impacts, and health (Katherine et al. 2021). Such concerns are aligned with ongoing and broader popularization of ethical food consumption and production, which have received similarly wide media attention (Phillipov 2017) and which emphasize a consumerist approach to veganism and vegetarianism (Beck and Ladwig 2021; Irving, Harrison, and Rayner 2002). Other scholars have argued that production and consumption of animals is a collective phenomenon determined not by individual choices but social and cultural processes and norms (e.g., Madeline, Fernando, and Begeny 2022; Ruby et al. 2013, 2016).

While debates about alternatives to meat production and consumption are also occurring elsewhere, Australia represents a setting that is undergoing significant conflict in this domain due to its history of high levels of meat consumption, but about which there has been limited recent scholarship (one older exception is Lea, Crawford, and Worsley 2006). Australia has among the largest per capita meat consumption in the world (OECD 2019), and there is a deep identification with meat eating as part of Australian national identity (Ankeny 2008). Long-standing ideologies about rural industries and the cultural place of meat in everyday Australian life are central to Australian meat discourses, and these feature prominently in advertising campaigns such as those run by the lamb industry (Alonso and Krajsic 2016; Ankeny 2008; Nguyen and Platow 2021). However, while meat consumption has been the traditional cultural norm in Australia, consumption patterns are shifting, with significant recent growth in vegetarian and flexitarian consumer segments (Malek et al. 2019). Nearly 2.5 million Australians now report that they eat largely vegetarian diets, up from 1.7 million in 2012 (Morgan Research 2019). Analysis by the CSIRO estimates that Australian export and domestic consumption of plant-based proteins could reach \$6.6 billion AUD by 2030 (Wynn and Sebastian 2019). Such growth has occurred alongside a surge of high-profile vegan activism that has drawn attention to environmental and animal welfare issues associated with meat production (Buddle, Bray, and Ankeny 2018; Mummery and Rodan 2014; Pendergrast 2021; Williams, Archer, and O'Mahony 2022). There is no doubt that food choice is a highly emotionally charged topic for both meat eaters and vegans (Lupton 1996; Macht 2008).

### **Media frames**

Media studies of meat production, consumption, and its alternatives have often focused on the content of news coverage, for example, reporting on the meat – environment nexus, or about the role of vegetarian diets (Mroz and Painter 2022). Other studies have analyzed social media discussions on platforms such as Facebook and Twitter to assess drivers of low-carbon diets, particularly as they relate to vegetarianism (Eker et al. 2021), and to identity areas “sustainable meat” narratives (Maye et al. 2021). However, despite wider scholarly interest in online comments as a method for understanding how people participate in news processes (e.g., German and Krämer 2017; Su et al. 2018) or as expressions of public sentiment (e.g., Flores 2017; Ho and Kristiansen 2019; Jang and Sol Hart 2015; Newlands and Martin 2018), few studies have analyzed “below the line” comments made by news audiences in relation to reporting on meat and its alternatives (Price 2021), although some recent research has emerged focused on these texts with regard to laterally related topics such as cultured meat (Ryynänen and Toivanen 2023).

Framing theory claims that how something is presented to the audience (called “the frame,” which is an abstraction that organizes or structures the meaning of messages) influences the choices that people make about how to process that information. Hence news reports are said to frame story content in ways that make some aspects of an issue more salient and influence the ways in which the news is perceived by the audience (see Entman 1993 for a full discussion; Goffman 1974 is the original source on frame analysis). Frames not only tell the audience *what* to think about but also *how* to think about an issue. However, frames do not offer fixed meanings: they are flexible, offer

a range of positions for audiences to occupy, and allow them to bring their own experiences and perspectives when interpreting media messages. The presence of a particular frame does not guarantee that audiences will interpret the information in the intended way (Gamson 1988). Nonetheless, and albeit with some exceptions (e.g., Ryyänen and Toivanen 2023), previous research has shown that user comments on news stories tend to stay within the frames created by the report on which they are commenting (Lester and Hutchins 2012), and sometimes result in “echo chambers,” a criticism that has been particularly leveled at social media when used as a news source (Bruns 2019). This phenomenon occurs because circulation of mainstream news on social media platforms can work to shape not only what issues are discussed, but also the manner in which discussion occurs (Happer and Wellesley 2019). For example, previous research has shown that conflict framing can influence how individuals interact with news stories (Stroud and Muddiman 2019; Valenzuela, Piña, and Ramírez 2017), and disagreement has been shown to increase engagement with news (Segesten et al. 2020). Thus analysis of user comments can reveal how the selection and presentation of information works to encourage particular interpretations of issues, as well as the extent to which dominant frames are accepted (or not) by news audiences, particularly when considering contentious issues such as novel proteins.

