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Nested relationships and the spatially distanced consumer in alternative pet food movements

Carly Baker[1]

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Abstract

Marketing 'sustainable and humane' super-premium dog kibble emerged alongside alternative food movements interested in sustainability, transparency, and welfare. To demonstrate the trends and implications of the alternative pet food movement, I selected Open Farm for a case study. Open Farm was the first certified humane and sustainable dog food on the market with a 'transparent' supply chain. Through interviews, autoethnography, and semiotic analysis, I demonstrate that certification represents a series of nested relationships in the dog food supply chain, from the dog through to the non-humans used as ingredients. With the transparency tool, these relationships are commodified to increase the exchange value of the product. The added premium is meant to signal an intimate and improved food system, but I argue that the certification and representation of these specific relationships obscures the industrial scale of alternative pet foods and the consequential impact for humans and nonhumans within food systems. This research contributes to food and animal geographies by applying alternative food literature to the alternative pet food industry, and by researching a novel intersection in pet-farmed animal-human relationships: the pet store.

Keywords Certified humane · Dog food · Commodification · Alternative food · Re-semioticization · Pet store

Abbreviations

APFN	Alternative pet food network
AFN	Alternative food network
ABP	Animal by-products
AAFCO	American Association of Feed Control Officials
FAO	Food and Agriculture Orgnanization
GAP	Global Animal Partnership

Introduction

Pet food deserves more attention in geography and the social sciences. In 2015, Jen Wrye pointed out that "pets and their food aren't typical objects of critical analysis" despite the industry being "enormously profitable" (2015, 102). There are roughly 85 million dogs in the United States and their human companions spent $64.6 billion on their food and treats in 2023 (American Veterinary Medical Association 2022; American Pet Products Association 2024). This number is increasing alongside changing socio-economic status of pet owners and evolving human-pet relationships. This paper contributes the social sciences and critical food studies by analyzing humane certification in the context of a premium pet food, Open Farm, and their supplier, Atkins Ranch. It builds on animal geographies to highlight the dog as key actor in multispecies food supply relationships.

In the past two decades, concerns about pet food safety, sustainability, and animal welfare, led to the development of premium pet foods and alternative pet food networks (APFN). Premium dog foods are defined as foods that have meat as the first ingredient. Often, they are marketed as containing higher quality protein or human-grade animal flesh instead of animal by-products (ABP); however, high-quality protein has a significant environmental impact and does not necessarily result in humane handling (Alexander et al. 2020; Nestle 2008; Okin 2017; Stanescu 2010).

A 'super'-premium pet food brand, Open Farm, aims to address that issue. In this article, I explore the marketing of their 'lamb'-based kibble and their sheep supplier, Atkins Ranch, based on their websites and product packaging.

✉ Carly Baker
bakercr1@cardiff.ac.uk

[1] School of Geography and Planning, Cardiff University, Glamorgan Building, Wales, Cardiff CF10 3WT, UK

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Open Farm was the first pet food company to source their animal-based ingredients from farms that abide by the guidelines established by Certified Humane or Global Animal Partnership (GAP) organizations. Additionally, Open Farm was one of the first companies to offer a transparency tool, which generates a list of ingredients and their region of origin from the lot number. They are a trend-setting company that moved into the niche alternative protein market early. As such, I focus on their brand, not to critique the brand individually but to discuss the ethical and environmental impacts of pet food marketing. I situate this case study in Seattle, Washington, where I conducted interviews and autoethnography to supplement a semiotic analysis of Open Farm and Atkins Ranch marketing.

Open Farm kibble is one of the highest-priced dry foods in the US market, costing up to four times the cost of traditional dog foods. While premium dog food makes up a sizable portion of the $65 billion pet food and treat industry (American Pet Products Association 2024), Open Farm markets their transparency tool and humane certification as setting them apart from other brands in the industry. In this article, I argue that this certification is a sign for a series of nested relationships in the dog food supply chain, from the dog consuming the food through to the nonhumans used as ingredients. These relationships can be traced with the transparency tool, creating various points in the supply chain where the pet owner can engage with the spaces of production that seek to address sustainability, nutritional, and welfare concerns, which I outline further below. Like alternative food networks (AFNs) narratives, Open Farm aims to expose these relationships as a signifier that humane certification is indeed humane because of the intimate and 'meaningful' nature of them. Narratives and certification work in tandem to reinforce one another through the process of re-semioticization, which both simplifies the spaces of production and increases the exchange value of the food (Goodman 2004; Scollon 2008; Watts et al. 2018). The added premium is meant to signal an improved food system, but I argue that the certification and representation of these *specific* relationships obscures the industrial scale of alternative pet foods, ongoing colonialism, and the consequential impact for humans and nonhumans within food systems.

