



“Don’t mince words”: analysis of problematizations in Australian alternative protein regulatory debates

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Abstract

Alternative proteins, including plant-based and cell-based meat and dairy analogues, are discursively positioned as a new form of meat and dairy and as a solution to the myriad of issues associated with conventional animal agriculture. Animal agricultural industries across various nations have resisted this positioning in regulatory spaces by advocating for laws that restrict the use of meat and dairy terms on the labels of alternative proteins products. Underlying this contestation are differing understandings of, and vested interests in, desirable futures for animal agriculture. In Australia, this broader contestation led to a national-level inquiry by a Senate parliamentary committee entitled *Definitions of meat and other animal products* (the Inquiry). This paper reports findings from a study of the problematizations developed through the Inquiry using a framework for policy discourse analysis referred to as Bacchi’s ‘What’s the Problem Represented to be’ methodology. It shows how the dominant discourse throughout the Inquiry moved away from the initial problematization of alternative proteins as a threat to animal agriculture. Instead, both industries were ultimately positioned as not in competition and only labelling laws were problematized with the solution being amendments to ensure ‘consumer clarity’. This outcome ignored a range of alternative problematizations related to the ethical, environmental, health, social and economic issues raised by animal agriculture and by alternative proteins. This lack of scrutiny benefits both industries, by closing off the policy discourse to consideration of a range of alternative interests, voices, and potential solutions, such as stricter health and welfare regulation.

Keywords Food labelling · Alternative proteins · Animal agriculture · Meat · Food technologies · Regulation

Abbreviation

Aps Alternative proteins

Introduction

Alternative proteins (APs) refer to a new food category derived from insects, plants, fermentation or cell-culturing techniques that closely resemble the nutritional and sensory features of meat and dairy. The demand for, and investment in, APs is rapidly growing (CB Insights Research 2021). In 2021, for instance, APs raised \$5 billion in investments, which was 60% more than the industry raised in 2020 (GFI 2021). Partly driving these trends is the discursive construction of APs as the future of food and as a solution to the multiple, intersecting environmental, public health, labor rights and ethical issues with intensive animal agriculture (Sexton et al. 2019). These solutionist discourses about APs operate as promissory narratives (Lonkila and Kaljonen 2021) to promote the adoption of APs in industry, government policy and ultimately by consumers.

These promissory narratives have met with resistance from existing animal agriculture industries, especially in large meat and dairy producing and consuming countries like the US and Australia. Resisting discourses, and related

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lobbying efforts, have focused on problematizing the use of “dairy” and “meat” terminology and images in AP marketing. Political pressure to introduce new laws that prohibit or restrict the use of meat and dairy terms and images on APs has occurred in several jurisdictions including the EU, the US, France and Belgium (See e.g. Lähteenmäki-Uutela et al. 2021). In Australia, such pressure led to a 2021 Federal parliamentary committee inquiry entitled *Definitions of meat and other animal products* (the Inquiry). The Inquiry, by a six-member cross party committee of Federal senators, used public hearings, public submissions, private meetings with particular stakeholders, and documentary analysis to generate recommendations about how to regulate APs. The Inquiry was wide-ranging in its scope and resulted in hundreds of submissions and six public hearings over the course of a year. It also marks a significant development in regulatory debate regarding APs, being the second time in the world a national-level inquiry has been held about APs. The first took place in the US in 2018 and focused on cell-cultured products (USDA Food Safety and Inspection Service 2018).

Utilizing Carol Bacchi’s (2012) “What is the problem represented to be” methodological approach, this paper shows how the problems and solutions discursively produced by the Inquiry changed from competition between animal agriculture and APs in future food systems and towards the need to support both sectors. The initial scope of the Inquiry envisaged engagement with broader debates concerning social, economic and health effects of APs, and had the potential to intersect with issues regarding the future of animal agriculture. This article shows that the key policy problem that emerged from the Inquiry was much narrower, relating to labeling for consumer clarity (RRAT 2022, p. vii).

The “problem” of labeling and consumer clarity fits comfortably into the emphasis in Australian food regulation policy discourses on the importance of consumer choice, and of increasing Australian production and export. The discursive construction of regulatory policy on APs that emerged from the Inquiry process downplayed those aspects of AP’s promissory narratives that promote the disruption of animal agriculture, and which align with broader critiques of animal agriculture. Instead, it emphasized those aspects that uphold “business-as-usual” in capital-intensive, market-based food systems. This article shows how the focus on the problem of labeling and consumer clarity in AP debates sidelines concerns about the impact of both animal agriculture and APs on health, the environment, and especially animal interests, closing down possibilities for policy debate about further regulation of both APs and animal agriculture. The resulting discursive construction benefits both animal and AP industries.

The first section in this paper situates our study in the literature on APs and on the role of food labels. The next section details the methodology and methods used in this study, followed by a presentation of the findings in terms of four problematizations that emerged from stakeholder discourse and what problems, and related solutions, the Senate committee ultimately adopted. The final section discusses the findings.

Literature

Alternative proteins

The AP sector has moved from niche to mainstream in recent years within the context of unprecedented media, activist, government and academic attention to the adverse impacts of intensive animal agriculture and projections about increasing global demand for animal source food. While the initial development of APs can, in some instances, be traced to public institutions, recent advances in APs and their related diffusion into markets has emerged from the activities of private companies with the support of venture capitalists and newly created industry bodies (FAIRR 2022). The development of APs is concentrated in high-income countries with a pre-existing advantage in advanced food manufacturing technologies especially the US (GFI 2022). Three of the most prominent AP companies, Impossible, Eat Just and Beyond Meat, are start-ups from Silicon Valley. The largest meat processing and food manufacturing companies have also invested in APs (Howard et al. 2021).

Underlying the rise of APs are broader, connected trends regarding technology and food. These include the prominence of privatized high-tech innovation networks and a related ideology of techno-optimism regarding the potential for high-tech to resolve complex social and environmental issues (Taffel 2018; Wurgaft 2020). The emergence of APs is also an example of the prevalence of ultra-processed foods in contemporary food systems, that is, food items created using food additives, substances extracted from whole foods and industrial processing techniques (Monteiro et al. 2019). Many APs could be categorized as ultra-processed foods. Additionally, the development and popularity of APs derives in part from a Western meat culture that attributes special qualities to diets high in animal products (such as strength and masculinity) and protein (such as healthiness and morality) (Allen 2014; Neo and Emel 2017). Finally, APs benefit from dominant discourses in food and agriculture, based in productivism and neoliberalism, that positions increasing production using advanced technologies as a normative goal and prioritizes market mechanisms as a way to resolve food systems issues (Jarosz 2011; Kirwan and Maye 2013; Tomlinson 2013).

This paper contributes to two emerging conceptualizations of APs in the social scientific literature. The first concerns the role of APs in extending contemporary, globalizing and industrializing food systems. The second concerns how the interests of animals are engaged in political and social debates regarding APs.

Alternative proteins and the food system

Promissory narratives, ethical discourses, and metaphors created by the developers of APs and articulated in mainstream media have increasingly been the subject of social scientific inquiry (Broad 2020, 2019; Chiles 2013; Dilworth and McGregor 2015; Helliwell and Burton 2021; O'Riordan et al. 2017; Sexton et al. 2019). This research has shown that developers of APs position existing and promised AP products as the solution to multiple issues with animal agriculture by providing an animal-free version of meat and dairy. These positive expectations have promoted new markets for investment in and consumer adoption of APs has been a key theme (Mouat and Prince 2018; Sexton et al. 2019).