## Data and methods

Our qualitative analysis of user comments used Facebook as its primary source of data. The data consisted of 1384 user comments (851 comments on the first article, 533 on the second) associated with two ABC News stories reporting on the launch of Minced in June 2018. We chose ABC News as it is the national public broadcaster and Australia’s most visited online news source (Nielsen 2020). Both the news stories and the comments were taken from ABC News’s Facebook page because of recognition of Facebook’s increasing importance as a free, widely accessed site for the distribution of traditional news (Chen and Pain 2021). Comments were collected for 5 days following the initial posting of the news stories in order to capture the debate about Minced as it occurred in real time.

## The news articles

The two stories provided clear examples of the news frame of “conflict” (Conley and Lamble 2006, 43). The first story, “Food Fight over ‘Traitorous, Manipulated Mung Beans’ in Meat Fridge” (Henderson 2018), was prompted by the criticisms of Liberal MP Michelle Landry who, in representing the interests of Australia’s “beef industry heartland,” objected to the labeling of the Minced product as “mince.” Landry described the placement of Minced in the meat aisle as an “attempt to trick consumers into taking home a Trojan horse of processed protein posturing,” invoking meat industry protectionism, ideas about the “naturalness” of meat, and stereotypes of Australian masculinity. For instance a large pull quote shows Landry saying, “When red-blooded Australians peruse the aisle for red meat to feed their hunger, they are looking for good, wholesome, natural, Australian beef – not a pile of manipulated mung beans with a fancy name and a lab coat.”

The second article, “What is ‘Mince’? Supermarkets and Farmers Clash Over Funky Fields Plant Product” (McCarthy and Henderson 2018), described livestock lobby groups as “angered” and a National Party Senator as “infuriated” by major retailer Woolworths’s decision to sell a plant-based product in the meat cabinet. The issue was primarily framed as one of “correct” labeling, with Deputy Prime Minister David McCormack quoted as saying that “the labeling and positioning of all food products should accurately reflect what’s in the packet,” while the chief executive of the Cattle Council of Australia said, “By placing the product within the defined meat protein cabinet the consumer is led to believe that the product is of equivalent source and this placement may mislead consumers.” National Party senator Barry O’Sullivan was quoted as saying that “Woolworths needs to pull it [Minced] from the shelves today.” Woolworths responded by noting that the decision to place Minced in the meat section reflected consumer demand for “less traditional protein.” The story explicitly sought to elicit reader response with the question, “What do you reckon – can you call a plant-based product mince and sell it in the meat section?”

### **Data collection and analysis**

Comments on the two stories were downloaded, copied, and pasted into Microsoft Word, where they were subjected to qualitative content analysis (Weerakoddy 2015). Open coding was used to identify initial patterns in the data, followed by axial coding to categorize the data into broader themes (Strauss and Corbin 1998). Individual comments were coded into one or more themes depending on the nature of the content. To ensure consistency of coding, one member of the research team coded the whole sample, while the other members doublechecked smaller portions of the sample to confirm agreement.

Axial coding identified seven main themes: “a product in disguise,” “animal ethics,” “health,” “a way to reduce meat consumption,” “environmental concerns,” “gender,” and “nationalism.” These themes were then analyzed for their extent of alignment (or not) with the stories’ original frames. Illustrative comments were selected to report the findings, with all quotes provided verbatim and with spelling and grammatical errors preserved. All quotes provided are presented without identification to ensure anonymity.

We consider the user comments as indicative of audience responses to these news stories and, by extension, to Minced as a product. However the views of commenters cannot be considered to be generalizable. That is, they are not necessarily strictly representative of the ABC’s broader readership, or of the Australian population, but only of those audiences actively engaged in online discussions (Price 2021). Nonetheless, these comments reveal which aspects of the news coverage sparked debate amongst this audience, the extent to which commenters were (and were not) responsive to the stories’ framing of key issues, and the implications of these findings for how the meanings of products such as Minced can be constructed by and in the service of certain political and industry interests.