I situate my findings in debates within the pet food industry, critical food geographies, and animal geographies. I expand current understandings of food systems, certifications, and consumption patterns by analyzing how companies interpret and convey pet food as solutions to pressing environmental and ethical concerns. Importantly, I will discuss how marketing 'shows' the consumer various spaces of production, including the high-end pet store which scholars of critical human or animal geographies have not yet studied. I highlight the importance and commodification of multispecies relationships in the marketing and sale of the products, including the importance of the dog. Marketing is directed towards humans, but the dog is a primary consumer of the product and therefore creates space for the product to exist. I begin the article summarizing the contestations in the pet food industry that led to alternative pet food networks (APFNs). I then contextualize my argument within geographical literature on AFNs and certification. Prior to my results, I describe my methodological approach, where I discuss re-semioticization (Scollon 2008). I combined multimodal social semiotics and discourse analysis to analyze the data from website analysis, interviews, and autoethnography. Then, I demonstrate how marketing mobilizes each relationship as meaningful or intimate to produce value: pet and pet owner, pet owner and pet store, pet store and brand, brand to the farmer, and the farmer to their land and animals. I conclude with remarks on the significance of (mis) represented spaces of production.

Pets and alternative food networks in geography

Dog food is a critical space for further research. The pet food industry is adopting key discursive and material characteristics of alternative food networks: natural or quality ingredients, transparent production processes, sustainability, and improved relationships, particularly around animal agriculture (Forssell and Lankoski 2015). The animal agriculture industry and the pet food industry are deeply entangled. They rely on one another for profits: animal agriculture must sell by-products to stay profitable and pet food companies need affordable protein for their products (Baker 2023; Pachirat 2013). I begin the literature review by discussing the consequences of meat being a primary ingredient in dog food. I bring literature from veterinary and consumer research due to the limited research in the critical social sciences on pet food. I then review the AFN literature in human geography to contextualize these changes and how they led to the development of APFNs.

The economic and environmental impact of pet food

Several factors led to the market development of certified dog food. First, pet owners prioritize the wellbeing of their pet when selecting dog food (Conway and Saker 2018). Most consumers are focused on prevention of ailments and elect a diet based on the perceived healthiness of it (Kwak and Cha 2021; Rombach and Dean 2021). Hobbs and Shanoyan (2018) demonstrated by analyzing 8,301 reviews of two market leading dog foods that 'ingredient' was the most

cited word, suggesting that healthiness is directly linked to ingredients.

Second, pet owners purchasing premium pet foods disapprove of unknown ingredient origins and ambiguous label claims (Nestle 2008). There was a significant increase of premium pet food brands in the early 2000's after mass recalls mainstream dog food in the United States caused thousands of pet illnesses (Nestle 2008). The Food and Drug Administration (FDA) was slow to pull the pet food off the shelves and to determine the cause of the illnesses, which was linked back to melamine-laced protein from China (Nestle 2008). The lack of immediate action and number of pet deaths led many pet owners to become highly skeptical of market-leading mainstream brands and unknown origin of ingredients (Nestle 2008). Premium and specialty pet food sales increased as much as 90%, while conventional sales dropped 30% (Nestle 2008).

Third, pet owners – especially vegetarians – are increasingly concerned with animal welfare (Rothgerber 2013). The use of animal products in pet food also creates an impasse for pet owners – especially vegans or vegetarians – who experience guilt about feeding animals to their pets but still feel that it is necessary for their wellbeing (Baker 2023; Pirsich and Theuvsen 2017; Rothgerber 2013; Wrye 2015). Pet-owners are more willing to pay for animal welfare friendly ingredients, resulting in a market niche for certified foods (Pirsich and Theuvsen 2017; Pearce et al. 2023).