A small but growing strand of the literature critiques APs as a development that reinforces and extends globalizing, industrial food systems while marginalizing other options for food systems change, such as addressing economic access to food or promoting ecological approaches to farming. In part, this body of work focuses on showing how much of the current promotion of APs reproduce the same approaches and ideologies that underlie conventional and unsustainable food systems. For instance, APs continue reliance on high external in-put, monoculture cropping, low dietary diversity, and market mechanisms as the primary way to address complex social and environmental issues. Instead of being a solution to the problems with food systems, in this body of work APs are understood as a "palatable disruption" (Clay et al. 2020; see also Lee 2018), or a minor adjustment, that is significantly limited in its capacity to bring about more just and sustainable food systems. The concern here is that, while reinforcing current food systems dynamics, APs draw attention and resources from alternatives to resource and capital-intensive options while sending the political message that other changes to the food system, such as government support for reducing red and processed meat consumption, are unnecessary.

This literature also details how the privatized nature of APs enables further corporate control over food systems and prevents deliberative and analytic engagement with APs and related new technologies (Guthman and Biltekoff 2020; Howard 2022; Howard et al. 2021; Johnson 2021). These authors critique the idea that APs can disrupt food systems by drawing attention to how the production of AP is the subject of extensive private property rights in the form of IP as well as contractual rights. Further, they detail how these

private rights to develop and sell a particular form of AP are held by existing, large corporate actors in the food system who are implicated in existing food systems issues including corporate concentration and unsustainable, unethical models of production.

A recent extension of the work critiquing APs for reinforcing existing food systems examines how AP proponents are increasingly avoiding problematizing animal agriculture, that is, moving away from positioning animal agriculture as a problem requiring change. Rather, AP proponents are increasingly identifying a lack of protein on a global scale as the problem that APs will solve on the basis of projections regarding increased demand for meat (Guthman et al. 2022; Howard 2022; IPES 2022). This problematization of a lack of protein has been particularly exploited and enabled by large meat processing companies who invest in APs but also seek to expand their existing meat markets (Howard et al. 2021). For these groups, APs are not in competition with meat but rather another product alongside meat. However, there are some AP proponents who continue to emphasize the original promissory narratives regarding APs as a way to address the issues with animal agriculture and call for ways to ensure APs serve the public over private interests (Holmes et al. 2022).

Importantly, there is no documented lack of protein in diets, though there is, of course, food insecurity and therefore a lack of all the macronutrients, which insecurity is largely caused by poverty (IPES 2022, p. 21; Sen 1982). Inadequate protein consumption among certain populations is tied to inequity of food access—the lack of economic resources to access food—rather than lack of protein production. A broader body of work has critiqued the focus on increasing production to address food security in mainstream and institutional discourse because it reinforces neoliberal, productivist ideologies and draws attention away from wealth inequalities, food waste, and other problems such as lack of investment in rural infrastructure in low-income countries (Evans and Johnson 2019; Jarosz 2011; Kirwan and Maye 2013; Tomlinson 2013). A focus on particular macronutrients rather than the whole diet is also not supported by nutritional science, which increasingly emphasizes dietary diversity and the need to consider the whole food (not specific nutrients) and dietary trends (IPES 2022; Scrinis 2013). Regardless, protein consumption in developed countries including Australia tends to exceed recommendations (Department of Health 2021).

In this paper, we detail how the promissory narratives regarding APs identified in the literature have themselves been problematized to the extent that they (i.e. the idea that APs will replace meat), and the AP products themselves, have become problems for policy to address. Our case study also provides empirical support for the recent literature detailing the shift in problematization from animal

agriculture to a lack of protein and illustrates the implications of this shift in problematization on law and policy. In particular, we show how the problem of “protein shortage” emerged, despite the initial framing of the Inquiry, and closed down alternative, more rigorous and wide-ranging, understandings of the problems and the scope of regulatory solutions.

Alternative proteins and animal interests

The second body of work, with which this paper is concerned, investigates the interests of animals in the context of APs.

Scholars concerned with the interests of animals in the context of APs have largely focused their attention on the animal welfare issues raised by current “cell-cultured meat”, which is a type of alternative protein produced using tissue engineering (Chriki et al. 2022; Evans and Johnson 2021). These issues include animals being continually subjected to biopsies and the use of a growth medium derived from a dying calf. Developers of AP products claim that some of these uses of animals can be or, for particular products, have been removed from the process through technological innovation such as through developing alternative growth mediums (Messmer et al. 2022). Relevant also to other plant and fermentation-based APs is the potential for APs to further normalize the consumption of flesh and reinforce speciesism, i.e. the idea that humans are owed greater moral rights than other species (unless, in the case of cell-based meat, human flesh is also created and consumed in the same circumstances as animal flesh) (Johnson 2019; Milburn 2016).

The potential for a value inconsistency to emerge when animal activists advocate for APs has also been highlighted (Evans and Johnson 2021; Gleckel and Colb 2020). To advocate for APs, animal activists generally argue for less state intervention in the regulation of food and of food labels, for example they advocate for not creating more rules restricting labelling terms to be used by APs. This contrasts with the other advocacy work of animal activists, which often seeks greater regulation of animal products and labels such as heightened animal welfare regulation and stricter standards for voluntary animal welfare claims in food labelling (Carey et al. 2017). Animal activists also find their support for APs is uncomfortably aligned with the interests of large food processors who have started to produce APs but also significantly use animal products. Gleckel and Colb (2020, p. 78) described the position animal activists adopt in debates regarding meat labelling as follows: “Rather than fighting industry, animal-rights lawyers find themselves supporting it; and instead of encouraging the states to adopt stricter regulations...animal-rights lawyers are in the unfamiliar position of challenging state regulations as overly burdensome”. Accordingly, animal activists need to carefully avoid

adopting a position in meat labelling debates that would ultimately be detrimental to the animal movement as a whole or would damage the potential for animal activists to form alliances with other civil society groups concerned with the environment or other related issues that impact on the lives of animals (Evans and Johnson 2021; Gleckel and Colb 2020). This paper builds on these works by investigating how APs, and related promissory discourses regarding their potential to replace animal agriculture, are problematized in regulatory policy debates.

A related body of work, not directly focused on the interests on animals but rather on meat and animal flesh, critically examines the ontological and political debates regarding what APs are, and the fracturing consensus over what meat is (Jönsson 2016; Jönsson et al. 2019; Stephens 2010). This scholarship shows that APs are positioned, in an ontological and discursive sense, simultaneously as both meat and not meat, a material that is better than meat set to disrupt the meat industry and what it means to be meat. Our case study shows that this broader positioning of APs as better than meat can be successfully abandoned by AP proponents in regulatory policy discourses to appease legislators concerned with protecting animal agriculture. However, we also show that animal activists, who lack an economic interest in APs, maintain the notion that APs disrupt what meat is and that APs can be the solution to the issues with animal agriculture. This indicates a disjuncture between the goals of animal activists and the goals of the AP sector.

Politics of food labelling

Food labelling refers to all the tags, brands, marks, statements, representations, designs and descriptions on food and its packaging and made or displayed to consumers when it is sold (FAO 2022). The law has long required that front-of-pack food labelling accurately describe the nature and content of the food being sold. The law also requires certain “back of pack” safety and nutritional information (Codex Alimentarius 2022).