## **Results**

### **A product in disguise**

“A product in disguise” was the most frequently occurring theme, corresponding to 139 comments on article 1 and 380 comments on article 2. Comments in this theme primarily

focused on the labeling and store location of Minced, with 128 (article 1) and 354 (article 2) responding directly to these topics. These included discussion of whether it was acceptable to brand a plant-based product using meat-like language or to stock such a product in the supermarket meat aisle. Such a focus was clearly shaped by the framing of the original news articles, which focused on questions about “truth in labeling” and suggesting that there was a risk that consumers could confuse Minced with minced beef. The larger number of responses to article 2 was likely due to that article’s explicit invitation to readers to respond to the question, “What do you reckon – can you call a plant-based product mince and sell it in the meat section?”

The labeling of a plant-based product as “mince” was an issue of concern for 77 responders (10 on article 1, 67 on article 2), the majority of whom identified as meat eaters. For these commenters, “mince” was a term understood to describe minced meat. For example: “Mince is an abbreviation of minced meat. So therefore, the plant-based ‘mince’ shouldn’t be called mince.” A key concern for commenters in this theme was that consumers, thinking that the product was made from animal meat, could be misled into buying Minced (though, notably, none of the commenters thought they themselves would be at risk of being tricked).

However, a larger number of responses indicated that they thought that the labeling of Minced was clear and appropriate (159 comments in total: 60 comments on article 1, 99 on article 2). The majority of responses took the position that so long as Minced was explicitly labeled as “plant-based,” its positioning alongside the minced meat was acceptable. Commenters, many of them self-identified meat eaters, stated that avoiding buying plant-based mince by mistake was simply a matter of reading the label, something that consumers already do successfully when differentiating between other types of minces. For example:

I managed to differentiate between lamb and beef and pork/veal mince in the same section. I can even differentiate between the 5 star lean beef mince in the budget beef mince. I reckon people will cope.

Commenters unconcerned with the labeling of Minced also often defended the use of the term “minced,” taking the position that the agricultural industry does not own this word, and that mince is a process, not a product: for instance, the word is used in other contexts such as minced garlic or fruit mince pies. Examples of these types of response include:

Anything that is put through a mincer is “minced” ... Whether it be fruit, veg or animal products.

Anything can be “minced” and animal agribusiness does not lay claim to the word mince.

A second topic related to this theme focused on the location of Minced in the meat aisle. Many commenters (37 on article 1 and 149 on article 2, 186 in total) opposed the co-location of plant-based products and animal meat, compared to 60 commenters (21 on article 1 and 39 on article 2) who felt that the placement was acceptable. While most commenters did not think that there was a significant risk that the product’s labeling as “Minced” would deceive consumers into thinking that it was meat, opposition to its positioning in the meat aisle was dominated by comments from self-identified meat



eaters who described Minced as designed to “trick” customers into purchasing plant-based products. For example:

Woolies [Woolworths] appeared to b trying to trick red meat buyers into buying this fake mince by mistake because no VEGAN would b in the meat aisle looking for ANYTHING!

Commenters holding this view generally felt that Minced should be located with other plant-based foods, such as the tofu and veggie burgers, not alongside the animal meat products. While self-identified meat eaters most frequently expressed opposition to the location of Minced, such concerns were also shared by some vegans and vegetarians, who did not want to have to go to the meat section to buy the product. Examples of this position include:

Personally I would prefer it was kept away from the packaged body parts and with the tofu.

I’m vegan and I sure as hell don’t want a plant-based product merchandised in with the dead rotting carcasses.

I wish it wasn’t in the meat section. I hate walking through the valley of death.

Nonetheless, there were a number of self-identified vegans and vegetarians who were supportive of Minced’s location. People holding this view hoped that Minced would encourage meat eaters to try the product, as demonstrated through comments such as:

This is actually an excellent strategy to hopefully appeal to the meat eaters. If it means a meat eater will buy it I’m glad its there.

It is a nice way to remind people that there are alternatives by placing it in the same section.