Finally, pets contribute to the social and environmental impacts of animal agriculture. A study by Okin (2017) showed that pets eat 25–30% of the animal-based calories produced in the US. If this study is accurate, Okin argues that pets are responsible for 25–30% of land use, freshwater consumption, fossil fuel use, phosphate and biocides contamination, and green-house gas (GHG) emissions resulting from animal agriculture (Okin 2017). Another study estimated that 13.5% of wild-caught forage fish is used for pet food (De Silva and Turchini 2008). Since then, there have been studies that suggest this is an overestimation (Alexander et al. 2020; Leenstra et al. 2018; Martens et al. 2019; Su and Martens 2018). Regardless of the accuracy, Okin's report became an attention-catcher and is referenced in many pet industry documents (OmniPet 2024; PSC 2021; Wild Earth 2024). Actors in the pet food industry use Okin's report to both encourage behavior change and stimulate profits from their 'solution' to the problem.

Existing research on the development of APFNs focuses on behavior change and consumer attitudes towards premium pet food as well as implications for marketing (Conway and Saker 2018; Hobbs and Shanoyan 2018; Kwak and Cha 2021; Rombach and Dean 2021). There is limited literature on owner perceptions of pet food ethics and humane certification of meat (Nestle 2008; Pearce et al. 2023; Pirsich and Theuvsen 2017; Rothgerber 2013). However, few scholars have taken a critical lens to the ethical and ecological implications of marketing premium pet food to meet the changing demands of the consumer (Baker 2023; Wrye 2015). This article fills that gap by critically analyzing how brands market to the consumers concerned about the ethical implications of pet food, including the safety and wellbeing of their own pet, by emphasizing intimate relationships; *and* how marketing is a misrepresentation of what large-scale APFNs are offering.

Certification and relationships in alternative food networks

AFNs and their (mis)representations are well-studied in geography. AFNs for human consumption developed with increased consumer awareness of industrial food systems crises, such as labor conditions, food safety, poor animal welfare, and environmental destruction to name a few (Galt 2017; Goodman 2004; Jackson et al. 2009; Mutersbaugh 2005). While there are benefits to AFNs (Blokhuis et al. 2010; Galt 2017; Melo and Wolf 2005; Misleh 2022; Seymour and Connelly 2022), they have been critiqued as a neoliberal 'band aid' for broken food systems (Alkon 2008; Guthman 2006); reinforcing classism, sexism, and racism through whiteness (Alkon and McCullen 2011; Goodman 2004; Slocum 2007) and nationalism (Andersson and Smith 2021; Hanser 2013; Stanescu 2013a, 2019); and still enacting violence on marginal groups, human and nonhuman (Belcourt 2014; Cole 2011; Cusworth et al. 2022; Gillespie 2011; Stanescu 2013a, 2019).

Certifications began as part of AFNs with the goal of improving animal welfare, conservation, and working conditions. Like AFNs generally, humane certification has had some achievements and benefits for humans and nonhumans (Blokhuis et al. 2010; Bruckner et al. 2019; Galt 2017; Melo and Wolf 2005; Shreck et al. 2006). They have also faced similar critiques with compliance (Friedrich 2015; Veissier et al. 2021) and continued exploitation of beings in the supply chain (Baker 2023; Buller and Roe 2012; Cole 2011; Jaffee and Howard 2010; Stanescu 2019).

Consumers can identify certified products with the seal on the package, which companies obtain through third-party evaluations. As Tad Mutersbaugh argues in his work on fair-trade coffee, the seal does not necessarily represent quality or the intrinsic qualities of the product, but rather the extrinsic qualities of the processes and spaces of production (2005). However, the seal is the only thing that represents the "goodness" of the brand's practices because consumers cannot see the spaces of production (Mutersbaugh 2005). As such, the company and certifications must 'show' the consumer that the seal has meaning (Cook and Crang 1996;

Watts et al. 2005). Trust is established through narrative and visual representation of farmers, animals, and technology (Cole 2011; Gillespie 2011; Miele 2011; Stanescu 2019; Watts et al. 2018). In other words, certification is a sign that relies on the construction of knowledge – or the images and narratives – to function as intended (Rose 2023).