In contemporary times, however, food labelling is more than a way to convey basic information about a product. Rather, the food label is a small piece of “valuable real estate” in which are staked claims over the quality and provenance of each food and its implications for both the consumer and the whole food chain (Parker et al. 2019). Examples include the introduction of mandatory “interpretive” nutrition labelling, such as traffic lights, to grab consumer attention and “nudge” consumer choice (Mayes 2014; Scrinis and Parker 2016), and in some jurisdictions mandatory labelling of genetically modified foods or foods containing nanoparticles (Murray 2016). Food labels also typically incorporate a plethora of voluntary but widely utilized quality and credence claims, such as religious

certifications (halal or kosher), fair trade, fair labour, environmental, health, and animal welfare assurances (Goodman et al. 2010). Some such claims are supported by voluntary opt-in certification and logo schemes operated by government, industry or civil society bodies, while others are unverified marketing strategies devised by the food producers and retailers involved to respond to the perceived and actual concerns and desires of consumers.

The plethora of quality and credence claims on food labels has made them a significant site for political contest over the shape and nature of the food system (Clough 2015; Parker 2014). Public concern about the social, environmental, and ethical quality of food, and the way it is produced, frequently leads to contestation over what should be disclosed on food labels and how label claims should be regulated. For example, in Australia conservation activists and Zoos have engaged in a long running campaign asking government to mandate that food labels clearly identify the presence of palm oil, so that shoppers can avoid products implicated in the destruction of orangutan habitat for monocrop plantations in South East Asia (Zoos Victoria 2021). Similarly, animal advocates joined with consumer and environmental groups to call for mandatory labelling of cage, barn and free range eggs when they became frustrated with lack of progress on a government ban on battery cages (Carey et al. 2017). Scholarship on labeling regulation controversies has shown how these debates connect to deeper questions and conflicts involving diverging ideologies, differing understandings of credible evidence, and various visions for the future of food (Carey et al. 2017, 2020; Chuah et al. 2018; Herrick 2005; Klintman and Boström 2004; Todd et al. 2021; Withall et al. 2016). The Inquiry discussed in this paper demonstrates that in the same way, the descriptors used for, and environmental and health claims regarding, APs has become a channel for broader contestations over the future of meat.

Seeing the food label as a site of political contestation highlights the potential for food labels to act as governance mechanisms (Parker 2014). Because labelling claims invite consumers to express certain social values and ideals different from those perceived to be offered elsewhere in the market, they provide an opportunity for consumers to "vote with their fork" for certain food qualities and futures and against others (Miele and Evans 2010).

Accompanying marketing and political campaigns frequently propose that consumer choice, on the basis of label claims, is a mechanism for exerting political influence over the market to change production practices when consumers exercise choice over which goods to buy or not buy on the basis of qualities of the goods (Roff 2007; Shaw and Black 2010). There is some evidence that food labelling, and related certification schemes, can have beneficial outcomes for the environment and working conditions in

specific contexts (Dammert and Mohan 2015; Smith et al. 2019). Moreover stark, emotionally strong labelling logos and warnings (such as the black stop signs in Mexico, Peru and Chile) have been shown to change consumer behavior (Andrews et al. 2021).

Parker and colleagues' carried out extensive empirical studies of various animal welfare labelling claims on Australian animal agriculture practices. They found evidence of significant but small improvements in animal welfare for pigs, chickens and many layer hens across the whole market due to supermarket and consumer uptake of products labelled with various animal welfare assurances (Parker et al. 2020; Carey et al. 2017, 2020). However, Parker and colleagues also observe that these small incremental improvements enabled by animal welfare label claims do not have the capacity to create transformative change in the way animals are used in the industrial food system. As other scholars have also pointed out, food labelling reinforces individual consumption choices and individual ethical responsibility as the primary ways to govern the social and environmental aspects of food systems. But, this approach is unable to significantly alter the capitalist dynamics that incentivize unethical and unsustainable food systems (Evans and Miele 2017; Guthman 2007; Mayes 2014; Parker 2014; Parker et al. 2020). Rather, to change food systems, significant political and cultural changes are necessary.

The limitations of labelling and consumer choice as a regulatory approach to improving food systems are numerous. They include the difficulties of capturing accurately all the relevant social and environmental factors, and the relative weakness of individual consumers against the powerful commercial interests who control the limited information that can actually be shown on food labels (Bunge et al. 2021; Parker et al. 2020). Other limitations include the fact that labeling promotes niche market segments accessible only to consumers with educational and/or financial means (Horne 2009). Moreover, ethical consumerism is not necessarily a gateway to broader political engagement, and labelling as a governance mechanism may distract from other kinds of political action by reinforcing the apparent value of market-based governance (Bartley et al. 2015; Micheletti 2003; Parker et al. 2019). Our paper contributes to this literature by showing how food labelling has been problematized in the policy debate over APs in Australia, and the impact of this on the scope of regulatory interventions that can be contemplated as solutions.

Methods

This paper presents findings from a discourse analysis of the Senate inquiry, titled *Definitions of Meat and Other Animal Products* (the Inquiry). The Senate Rural and

Regional Affairs and Transport Legislation Committee called for the Inquiry on the 15th June 2021 and it resulted in the final report “Don’t mince words: definitions of meat and other animal products” (the Final Report) in February 2022. Senator Susan McDonald, a Senator for the State of Queensland at the Federal level, led the Inquiry. Senator McDonald is a former butcher shop owner and member of the National Party (Davis 2021). The National Party is the political party in Australia that has traditionally represented graziers (also termed ranchers), farmers and regional industries (Cockfield 2013, p. 197). At the time of the Inquiry, the National Party had formed a coalition government in Australia with the centre-right Liberal Party.

The Australian government presented the Inquiry as both an opportunity for the animal agriculture industry to present its case about the problems with the growing AP market globally and as a way to develop ideas about how the Australian food governance system should respond. The Inquiry’s terms of reference reflected this purpose being to investigate:

- “The potential impairment of Australian meat category brand investment from the appropriation of product labelling by manufactured plant-based or synthetic protein brands”;
- “The health implications of consuming heavily manufactured protein products...including...consideration of unnatural additives...and chemicals”;
- “The immediate long-term social and economic impacts of appropriation of the Australian meat branding” and
- “The implications for other Australian animal products impaired from appropriation of product labelling by manufactured plant-based or synthetic proteins”.

Senate Committees in Australia form part of the parliament. They conduct investigations to gather information and recommend legislation to the parliament. An inquiry of this nature provides significant and unique data about government discourses. Prior to this Inquiry, only US regulatory debates regarding APs provided enough data to critically analyze governmental relations and practices.

The research questions that this paper seeks to answer are:

- (1) What problems with alternative proteins, and related solutions, were represented in the Australian regulatory debates regarding alternative proteins?
- (2) What was left unproblematic from the problems and solutions that emerged regarding alternative proteins?
- (3) Which stakeholders benefited from these understandings of the problems with alternative proteins and whose interests were sidelined?

The methodology draws from Carol Bacchi’s (2016, 2009) Foucault-influenced post structural approach she names “What’s the Problem Presented to Be?” (WPR). Bacchi and Goodwin (2016, p. 16) say “the WPR approach starts from a simple idea: that what we propose to do about something indicates what we think needs to change and hence what we think the “problem” is”. This thinking is particularly suited to examining the discourses developed by and throughout the Inquiry, given the Inquiry’s stated focus on issues with APs and on finding regulatory solutions. The WPR approach is an analytical strategy that allows us to understand particular rationales and forms of knowledges shaping governmental policies and practices, and question their implications (Bacchi 2012, 2009; Bacchi and Goodwin 2016, p. 16). The data set for this research included the 226 submissions received (written responses to the terms of the inquiry submitted by stakeholders), transcripts from the six public hearings between 7 September and 7 December 2021 totaling 230 pages, and the Final Report.