If it means a meat eater may try the plant-based version its exactly where it should be.

### ***Animal ethics***

“Animal ethics” was the second most common theme, with roughly equal numbers of comments across the two articles (55 comments on article 1, 49 on article 2). Some posts in this theme shared coding with the theme “a product in disguise” when commenters’ expressed preference to avoid buying Minced from the meat aisle was linked to their desire to avoid the sights and smells of animal “death” or “cruelty.”

Other posts in this theme went beyond discussions of Minced specifically to argue for the merits or otherwise of a plant-based diet. By far the largest topic within this theme (45 posts on article 1 and 39 on article 2), plant-based eaters expressed their objections to meat consumption (rather than discussing Minced specifically) by describing animal agriculture as a source of “cruelty” or “suffering,” and plant-based foods as “kinder,” more “ethical” choices. Many of these posts explicitly connected eating meat with suffering and death, for example.

Meat eaters, in contrast, articulated their own ethical and moral codes when defending their choice to eat meat; there were 16 such responses to article 1 and 5 to article 2. These responses focused on the “naturalness” of eating meat, and the cruelty and double standards of veganism. Comments often combined naturalizing claims about the human “right” to eat meat with animal or human ethics related claims about animal

welfare, animals’ “purpose,” or the ethical imperative to prioritize human needs over animal rights. Examples include:

Man was made to eat meat you morons, we wouldn’t have canine teeth for tearing meat if we weren’t, we don’t have multiple stomachs or chew our cud like animals do . . . I love animals and don’t like them to be mistreated but have a good life prior to a clean death, humans have eaten meat since time immemorial.

They [animals] are bred for eating. That is their sole purpose for being alive . . . Circle of life.

Other comments focused on the cruelty and double standards of veganism by highlighting the ways in which plant production is not exempt from animal suffering or death, such the poisoning of mice and insects, or the culling of other animals to protect crops.

### **Health**

The third largest theme, “health,” appeared in 87 comments (37 on article 1 and 50 on article 2). Similar to the theme of “animal ethics,” comments related to “health” focused less explicitly on *Minced* itself and centered more on debates about the health impacts of diets with and without meat. Comments on these topics from self-identified vegans and vegetarians often involved explaining the reasons for their dietary choices and/or defending the healthiness of a vegan or vegetarian diet.

Some self-identified vegans combined statements about the health benefits of plant-based diets with claims about the carcinogenic properties of meat, for example:

We can gain the necessary proteins and nutrients from plant-based matter. Not to mention the fact that the WHO has classified red and processed meats as carcinogenic.

Others offered more simplistic statements linking meat consumption with negative health impacts, for example: “beef causes cancer!” and “eating animals gives you cancer.”

Counter-claims from self-identified meat eaters included that vegetarian or vegan diets are deficient in key nutrients (e.g., “I would have to have transfusions regularly to get iron without meat”), that omnivorous diets are healthier because meat’s proteins and other nutrients are more available to the body (e.g., “Red meat is more beneficial as it’s more bioavailable for your body to use”), and that the manufacturing processes of vegan products pose their own health risks (e.g., “all this highly processed test tube foods cannot be good for you”).

### **A way to reduce meat consumption**

Comments in the theme of “a way to reduce meat consumption” were evenly split across the two articles (47 comments in total: 23 on article 1 and 24 on article 2). The majority of comments in this theme were posted by self-identified vegans and vegetarians who focused on the usefulness of *Minced* as a consumer education and awareness tool. Such posts identified products like *Minced* as a likely “gateway” to assist meat-eaters to either reduce their meat consumption or transition to a fully plant-based diet, as the following comments suggest:

It's to encourage people to make a choice . . . We need to educate and replace [meat] with plant based options.

Actually most vegans are happy to think [Minced] might lead omnivores to taste a vegan product.

This focus on using familiar-tasting products to introduce meat-eaters to plant-based eating and educate them about vegan ethics was especially common in responses to article 2, given this article's focus on the labeling and location of Minced on supermarket shelves. Comments in this theme largely took the position that plant-based diets could not be successfully promoted through hectoring or “bully[ing] people into buying vegan,” as one commenter put it. Rather, change should be achieved by providing consumers with alternative choices and options to try. Indeed, the discourse of consumer “choice” was the most common one through which self-identified vegans and vegetarians defended and promoted Minced, with users posting comments such as “people want to choose,” “just happy to see more choice,” and “I like [seeing more] variety and choice.”