Linguist Scollon (2008) calls this re-semioticization, or the simplification of processes and narratives into a symbol. His study on organic rice demonstrated that the word organic encapsulated "an extended historical itinerary of action, practice, narrative, authorization, … and reification" across a wide variety of time, actors, and scales (Scollon 2008, p. 233). The process of re-semioticization begins with farmers raising animals humanely and consistently over time (Goodman 2004; Scollon 2008; Watts et al. 2018). The farmers create a descriptive and historical narrative about their practices to back up their claim, which becomes a key element in determining whether they are truly humane (Goodman 2004; Scollon 2008; Watts et al. 2018). A third party then legitimizes the narrative "which anticipates predictable and unchanged continuation of practice" and certification happens (Scollon 2008, p. 242). Therefore, if a product carries the certification, it 'promises' ethical relationships with other humans, the land, and nonhumans as represented in the narrative and images. It is the sign and the meaning it holds – as well as the means of production – that add value to the product.

However, the re-semioticization of production sometimes misrepresents material practices. Transparency and representations offer a curated image, or rather, the consumers see only part of the complex supply chain (Cook and Crang 1996; Dutkiewicz 2018). Individual trans-specific and affective relationships are centered to add value while more uncomfortable processes might be left out or obscured (Cudworth 2015; Dutkiewicz 2018; Gillespie 2014; Mc Loughlin et al. 2024; Pachirat 2013). This necessitates spatial distance in the human-farmed animal-pet relationship (Cook and Crang 1996; Cook et al. 1998; Gillespie 2011; Watts et al. 2018). The value derived from these relationships relies on the consumer's limited knowledge of the standards and regulations, as well as distance from the material processes (Cook and Crang 1996; Watts et al. 2005). While research has shown that consumer-producer-animal relationships are more nuanced and care-full on farms and in supply chains (Baker 2023; Bruckner et al. 2019), this article applies literature on representation to APFNs. To my knowledge at the time of writing, it is rare that scholars study if and how the critiques and benefits of AFNs apply to APFNs; nor has anyone researched the semiotics of humane certified pet food.

Methods

Semiotics and textual analysis

This is a case study of Open Farm certified dog food. The case is not meant to point at one company but rather evidence broader trends in the pet food industry and resulting implications. I include Atkins Ranch in my case study as a supplier to Open Farm. While I originally conducted research in 2021–2022, I include some updated material from the sites (2024-25). To construct my argument, I primarily draw on data I collected during textual analysis of both brand's websites, as well as tracing the supply chain. I also utilize evidence from interviews and autoethnography in Seattle to strengthen my argument. I chose Seattle because of the city's concentration of high-end or premium pet stores and because I worked there for fourteen years. Autoethnography is based on my own experience in the industry and the time I spent in high-end pet stores during this research in 2022. I expand on these methods in this section and describe how and why I apply social semiotics to the data.

My first step was to use the transparency tool on the Open Farm website to trace the supply chain. While at a pet store, I took a photo of the lot number on two bags of dog food: one chicken-based and the other 'lamb'-based, which came from Pennsylvania and New Zealand respectively. Curious about specifics, I analyzed Open Farm's industry brochure that informs stores on why they should carry the brand hoping to find information on sourcing. I then contacted the company by email to ask for details about origin and certifications. The representative provided me with sheep farms (but not chicken farms), one of which is in New Zealand – Atkins Ranch. I could not trace either bag back to its' *specific* origins as I kept getting responses like 'that is confidential' or they provided generalized information. I learned that it is usually the manufacturer that sources ingredients to a central location for processing. As such, I utilized the only farm name they provided me to analyze to understand marketing of the supply chain. This did not impinge on the study but rather gave me more information on the limitations of marketing and transparency.

I used semiology to identify the social practices and narratives that the websites put forward to signal humane certification, transparency, and intimacy (Rose 2023). Scholars use semiology to analyze advertisements to determine how a brand mobilizes signifiers to signal a desired value, image, or culture for their product to add value (Schroeder 2008; Scollon 2008; Rose 2023). To do so, I analyzed what images and texts the website prioritized, the language used for describing processes and materials, author intentions, and representational strategies (Phillipov and Gale 2020). I selected titles and subtitles that were relevant. Within

those subsections, I pulled existing AFN literature to identify how APFNs discursively draw on AFNs in marketing (Fairclough 2023; Rose 2023). This meant highlighting text or images (signifiers) that represented transparency (Dutzkiewicz 2018), intimate or meaningful relationships (Cook and Crang 1996; Watts et al. 2018), humane treatment of the animal (Baker 2023; Coulter 2016; Gillespie 2011; Miele 2011; Stanescu 2013b), or pet food safety (Nestle 2008). I also identified what was *not* present, such as the farm workers (Alkon and McCullen 2011; Pachirat 2013), consumer-producer distance and scale (Cook and Crang 1996; Watts et al. 2018), and the actual treatment of the animals based on certification standards (Baker 2023; Cudworth 2015; Dutkiewicz 2018; Gillespie 2014; Mc Loughlin et al. 2024). Then, I compared the visible or represented relationships on websites with complex relationships of food systems based on the literature. I complemented this work with autoethnography and interviews.