The table below details the type and number of stakeholder groups that contributed to the Inquiry via submissions and as witnesses at the public hearings (see Table 1).

Besides Senator McDonald, the other members of the committee present at various hearings included:

- Malarndirri Barbara Anne McCarthy (Australian Labour Party) (7th September)
- Glenn Sterle (Australian Labor Party)
- Peter Whish-Wilson (Australian Greens)

Bacchi (2016, p. 1) describes the starting point of this analytical approach as “a close analysis of items that are “successful” in the sense that they make the political agenda, to see how representations of “problems” within selected policies limit what is talked about as possible or desirable, or as impossible and undesirable”. To initiate the process in this research, topical coding using NVivo software was used to generate categories based on identification of what key items were discussed, including reoccurring phrases. As the categories developed and explanations emerged, we used analytical coding to further understand which problem representations successfully gained prominence in the discussion and the policy solutions proposed, and the assumptions or “conceptual logics” underpinning these representations (Bacchi 2018, p. 5).

In the following section, we present the results of our analysis focused on four key problematizations raised in the Inquiry. These were: APs agenda to replace animals, unfair appropriation of the reputation of Australian meat, the deceptive nature of AP labelling, and APs misleading claims about the attributes of both meat and alternatives. We show how these were resolved in the Final Report in

Table 1 Stakeholder contributions to the Inquiry

Stakeholder group	No. of submissions	No. of public hearing witnesses
Animal agriculture		
Graziers, meat processors and feedlots	Ninety-five (95)	Twelve (12)
Industry groups representing meat, livestock, dairy, seafood or other animal products	Thirty (30)	Twenty-one (21)
Alternative protein industry		
Alternative protein companies	Thirteen (13)	Four (4)
Alternative protein industry groups	Four (4)	Two (2)
Other Food Industry		
Agricultural and food industry groups not directly related to animal agriculture	Eight (8)	Five (5)
General food processors and retailers	Five (5)	
Civil society and academia		
Animal activist groups	Eight (8)	Six (6)
Civil society other than animal activists	Five (5)	Two (2)
Academics ^a	Six (6)	
Other		
Federal, state and territory regulatory bodies	Five (5)	Five (5)
Individuals in their private capacity	Thirty-nine (39)	One (1)
Miscellaneous companies and individuals including confidential submissions	Eight (8)	

^aThis group means individuals associated with a university. Two of the authors of this paper were co-authors of one of these submissions

favor of food labelling regulation for consumer choice as the policy solution.

What are the “problems” with alternative proteins? How is food labelling the solution?

Replacement agenda

The terms of the Inquiry detailed in the previous section framed the problem with APs as their potential to harm the meat industry in a reputational sense as well as the potential health implications of APs replacing meat. However, government actors and animal agricultural representatives spent considerable time on a related but broader problem: the concern that the AP industry sought to replace animal agriculture. For instance, Senator McDonald asked questions of AP manufacturers and proponents regarding their plan to replace meat. In a question put to Impossible Inc about its company’s mission that mentions replacing animals, the Senator asked: “Your program would effectively seek to end the livelihoods of hundreds of thousands of Australian families who work within the livestock production supply chain. What would you say to that?” This representation of the problem stemmed from AP proponents discursively positioning APs as a replacement for animal agriculture as discussed in the Literature section; but, it is also connected to the increased scrutiny animal agriculture has been

subjected to over the last decade and the related calls for and initiatives to reduce the consumption of animal source foods. Hence, the Inquiry provided an opportunity to reassert the importance and legitimacy of animal agriculture generally by creating a space for actors to problematize the idea that animal source foods should be replaced. Accordingly, and as will be discussed further, this positioning of APs benefited the animal agricultural industry.

The understanding of the problem, that the AP industry plans to replace animal products, led to animal agricultural groups positioning the viability of switching grazing lands to cropping lands as low and constructing meat and other animal products as superior on nutritional and sustainability grounds. These comparisons left out other potential alternative land uses such as nature preserves (i.e. instead of using the land for farming, use the land for conservation) and left unproblematic the very significant contributions of animal agriculture to land clearing and biodiversity loss in Australia. Wilmot Cattle Co submitted: “Just 8% of this [Australian] landscape is suitable for the production of grains, largely through monocultures...whereas a much greater proportion is suited to grazing ruminants, which when managed correctly, actually contribute to an increase in biodiversity and overall ecological health” (Submission 175, p. 2). The discourses regarding nutritional and sustainability attributes are discussed in further depth later in this article.

Animal activists and some AP manufactures engaged with the Inquiry as if it were a response to the threat APs

posed to agriculture rather than an Inquiry into descriptors on labels and health implications. In doing so, they reproduced the discourses shaping APs as a threat to animal agriculture (see, e.g., Tara Ward, Animal Defenders Office, Public Hearing 17 September, p. 10). Among these groups, there was a tendency to frame APs as analogous to other technological developments that were disruptive like electric vehicles and mobile phones (Animal Defenders Office, Submission 135, p.6). Nick Hazell, from v2food, asked,

“What are they [the red meat sector] scared of? We believe the Senate inquiry has given the answer. The red meat sector doesn't want to call our product 'meat', because that would allow consumers to directly compare our version with theirs, and on some key consumer drivers like carbon footprint, sustainability, animal welfare and health outcomes there is work to do with animal meat” (Public Hearing 6th December, p. 27).

Most alternative protein supporters, however, positioned APs as neither a threat nor in competition. They spoke of an increasing global population and demand for protein suggesting that there was “plenty of room in the market” for both (Katie McRobert, Australian Farm Institute, Public Hearing 8 November) leading to a “complementary situation rather than a competitive or trade-off situation” (Michael Robertson, CSIRO, Public Hearing 6 December, p. 20). GrainCorp (Submission 124, p. 1), a leading grain storage and processing company, submitted “As the Alternative Protein industry in Australia continues to grow, we expect to see greater investment in regional communities as processing and manufacturing capabilities are established”.

An exchange between Senator McDonald and Thomas King from Food Frontier was particularly emblematic of this move away from positioning APs as a solution to, and critique of, animal agriculture and towards framing APs only as a politically neutral, market opportunity. Food Frontier is a key lobby group for APs in Australia. Senator McDonald asked about why Food Frontier's constitution states that one of its purposes is to “reduce animal suffering” and to “encourage consumers to reduce consumption of animal products” (Public Hearing 8 November, p. 58). King responded that,

“...We sought independent advice from a charities lawyer, who recommended listing all key potential societal benefits of our work...So the animal welfare mentioned was included, although, as ethics don't really inform the work that we do, I would say that it's very much incidental, not ancillary to our purpose. So we may consider making updates to that in the future” (Public Hearing 8 November, p. 58).

Senator McDonald questioned this explanation,

“Going back to the company's purposes, you've listed three, and encouraging consumers to reduce consumption of animal products is one of those three, so I think it would be difficult to suggest that it was a sideline. It is only for three purposes” (Public Hearing 8 November, p. 59).

King countered by distancing himself and Food Frontier from animal activism noting that,

“No, I don't have an anti-livestock agenda, and Food Frontier is not anti any industry. ...certainly in the case of Australia, we strongly believe that we can continue to enjoy success in long-established agriculture sectors while investing in, and benefiting from, new ones.” (p. 59).