On the other side, self-identified meat-eaters expressed anger at vegan and vegetarian “proselytizing” that their choice to eat meat is unjustified or uninformed. For example:

It's patronising and pompous to assume that others have no idea about animal husbandry, agriculture and food processing.

I can count on one hand the number of vegetarian/vegans I've met who don't proselytize and get aggressive/personal over the choices of others to eat meat. Most conduct themselves so horrendously I avoid them in real life and avoid the subject entirely these days. The hate and anger you get from them, or the holier than thou attitude is just not worth being around.

Meat-eaters' attacks on vegans and vegetarians were more common than the reverse, with many linking plant-based eating to religious or political ideology. Language associating plant-based diets with the political left was also present, such as: “It [Minced] should go next to the other vegan products like tofu and whatever you lefties eat.”

### ***Environmental concerns***

Comments related to this theme focused on the environmental impacts of meat-heavy diets (13 for article 1 and 23 for article 2), and much like the themes of “health” and “animal ethics,” typically did not discuss the Minced product directly. Most of these comments (10 in article 1, 22 in article 2) acknowledged the negative environmental impacts of animal agriculture. This acknowledgment often occurred as part of participants' explanations for why they had chosen vegetarian or vegan diets, with commenters indicating environmental factors to be a key motivation for dietary change. For example:

I'm willing to change if it helps our kids future and the sake of the environment.

However, the majority of comments in this theme tended to be brief, often comprising only a few words, and usually occurring alongside other content primarily coded to the themes of “health” or “animal ethics,” highlighting the interconnectedness of these factors in commenters' dietary choices. Comments in a positive register included descriptions of plant-based diets as “sustainable” or “better for the planet.” More negatively, comments described meat consumption as “unsustainable” and “environmentally destructive,” as “causing climate change” and as “killing our planet.”

## **Gender**

Comments related to the theme of gender (22 in total: 15 for article 1 and 7 for article 2) were frequently critical of the traditional associations between meat and masculinity invoked in the news articles. Such comments were predominantly made in response to article 1, due to Landry's quoted comments about "red-blooded Australians" seeking "red meat to feed their hunger." Most comments associated with this theme pointed out the gendered connotations of "red-blooded" (e.g., "I've never heard of a woman being referred to as 'red blooded' in the context of eating meat") and/or critiqued the stereotypical associations between meat and masculinity, for example, the "stereotype of men cooking meat outside on a BBQ" or that "real men eat steaks." Overall, comments related to the theme of "gender" discussed broad stereotypes of meat, masculinity, and veganism (though largely they rejected these characterizations), were limited, and did not address the Minced product directly.

## **Nationalism**

Comments associated with this theme tended to link animal meat consumption to Australian culture and national identity. However, this was a less popular theme, appearing only four times in response to article 1 and once in response to article 2, despite the prominence in article 1 given to Landry's comments about "red-blooded Australians" and their desire for "good, wholesome, natural, Australian beef," and article 2's framing of Minced as a threat to the Australian beef industry. As an example of a comment in this theme, one responder suggested that plant-based mince is "not an Australian interpretation of meat." However, this comment did not generate response or discussion from other participants.

## **Discussion**

The two news articles at the center of our analysis both reflect attempts by political and industry actors to shape the meanings associated with plant-based proteins in a particular way, specifically, as a form of deceptive labeling that is un-Australian, unmasculine, and a threat to the Australian meat industry. There was an implicit attempt by these actors to connect critiques of Minced to long-standing ideologies around Australian rural industries and the cultural place of meat in Australian life (Alonso and Krajsic 2016; Ankeny 2008; Nguyen and Platow 2021). However, user comments on these articles indicate that only some aspects of this attempted framing were accepted by audiences, while others were contested, thus highlighting the complex ways in which news stories shape (or fail to shape) audience debate on contentious issues. While previous research has shown that those who comment on news stories tend to stay within the frames created by the report on which they are commenting (Lester and Hutchins 2012), our findings do not consistently indicate this to be in the case in relation to the ABC News coverage of Minced.