Social interactions: autoethnography and interviews

Beyond websites, I identify packaging and pet store as advertising based on Gillian Rose's definition: any kind of "work to give a brand a certain set of values or a certain emotional association" (2023 summarizing Johnson 2009, 207). Of particular importance is the high-end pet store. Gillian Rose demonstrates how social interactions add value to brands with her analysis of Apple stores (2023). To summarize, she states that the environment encourages specific social interactions that lead to an experience for the customer which adds value to the brand. The websites, packaging, and the store work together to create a preferred reading of a brand, which maintains ideologies and adds value when the consumer interprets a sign "correctly" (Rose 2023). I evaluated meaning-making with interviews and autoethnography (Rose 2023, p. 202). Throughout the article, I refer to my own experiences of working in a pet store for five years in Seattle and the affective relationships within them. However, I worked in a corporate pet store and therefore my experience in a high-end pet store is based on my time as a customer or observer. The interviews with workers in the premium pet food industry complement autoethnography.

I conducted two interviews in the Seattle area. Although the number of interviews is small and restricts the generalizability of the findings, I include them because they link my primary data, semiotics and textual analysis, to the pet store. I selected my participants opportunistically and specifically because of their experience working with premium pet foods. Their perspectives are not representative of all actors in the pet food industry, but they are appropriate (Crang and Cook 2007). The first participant was a small-scale pet food producer and butcher (Frank[1]) who produces humane pet food from which they sell themselves at events and in some boutique shops. Over 90 min, we discussed pet food labeling and his relationship to nonhuman farmed animals. The second participant was a long-term high-end pet store employee (Angie) that worked at one of the stores I speak about in this article. Our conversation was thirty minutes long and we talked about how pet stores select their products and how they instruct employees to sell those products. Both interviews were audio-recorded. I transcribed and thematically coded both interviews.

Autoethnography politicizes human-nonhuman relationships that might otherwise go unnoticed while conducting research (Gillespie 2021). I am inside this 'web of multispecies relations' (Gillespie 2021), more than just a researcher. My position impacts both this research, the researched, and the beings impacted by the pet food system (Butz and Besio 2009). As a veterinary nurse and dog owner, my relation to this industry draws from my experience and stems from my own concerns regarding nutrition, environmental injustice, and animal welfare. As a vegan, I am critical of 'eco-capitalism' and do not believe that farming animals can ever be sustainable or humane. Still, I wanted to see what was available, so I began by looking for the most 'humane' options available. Currently, I still feed my dogs animal meat-based foods[2]. So, I contribute to the significant inequality and violence related to animal agriculture, and I am comparatively unaffected from the negative outputs given my social position.

My identity also impacted autoethnography because I demographically 'fit in' with the pet industry statistics. According to the US Bureau of Labor Statistics 64.2% of veterinarians are women and 93.3% are white, meanwhile 89.9% of veterinary technicians are women and 88.5% are white[3] (2021). I know dog food 'language' and I have the financial ability to purchase premium dog food. This facilitated access to high-end stores in Seattle as a consumer and observer, as agreed upon by the store owner, in addition to reflecting on my experience. I took notes on the layout, the products, the atmosphere, and the interactions with pets as they came into the store. I spent anywhere from 10 min to an hour in ten different stores and looked at the arrangement and packaging. I analyzed how the employees answered my questions around selecting dog food and the popularity of

[1] Angie and Frank are pseudonyms to protect participant privacy.

[2] My dog developed a serious heart condition while eating a vegan dog food that reversed with diet change. However, I do feed a prescription/big brand vegan dog food and insect-based dog food is the bulk of their diet.

[3] I could not find data on the demographics of pet store employees, but from conducting research on the pet food industry for 5 years now and working in it for nearly 20, the demographics are similar in the Seattle area.

humane and sustainable pet foods. I then narrated my experience in the store using voice recording with the goal of tracking consistencies and contradictions across the stores.