Some AP proponents positioned the debate over whether APs should replace animals as a matter that consumer choice can and should decide rather than through public debate and regulator response. Tyler Jameson, from Impossible Foods Inc, explained “... Our company doesn't go out of our way to denigrate them [producers], necessarily. We're putting a product out on the market and letting consumers decide... We're not asking the Australian Senate for anything. We don't ask any of our legislators back here in the United States for help. We're just putting a product out on the market and letting the consumers decide” (Public Hearing 6 December 2021, p. 2).

Despite the initial framing of the Inquiry, the Final Report supported the truth claim that APs are not in competition with meat and dairy:

“The perception of competition between the traditional category of meat protein and manufactured plant-based protein was not borne out in consumption or consumer trends. It appears that the two categories are growing in size in line with a growing hungry world, and it is in Australia's interests to be a part of the growth of both sectors, utilising our reputation as a producer of high-quality produce, both animal and plant, and high standards.” (Final Report, p. vii)

Indeed, Recommendation 7 encouraged particular government agencies to “strengthen the plant-based protein product sector's capacity to source its products from Australia” and to “support investment opportunities” in Australia's plant-based APs sector (RRAT 2022, p. x). This discourse strongly benefits the AP sector while also sidelining the critiques of animal agriculture to the benefit of the animal agricultural industry.

As the following sections will show, the problem identified in the Final Report was the lack of a clear food labelling regulatory framework for AP. APs as such were not a problem due to their potential to benefit Australia economically.

Notably, though, similar encouragement and statements were not extended to cell-cultured meat in these debates, indicating that perhaps this type of AP was still seen as a threat to meat and dairy sectors.

Unfair appropriation

A supporting and overlapping problematization was that the use of meat and dairy terminology on APs unfairly leverages, appropriates and undermines the reputation of Australian meat and dairy products and sectors. “Fairness” and egalitarianism are values tied to Australian culture (Plage et al. 2017). As one submission put it “We need to level the playing field between these synthetic and plant-based products and real meat. As a committed beef producer all I want is a fair go for the product my family has produced for generations” (Ann Lewis, Submission 185, p. 1). The “unfairness” problem had two “conceptual logics” underlying it (Bacchi 2009, p. 5).

The first conceptual logic was a collective feeling of ownership over the words “meat” and “dairy” and related terminology. One submitter explained “Farmers have invested millions of dollars into the intellectual property of meat” (All Quotes Direct, Submission 54, p. 1). Another added that “To have all of these endeavors and the accumulated industry capital captured by misrepresentation of an alternative product, is a form of theft of identity... It goes beyond misrepresentation and is indeed a form of product theft” (Nick Burton, Submission 209, p. 1). In a technical legal sense, it is not possible to own terms such as “meat” and “dairy” due to their generic and prior use. Those resisting this characterization of the problem often mentioned this fact. The problematization of unfair appropriation of these terms however reflects a push towards further commodification in which “meat” and “dairy” terms are positioned as subject to ownership and able to be bought and sold.

The second conceptual basis for the unfair appropriation problematization centred on the different regulatory standards that apply to meat and dairy but not to APs. The mandatory payment of levies by producers of meat and dairy was framed as a key reason it was unfair for APs to use “meat” and “dairy” terms, as AP companies are not paying such fees. While the details differ in each animal industry sector, individual producers generally pay levies to the Federal Government that the government matches and then disperses to industry bodies for various uses including research and development. Some of these funds are directed towards marketing such as advertisements for e.g., “lamb” or “beef”. National Farmers’ Federation explained that these levies “...almost \$2 billion dollars over the past decade alone, has provided the red meat protein sector with an intrinsic sense of ownership of the language... The dairy and pork protein sectors also feel a similar sense of ownership...”

(Submission 103, p. 1). A government representative added “Plant based and synthetic protein manufacturers do not contribute to the...industry levies and should not benefit from, or piggyback on the funds used in marketing and insurance activities” (Luke Bowen, NT Department of Industry, Tourism and Trade, Public Hearing 7 September, p. 10).

This discourse regarding the levies and fairness left unproblematic the provision of government funds to benefit the animal agricultural industry in Australia, which support has been critiqued on various grounds (Sievert et al. 2022). These kinds of protectionist arguments are also at odds with Australia’s strong advocacy for liberalized agricultural markets internationally (Pritchard 2005). Yet, simultaneously, these kinds of protectionist statements reflect the extractivist colonial history in Australia that has led to a strong reliance by the Australian economy on natural resources rather than advanced industries like manufacturing (See e.g. Harcourt 2021). For Australia, economic specialization in extractivist industries, namely farming and mining, was a central process of British colonization; governments since colonization have prioritized the expansion of intensive farming as reflected in the levy system (Iles 2021; Larder 2021; Pritchard 2005). But, manufacturing, including of food, has not achieved the same scale, economic or cultural significance in Australia despite comparatively more recent efforts to promote it (OECD 2015).

Animal agriculture representatives also emphasized the food safety and related accreditation and other regulatory requirements for meat and dairy as another factor why it was unfair for APs to use “meat” and “dairy” terminology. AgForce Queensland put this point as,

“...To allow manufactured plant-based or synthetic protein brands to appropriate an existing brand, without having to compete in a similar regulatory environment or invest in the foundational quality assurance work underpinning that brand, is anticompetitive and unfair and needs to be fixed” (Submission 139, p. 3).

AP proponents did not directly contest these points other than to reiterate that AP products do not confuse consumers (discussed in the next sub-section) and may have economic benefits for rural Australia. AP proponents could have directly challenged the unfair appropriation problem representation by focusing on how the levies give meat and dairy a competitive advantage that AP companies do not receive or by identifying that food safety standards for meat and dairy are higher given the biophysical properties of the products, but did not do so.

The problem representation that alternative protein companies were unfairly appropriating meat and dairy terms was taken up by the Final Report through its recommendations regarding the need for mandatory labelling to support clarity for both sectors. The Final Report reiterated its support

for APs but found there was “inadequacy” in the “labelling and marketing practices of plant-based products, which are piggybacking upon the significant investment made by the animal protein sector to develop brand recognition by consumers” (RRAT 2022, p. 32). The Final Report also accepted that levies contributed to “a sense of ownership” over poultry, dairy, pork, red meat and seafood terminology (RRAT 2022, p. 66) leading to the suggestion that a similar levy scheme might be appropriate for the AP sector. This suggestion, that APs adopt a similar levy scheme to the meat industry, seems to suggest a similarity between the products and industries that neither the initial Inquiry nor the agricultural industry supported. Regardless, it is consistent with the report’s framing of APs as not in competition with animal agriculture. In this way, the Final Report was striking a difficult balance between its ultimate decision to support APs, despite the terms of the Inquiry being focused on problems with APs, and its decision to meet the demands of animal agricultural industries for mandatory labelling.

Deceptive labelling

The most commonly mentioned problem in the Inquiry was that AP manufacturers were intentionally making their products appear like meat and dairy in order to deceive consumers into purchasing APs instead of meat. This problematization, which was mostly put forward by animal agricultural representatives, was often presented as a matter of “truth in labelling”, which phrase was common across submissions and the public hearings (See e.g. Submissions 8, 23, 62). Christian Mulders, from Australian Lot Feeders’ Association, explained “...the terms “beef” or “meat” if used to describe products not derived from animal protein are simply not truth in labelling” (Public Hearing 16 September, p. 9). Evidence to support this problem was often personal accounts of individuals or family members accidentally purchasing AP products. One grazier wrote:

“I have unknowingly bought a product labelled as “chicken...” when in fact it contained no chicken at all. My point here is first the absence of truth in labelling and secondly the implicit intention to deceive” (Thing Pastoral Company, Submission 62, p. 1).