For example, responses under the "product in disguise" theme suggested that the attempt to frame plant-based products as a threat to Australian animal agriculture industries was not accepted by many commenters, even those who objected to Minced on other grounds. A majority of comments related to the use of the word "mince" did not

accept the attempt to frame this word choice as problematic or as belonging only to the meat industry. Though most did not think that people would be confused by the product's labeling, many commenters nonetheless objected to the placement of plant-based products in the supermarket meat aisle, emphasizing how such products were perceived by some as disrupting established categorical boundaries of food (Jessica and Phillips 2023). These commentators included plant-based eaters who did not wish to shop in the supermarket meat aisle, but also included a significant portion of self-identified meat eaters – essentially the target market for *Minced* – who strongly and emotively objected to being encouraged (or, as they termed it, to be “tricked”) into buying plant-based products.

With responses relatively evenly split between self-identified meat consumers and those who did not eat meat, the comments highlight the emotionality of food choice for vegans and meat eaters alike (Lupton 1996; Macht 2008). However, the fact that it was self-identified meat eaters who expressed the greatest opposition to the placement of *Minced* highlights the ways in which food-based identities can be both deeply held and experienced as vulnerable and under threat. Landry and other political and industry actors were primarily concerned about protecting the Australian beef industry, but this was not generally a concern for commenters. Rather, the threat imposed by plant-based “meat” was described by commenters as much more personal: specifically, it was viewed as a threat to one's identity and social acceptability. Vegan diets have been frequently described in the scholarly literature as expressions of moral or ethical values (Backer, Charlotte, and Hudders 2014; Boer, Joop, and Aiking 2017; Malek et al. 2019). The concerns about animal suffering and welfare that emerged in the comments from self-identifying vegans and vegetarians highlight that this characterization was also accurate in this case. But the comments reveal the ways in which the choice – and in some cases, the perceived “right” – to eat meat was also framed in ethical and moral terms. These included ideas related to the “naturalness” of meat eating, the “need” to eat meat as a way of showing care for oneself and others, and the cruelty (including animal cruelty) associated with a vegan diet.

Differences in dietary preferences were often framed by self-identified meat eaters as reflecting opposing sides of an ideological battle perceived as almost religious in its significance: for example, vegans described as “proselytizing” or seeking “conversion” for meat eaters. This finding is significant, especially when compared to the responses of vegans and vegetarians who typically framed plant-based diets, and *Minced* itself, within market-based discourses of individual consumer choice. As Judge et al. (2022) note, the production and consumption of animals are a collective phenomenon, determined not by individual choices but by social and cultural processes and norms (also see Ruby et al. 2013, 2016). However, plant-based eaters' focus on consumer “choice” highlights a far more individualized approach to dietary change than the more contentious forms of animal activism and protest that have dominated Australian media coverage of vegan diets in recent years (Williams, Archer, and O'Mahony 2022). Indeed, the Facebook comments seem to highlight the pervasive influence of ethical consumption discourses within contemporary vegan food politics, in which political change is increasingly not sought through collective action, but through the expansion of consumer markets (Beck and Ladwig 2021; Irving, Harrison, and Rayner 2002).

At the same time, however, advocates of plant-based diets also drew upon wider media and public discourses about meat (e.g., the WHO classification of red meat as a probable and possible carcinogen, and the findings of the EAT-Lancet commission about the environmental impacts of meat consumption) that went beyond both individual consumer choices and the specific contents of the two news articles. Advocates of plant-based diets argued for the health benefits of reducing or eliminating meat and highlighted the health risks of meat consumption. In contrast, meat eaters pointed to the nutritional deficiencies of a vegan diet and the overprocessing of vegan foods. Such tensions highlight the ongoing roles played by cultural and political contexts in determining an audience's reaction to and engagement with information (Happer and Wellesley 2019). The fact that a large number of comments did not address the Minced product specifically, but used the attention generated by its launch to discuss broader issues about the health, animal welfare, and environmental issues related to meat and non-meat products is not only revealing of the interconnectedness of these issues in dietary choices, but also the role that values play in debates about food-related issues.