Whilst all consumers were positioned as at risk of being deceived, particular groups were identified as more vulnerable, including the elderly, non-English-speakers, busy parents and people with functional illiteracy (e.g. Submissions 54; 73; 79; 205; 138; 156; 162).

Proponents of APs did not contest the importance of “truth in labelling” to support consumer choice, but did counter the idea that consumers were being deceived. Rather, they argued, APs clearly differentiated themselves

from their conventional counterparts. Tony Green, the CEO of the Australian Food Service Advocacy Body, submitted that “Alternative protein products usually go to great lengths to identify themselves as “NOT” real meat which is part of their selling point and reason for being” (Submission 82, p. 3). A related counter was that consumers would be misled if meat and dairy terminology could not be used. Impossible Foods Inc submitted:

“If we were prohibited from using common food terms consumers understand, consumers will have a more difficult time understanding how to prepare our products when they take them home. Similarly, “pork” describes a specific sensory experience, and if we were to rename Impossible Pork Made from Plants to “Impossible White Protein Made From Plants,” consumers would wonder if it will taste like pork, chicken, turkey, etc” (Submission No. 25, p. 2).

AP proponents also reiterated the position the Australian Competition and Consumer Commission (ACCC) took throughout the Inquiry, which was that consumers were not being deceived. The ACCC reported that over the January 2020 to June 2021 period they received “a total of 17 contacts, or 0.003 per cent” of complaints about alternative protein product labels being misleading. At the public hearing, Mick Keogh, the ACCC’s Deputy Chair, noted that:

“...The majority of these were not from consumers who claimed to have been misled; ...the majority of those persons contacting us were obviously aware of the nature of the product and were querying the legality of the use of animal-related images or words...” (Public Hearing 6 December, p. 34).

The ACCC explained their reasoning behind why current labels were generally not misleading:

“...When you look at the totality of the representation in the current packaging...it doesn't create the overall impression that it's clearly a beef or chicken product. At most, it creates a sense of confusion, which the courts have found not to breach our act” (Rami Greiss, ACCC, Public Hearing 6 December, p. 35).

Animal agricultural representatives countered the ACCC evidence and its use by AP proponents by suggesting that consumers were confused but not reporting it to the ACCC. (See e.g. Patrick Hutchinson, Australian Meat Industry Council, Public Hearing 7 December, p. 20).

Animal activist groups aligned with the proponents of APs, arguing that deception was not a problem. Some animal activist groups and individuals co-opted the term “truth in labelling”, calling for stricter regulation of labelling across all products especially meat (see e.g. Submission 6, p. 2). Vegan Australia (Submission 169, p. 4) stated that they

support “the push by the Australian animal industries for ‘truth in labelling’” and called for “...mandatory labelling of animal products with text and images showing the horrific conditions under which the animal was bred, raised and killed”. Numerous individual submitters made broadly similar observations about the need for mandatory regulation to require more information across all food labels not just APs, and especially in relation to input use in meat production (e.g. Submission 1 p. 2; Submission 2, p. 3–4; Submission 5, p. 3; Submission 49, p. 2). This issue was ultimately left unproblematic in the Final Report.

Two solutions followed from this problem representation: either voluntary or mandatory prohibitions on the use of meat and dairy terminology and images on APs. Whilst AP proponents did not acknowledge a problem, they often supported the solution of the industry having “voluntary guidelines and polic[ing] itself”, consistent with their position of no state intervention being required (Nick Hazell, Public Hearing 6 December, p. 32).

Animal agricultural groups positioned voluntary labelling guidelines as inadequate and unlikely to be complied with. Markus Rathsmann, from the Cattle Council of Australia, explained “Everybody who runs a business knows that voluntary standards don't work and are rarely respected” (Public Hearing 16 September, p. 1). Senator McDonald stated “... in a perfect world voluntary is great, but the reason why we live in a society with rules is because not everybody always follows them” (Public Hearing 8 November, p. 36). The position adopted here by politicians and animal agricultural industry is contradictory with the significant role voluntary guidelines generally play in the regulation of food and agriculture in Australia including, for instance, the Australian Beef Sustainability Framework, which was commonly mentioned to support claims that animal agriculture was sustainable. The support for mandatory food labelling regulations, as opposed to voluntary schemes, was justified by reference to a distrust of AP companies “I can't imagine they would come to the table in good faith in a voluntary scheme” (Paul da Silva, Arcadian organic and Natural Meat Company Pty Ltd, Public Hearing 8 November, p. 52).

The Final Report recommended the introduction of a mandatory regulatory framework for the labelling of AP products in consumer law, food standards or both. Accordingly, the problematization that AP labels were deceptive, mostly deployed by animal agricultural groups, was taken up as “truth” in government discourse to the benefit of the industry. To support the existence of this problem despite the lack of evidence from consumer reports, the Final Report adopted the view that consumers are confused but were not reporting incidents of unintentionally purchasing APs. The grounds for this finding were “demonstrated by the numerous reports of consumer confusion throughout the inquiry” (RRAT 2022, p. 32). Notably, the reports of

consumer confusion in the Inquiry originated from producers or individuals with connections to the agricultural industry. No consumer body provided a submission other than the federal consumer protection regulator, the ACCC, whose evidence the Final Report expressly did not accept (RRAT 2022, p. 33).

At the same time as adopting this problematization of APs as exploiting consumer confusion, the Final Report also found that APs were not a threat but an economic opportunity (as discussed in the previous section). Hence, it had to balance its support for APs with its finding that AP labels were causing confusion and needed to be regulated. At times, this led to the Final Report positioning the problem not as consumer confusion but as a lack of labelling regulation. The Chair's foreword to the Final Report reflected this attempt to strike a balance with the observation that:

“While it appears most plant-based protein product manufacturers use clear labelling and terms, such as “plant-based burger”, there are no labelling standards to ensure that animal terms or images are not used on plant-based protein product packaging...” (p. vii)

In this statement, the Chair of the Inquiry moves away from the framing of AP developers and AP labels as causing consumer confusion or exploiting the meat brand, and instead positions as the problem the lack of labelling laws. This lacks alignment with the finding that AP labels are causing confusion significant enough to warrant regulatory responses as detailed in the Final Report.

Misleading claims about qualities

The final problem representation that emerged from the discourse was that AP labels and related marketing were misleading consumers into thinking APs had the same or better nutrition, sustainability and animal welfare attributes as meat and dairy. Whilst the previous problem was about the nature of the product, this problem representation was about the qualities or attributes of the product.

Nutrition

The nutritional attributes of APs were among the issues the Inquiry was designed to investigate with the terms of the Inquiry seeking consideration of “unnatural additives... and chemicals” used in APs. The health issues associated with the over-consumption of ultra-processed food, and the lack of regulation of ultra-processed food, is a key issue in public health nutrition scholarship and advocacy (Monteiro et al. 2018). Research has explored how corporations producing ultra-processed foods have enabled and exploited a reductionist understanding of nutrition focused on individual nutrients and calories rather than the whole food and dietary

trends; this in turn has led to a lack of political support for, and regulatory action on, addressing the over-consumption of ultra-processed foods (Baker and Friel 2016; Scrinis 2020). The Inquiry was one of the few times in which Australian regulators have considered ultra-processed foods as a potential problem requiring a governmental response, albeit only in relation to APs.

Animal agricultural groups problematized the nutritional qualities of APs by focusing on their ultra-processed nature and making references to, broadly, the increasingly established link between over-consumption of ultra-processed food and non-communicable diseases (See, e.g., Elizabeth et al. 2020). They positioned meat and dairy as nutritionally superior on the basis that meat and dairy can be consumed as a whole or minimally processed food whereas APs “are highly processed with high levels of unnatural ingredients and are nowhere [as] nutrient dense as the real thing” (HRG Sullivan Pastoral Company, Submission 100, p. 2). This problem representation, i.e. that APs were a problem because they are ultra-processed, overlooked how animal products are often used in the production of ultra-processed food, as observed by the Animal Justice Party (Submission 160, p. 14).

AP proponents commonly claimed that diets high in red and processed meat are a risk factor for non-communicable disease (IARC 2018). However this does not directly resolve the potential nutritional problems posed by APs, as ultra-processed foods, replacing the consumption of whole foods further. Regardless, problematizing red and processed meat consumption does bring into the scope of potential problems for regulators to address an issue that has not yet gained traction in Australian, and broader, regulatory and political discourses (Sievert et al. 2020). The Final Report did acknowledge the “potential adverse health impacts of processed meats”, but did not engage with this problem further to the benefit of the animal agricultural industry (RRAT 2022, p. 82).

Stakeholders who sold food using additives, including large amounts of ultra-processed foods, did contest the discourse that individual food additives were unhealthy, but remained silent about whether ultra-processed foods as a food category are in general less healthy than whole foods. They focused on the fact that additives used in ultra-processed food had been deemed safe by food regulators. The Australian Food and Grocery Council submitted “The Senate Inquiry has given voice to the worst excesses of ill-founded, reckless and mischievous commentary about food manufacturing and the food regulatory system” (Submission 109, p. 4). It benefited these groups in particular for problematizations of the ultra-processed nature of APs to be side-lined.

Finally, some AP companies and food manufacturers sought to highlight how their products were nutritionally comparable to meat (Nestle, Submission 119, p. 4; Sanitarium Health Food Company, Submission 113, p. 3). The Food Frontier presented findings from its study that compared the nutritional profile of APs available in the Australian and New Zealand market to their processed meat counterparts (bacon, sausages etc.) (Submission 159, p. 6). It found that APs had a “comparable or superior” nutritional profile (Food Frontier 2020, p. 39). A peer-review study, also cited by proponents of APs, similarly found AP options were lower in kilojoules and saturated fat and higher in fibre compared to meat, but only 4% of the 137 products surveyed were low in sodium, and 24% were fortified with additional vitamins (Curtain and Grafenauer 2019).

The Final Report broadly summarised the debate over whether APs were a nutritional equivalent and identified the need for further research on health implications of *both* animal products and APs (RRAT 2022, pp. 77–84). Ultimately, though, the Final Report recommended introducing mandatory compositional standards for APs (e.g., requirements for vitamin and mineral fortification). The solution put forward did not, therefore, address meat or ultra-processed food consumption, or seek to develop further discussion about the various regulatory interventions that could enable a reduction in the consumption of these products. This was to the benefit of the food and animal agricultural industries.

The recommendation for mandating fortification seems like a win for animal agricultural groups given their position that APs are not as healthy as meat and dairy. Yet, mandating fortification will significantly benefit APs. Many APs are already fortified with various nutrients (Lacy-Nichols et al. 2020). Further fortification will allow APs to make health claims such as “high in iron” that will signal to broader society that APs are healthy and a legitimate food choice alongside meat and dairy (Johnson and Parker 2022). The way food marketing focuses on the individual nutrients in products and remains silent about the less healthy characteristics of the food, misleads consumers into thinking the product is overall healthy. This phenomenon is referred to as the “health halo effect” (Fernan et al. 2018). The focus on mandatory fortification by the Final Report leaves out any problems with the health of either animal agricultural products or ultra-processed foods in general.

Sustainability

Proponents discursively position APs as more sustainable than meat and dairy (Sexton et al. 2019), which contains an implicit critique of the environmental impact of animal agriculture. Throughout the Senate Inquiry, animal agricultural groups represented the sustainability claims regarding APs as a problem on the grounds that meat and dairy were also

sustainable and that AP environmental claims lacked a verification system. Troy Setter, CEO of Consolidated Pastoral Company, explained:

“They’ll take our great brand reputation, our consumer trust, and then say, ‘We’re better because we have less of an environmental impact,’ and that is just a blanket statement rather than the facts and science around emissions. Livestock have reduced emissions by 50 per cent already and are on track to be [carbon] neutral by 2030” (Public Hearing 8 November, p. 43).

As part of this resistance to mainstream environmental concerns about animal agriculture, animal agricultural groups emphasised various industry-set voluntary targets to reduce emissions and improve other environmental outcomes.

A significant contributor to emissions reduction from animal agriculture in Australia has been the introduction, or scaling-up of, laws to restrict land clearing, despite strong industry resistance from animal agricultural industries to these laws (See, eg, Howard 2020). Meanwhile, the continuing, significant and adverse impact of animal agriculture on Australian landscapes is well-documented (DCCEEW 2021). Existing approaches to improving animal agriculture include technological innovations (such as new types of animal feed) and market-based schemes, which have both been thoroughly critiqued for lacking potential to significantly improve sustainability (Deane 2022; McGregor et al. 2021). The weaknesses in the current regulatory response to the environmental impact of animal agriculture was problematised by the Inquiry; rather, the existing industry was, as discussed, upheld as sustainable.

Another basis for the sustainability claims by animal agricultural groups was the fact that Australia has predominantly grass-fed cows for beef, which helps with carbon emission reductions on-farms through off-setting and feed (e.g. NAPCO, Submission 181; Golden Grazing, Submission 74; Somerset Trading, Submission 98). This discourse regarding the high sustainability of meat and dairy production overlapped with the claims by animal agricultural groups that converting grazing lands to cropping lands to produce APs would be environmentally harmful:

“We would need to clear more land to produce the protein crops and the native flora and fauna etc that we have on our property now would have nowhere to live. We pride ourselves on our biodiversity and feel that untruthful claims by manufactured product companies to be a threat to our native flora and fauna” (BTD Pastoral, Submission 102, p. 2).

Australian animal agriculture has increasingly moved away from grazing and towards feedlots with 40% of Australia’s total beef supply and 80% of its domestic beef production coming from cattle finished off in feedlots after living on

pastures (FutureBeef 2022). This was not problematized in the discourse nor raised as a limitation to sustainability claims by animal agriculture.

Resisting discourses problematized the sustainability issues with animal agriculture, namely its resource intensive nature and emissions. The idea that APs were more sustainable was generally stated in broad terms or merely implied through statements that consumers were looking for sustainable alternatives. The George Institute for Global Health provided one of the most specific statements about the sustainability benefits of APs: “In comparison to meat products, manufactured plant-based or synthetic protein products are better for the planet—requiring less land and water and producing fewer greenhouse gas emissions.” (Submission 29, p. 6). Direct engagement with the problem of unverified sustainability claims was absent from resisting discourses. Australian food law, however, largely does not regulate sustainability claims on any products other than through consumer complaints to the ACCC (Johnson and Parker 2022).

The Final Report also summarised the concerns about unverified sustainability claims, but it did not engage with this matter further (RRAT 2022, pp. 84–86). This meant that the broader sustainability debate that pits APs against animal agriculture was overlooked as were potential avenues to improve the sustainability of consumption choices more generally. Moreover, the sustainability claims of animal agriculture went unscrutinised. The Australian Greens, in its rebuttal to the Inquiry, advocated for “sustainability labelling requirements, or a similar consumer education tool on fresh and packaged foods” (RRAT 2022, pp. 100–101). The lack of engagement with the regulation of sustainability claims ultimately benefits both animal agriculture and APs, as it leaves it to the industries to determine what environmental impacts they will draw attention to and how they will evidence these claims.