In contrast, attempts by political actors such as Landry to “fix” meat consumption as an essential and unchanging part of Australian (particularly male) national identity may have proven effective for generating eye-catching news headlines, but were met with limited acceptance by readers, meat and plant-based eaters alike. This finding demonstrates that while news frames may partially shape the focus of user comments, their influence is never wholly dominant. Indeed, the themes that mobilized commenters more successfully (such as those related to health and the environment) reveal the importance of audiences' underlying values in shaping the alternative frames through which issues relating to plant-based foods are being discussed.

Thus our analysis reveals “critical moments,” in this case of conflict between those who consider meat eating to be an important part of a “normal” and healthy diet, and those who seek to normalize the consumption of plant-based meat alternatives. Largely absent from the comments, however, were views from those who held more neutral or middle-of-the-road views. This gap is perhaps unsurprising, as only those who feel strongly about these issues, particularly because of their alignment or conflict with their underlying values, would be likely to be motivated to contribute comments. Previous research has shown that conflict framing can influence how individuals interact with news stories (Stroud and Muddiman 2019; Valenzuela, Piña, and Ramírez 2017) and, as Dutceac Segesten et al. (2020) demonstrate, disagreement can increase engagement with news. However, in this case, it was not only the original framing of the new articles that shaped how people responded. Reader responses were also shaped by the comments of other users, as well as by the wider media and cultural contexts in which these debates were situated.

## Conclusion

Analysis of user comments generated seven key themes: a product in disguise, animal ethics, health, a way to reduce meat consumption, environmental concerns, gender, and nationalism. That comments were split relatively evenly between self-identified meat-eaters and those who did not consume meat meant that this research did not reveal the “echo chambers” that social media is often thought to

engender (Bruns 2019). In the case of the Minced coverage, we can see the capacity of social media to amplify polarization in debates on contentious issues, instead of people only being exposed to those views that they already share. In other words, rather than a space in which users are only exposed to those who already think like them – or even a space to discuss or negotiate their beliefs with others – social media becomes a site for existing positions to be staunchly defended and further entrenched. Consequently, if we were to take these comments as straightforward evidence of public sentiment, as studies of social media engagement on other controversial issues often do (e.g., Flores 2017; Ho and Kristiansen 2019; Jang and Sol Hart 2015; Newlands and Martin 2018), we would be likely to mischaracterize the degree of public support of or opposition to particular issues. Thus rather than providing insights into public sentiment, the oppositional tenor of the comments in this case highlights the ways in which social media comments can be useful for identifying and accessing critical moments in debates over contentious issues, the strategies and discourses through which these are articulated, and the extent (or limits) of media framing in shaping them. These critical moments are theoretically important as they mark points in debates that are worthy of greater analysis: they encourage us to view these debates not simply as a string of separable textual comments that indicate support or lack thereof, but in context and as part of an overall narrative that reflects commentators' underlying values. Hence critical moments can be used as an alternative device for media analysis, instead of relying solely on traditional approaches to framing.

That commenters only partially responded to the attempts by political and industry actors to frame the meanings associated with plant-based proteins in alignment with their own interests reveals that while news coverage may seek to invite certain audience responses, people's views on contentious issues are more robust and less open to persuasion than political and industry actors might hope. While we found that news stories' framing can influence the content of user comments at least in terms of what people post about (hence the large number of posts about the labeling of the product as "mince" and its placement in the supermarket meat aisle), this type of influence did not necessarily result in audiences adopting a coherent ideological position in relation to that content. As previous work on vegan activism has shown (Buddle, Bray, and Ankeny 2018), social media audiences are not easily persuaded by those seen as having an "agenda," particularly when that agenda is viewed as in direct conflict with their own social and cultural values.

Provocative pronouncements about "red-blooded Australians perus[ing] the aisle for red meat" (Henderson 2018) and about products such as Minced deliberately "mislead[ing] consumers" (McCarthy and Henderson 2018) can be effective in eliciting audience comments and clicks, but it is telling that although the two stories elicited a large number of comments, relatively few explicitly discussed Minced. Instead, the controversy that Minced generated more often served as a starting point for debates about the merits (or flaws) of a plant-based diet. Thus through analysis of this debate, we can see how user comments can provide access to "critical moments" in which debates about food-related issues play out in real time in ways that are revealing of audiences' underlying values, many of which remain unchanged by the frames dominating the media coverage to which they are responding.

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