Animal interests

Animal interests did not feature in any of the dominant problematizations about APs. Instead, animal agricultural representatives provided brief and broad statements about how they had good animal welfare practices on-farms (Miriam Blythe, Public Hearing 6 December, pp. 16–17; Australian Pork Limited, Submission 129, p. 3). Only animal activist groups focused on the potential benefits of APs for animals, which they emphasised alongside benefits for health and sustainability.

The Final Report reflected the marginalised role animal interests had in discussions about the benefits of APs. It stated that “animal welfare concerns” were not a “central matter considered” (RRAT 2022, p. 86). Ultimately, the lack of attention to animal interests from the Inquiry benefited

animal agricultural groups, who arguably would struggle to contest claims that their products provide more animal welfare than APs. The limited attention for animal interests revealed that advancing the interests of animals was not a priority of government, the animal agricultural industry or even the AP industry.

Whilst animal activists problematized the treatment of animals on-farm, the solution they offered was to enable consumers to choose APs. Generally, animal activists advocate for state-intervention in markets to better advance animal interests to counter market signals favouring high productivity and low animal welfare. Animal-oriented scholarship has consistently critiqued how industrial, capitalist food systems have enabled mass animal suffering and illustrate the limitations of market-based responses, such as animal welfare labelling, to advance animal interests (Carey et al. 2020; Miele et al. 2005; Schicktanz 2006). In the AP debate, however, animal activists argued for free choice through the markets, revealing, to an extent, an ideological switch and conceptual logic that APs offered a technological and market-based pathway to animal liberation. This hope for APs in regards to animal interests was not reflected in the discourses deployed by any other participants in the process including AP developers. As discussed, AP proponents, and ultimately the Final Report, accepted the claim that APs were not in competition with animal agriculture, and so would not reduce demand for animal agricultural products.

Discussion

In this section, we detail three key implications from the dominant problematization and related regulatory solution that emerged from the Inquiry. The first concerns the ways in which food systems issues and solutions were constructed. The second relates to the impact of these constructions on the interests of animals. The third concerns the way food labelling was positioned as the solution in a way that shifted the problematization away from the full range of significant problems with both animal and AP foods and towards a narrower, more tractable concern with clarity for consumer choice.

Considering first the ways in which food systems problems and solutions were constructed (Research Question 1 above), the Inquiry initially targeted the “problem representation” (Bacchi 2009) of APs posing a threat to animal agriculture and to the health of Australians. However, the Final Report solely represented the problem to be the lack of “labelling standards to ensure that animal terms or images are not used on plant-based protein product packaging” (RRAT 2022, p. vii). This production and reshaping of the “problem” in the discourses allowed the regulators to frame state intervention as a way to ensure “consumer clarity”

rather than protection of one industry against another. It also reveals concomitant knowledges about the future of the food system itself, such as the necessity of intensive animal agriculture expanding.

Turning next to what was left unproblematic (Research Question 2), the problem and solution that emerged from the policy debate avoided opening up space to a range of alternative problematizations (Bacchi and Goodwin 2016, p. 83) related to the ethical, environmental, health, social and economic dimensions of both animal agriculture and APs. Such considerations are otherwise relevant to discussions over the role of APs in the future of food. Other possible problems that could have emerged from this Inquiry requiring regulation included the contributions of both sectors to ultra-processed food consumption, to intensive farming practices focused on a few animal or plant varieties with high input use, and to corporate consolidation in food systems. The Final Report expressly removed other understandings of the problems as not necessary to be addressed: “What is missing is clarity for the consumer. While industry sectors will argue the relative benefits of one over another by nutrition, sustainability and environmental standards, the consumer is not benefited if the labelling does not clearly define which category the product belongs to” (RRAT 2022, p. vii).

The conceptual logics underpinning this specific problem representation reflect a neoliberal logic focused on prioritizing free markets. This narrow understanding of the problem (i.e. consumer confusion), and the solution (i.e. food labels) that emerged from the Inquiry benefited not only opponents of APs but also the AP sector, however animals and animal advocates along with those food activists representing the other missing problematisations were sidelined (Research Question 3).

Turning to the implications for animals in particular, the findings of this paper illustrate an obvious division between the AP sector and animal activists when it comes to goals and visions for the future of human-animal relationships. Throughout the Inquiry, animal activists constructed APs as something that could significantly reduce demand for meat and lead to a decline in intensive animal agriculture consistent with the promissory narratives deployed by the AP sector and used to attract civil society, consumer and investor support. During the Inquiry, AP sector representatives moved away from reproducing this knowledge and instead emphasized a world protein shortage and relatedly non-competition. The production of protein shortage as a problem, with increased protein production as the solution, in policy discourse regarding food systems has been recently observed in the literature (Guthman et al. 2022; IPES 2022). Our findings illustrate how the “protein shortage” problem influences regulation. In this instance, the construction of a world protein shortage, taken up as truth in the Final Report, allowed regulators and AP proponents to uncritically accept

that intensive animal agriculture would, and should, expand alongside the new AP sector to produce enough protein to solve the world protein shortage. Because of the important role assigned to AP in resolving the protein shortage, and the related economic benefits of meeting rising demand for protein, regulatory scrutiny regarding APs did not need to go further than the label.

However, unless APs replace current or future demand for meat and dairy with a less resource-intensive and animal-free product, the promissory narratives cannot be realized. This is important as these promissory narratives, detailed in the Literature section, have not only had a significant role in driving uptake and development of APs, but they have also sent a political message to the public regarding how markets and technologies can transform food systems without regulatory intervention or other forms of activism. If the AP sector is to expand alongside intensive animal agriculture, as discursively constructed throughout the Inquiry, it would only add to the environmental impact of food systems by creating another product that involves energy intensive processing, long cold-storage supply chains and waste. The shift in discourse by AP sector from transformation to non-competition means that animal advocacy groups are at risk of providing legitimacy and support for a sector that is not only increasingly positioning the continuation and expansion of intensive animal agriculture as desirable but is also the subject of significant investment by large meat processing firms. Alternative problematizations, deployed by animal advocacy groups and other food systems activists, could have emphasized different solutions aimed more squarely at reducing and transforming animal agriculture (consistent with the promissory narrative of transformation promoted by APs). These include the promotion of herd limits or meat taxes and procurement policies that reduce meat and increase consumption of whole fruits and vegetables (rather than promoting ultra-processed foods).

Overall, our analysis highlights the role that problematizing labelling plays in displacing conflict. By positioning the label (and labelling laws) as the problem, actors resolve, in the short-term, political tension by narrowing the scope of potential regulatory policy action away from addressing multiple substantive concerns with the food system connected to its embeddedness in the capitalist system. When the problem relates to the label, the issue to address becomes a much narrower, more tractable issue consistent with consumer choice in a market-based governance system and related dominant ideologies. Problematizing labelling thereby avoids more intractable problems and transformative solutions and supports moving forwards to a policy solution (labelling reform) that resolves the (narrowly defined) problem, while avoiding deeper cultural and ideological conflicts over the future of the food system. This shifting of the problematization—from the future of animal agriculture and the

potential of alternative protein to displace and replace it—secures political acceptability for the continuation of, what is arguably, significant problems in regard to both foods.

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