Critiqued for being biographical and perhaps less rigorous than other methods, autoethnography still makes meaning and highlights how larger issues in food systems – well-documented in geography – apply to pet food industries as well (Butz and Besio 2009). My perspective gives insight into an industry I know well, even if my perspective is partial, subjective, and biased with my values (Butz and Besio 2009; Crang and Cook 2007). As a sole researcher on this project, I managed these limitations with a multi-method approach and theoretically situating the research "within other researchers' interpretations of similar situations" (Crang and Cook 2007, 15). The article is one representation of one case study, but it gives a deeper understanding of humane certification, food systems, and the role of pets in other animals' lives.

Human-dog relationship as the place of growth

In this section, I demonstrate how the human-dog relationship sets up the conditions for growth of certified pet foods. Pet owners care deeply about their pet's wellbeing, and some contribute significant financial and emotional resources towards the relationship. As such, dogs have become commodities and consumers of commodities (Haraway 2008; Nast 2006). While I have already discussed the factors leading to the development of certified dog food, I expand on these factors using empirical data. I show that: (1) dogs and humans have an intimate relationship in which the dog is a provider of 'unconditional love', especially as pet owners increasingly humanize them, which is reciprocated with 'quality' foods and other items purchased for the dog; (2) this, along with the owner's personal preferences and emotions, influences which food they select; and (3) Open Farm caters to the owner's preferences and emotions with their marketing and transparency tool, which opens up the spaces of production to the owner and adds value to the product. However, they are catering to specific owners – those financially able to purchase their product – and the labels may not be as meaningful as they seem.

Humanization facilitates the commodification of the relationship (Dodd et al. 2020; Haraway 2008; Nast 2006). In some cases, humans see dogs as substitutes for human babies in the family. It is common to hear pets referred to as children – 'fur babies' – and the humans referred to as mom or dad (Arluke and Sanders 1996; Haraway 2008; Nast 2006). Because of this, economist Morris Holbrook argues that pets are an excellent target for marketing (Holbrook 2008). He asks, "How could we deny our canine companions or kitty compadres anything that could make these creatures more contented or more comfortable" (2008, 547)? He demonstrates that brands "need only exercise their imaginations to conceive of still larger, loftier, and more lucrative ways in which people can spend money," which often plays out in improved function and quality of food (2008, 547). Pet 'parents' want to feed their 'babies' just as they would themselves. Looking at packaging reveals that pet food follows trends in human diets: grain-free or 'ancestral' diets emerged alongside 'paleo' human diets; or grain-friendly foods – like Open Farm's kibble – advertised as containing 'ancient grains'. In other words, the human-pet relationship is an economically valuable relationship to market to and APFNs do just that.

At the basic level, Open Farm meets the dog's nutritional needs. However, they market their added-value-product to a specific relationship – one where the dog is part of financially privileged family that wants to provide the best nutrition. On their 'premium nutrition' page, they state that "Better ingredients from better sources deliver better nutrition" (2024b).They continue, stating that "We go to great lengths to find the best ingredients in the world … Sounds like a lot? We think it's exactly what your pet deserves" (2024b). In other words, feeding *a* dog food to a dog is practical, but feeding *this* dog food is superior because Open Farm recognizes the intimate and meaningful human-dog bond. But it is not enough to just say so: they have the certification to represent the "goodness" of the product, which they reinforce with the images of free-roaming cows and rolling fields (Mutersbaugh 2005).

They also address the ambiguity and mistrust around pet food claims. In my interviews, participants stated that many high-end pet stores do not sell any large-scale 'brand name' foods owned by global corporations, such as Purina or Hills. Frank called pet food labels "nonsense" and "lies" used to attract buyers. In some ways, that is correct. The American Association of Feed Control Officials (AAFCO) does not define many label claims, such as human-grade or premium. Open Farm assures the pet owner that their labels are "meaningful," as opposed to other brands that use meaning*less* labels (Open Farm 2024b). They state that "We don't add any ingredients with insignificant nutritional benefits just for the flashy names. Each recipe includes *meaningful* amounts of impactful nutrients that help your pet thrive" (2024b, emphasis added). Selection of meaningful ingredients for a certified product contributes to the meaningfulness of certification and therefore the preferred reading of the sign. However, there is no real discussion of what meaningful ingredients mean, or the quantity of an ingredient required to make it meaningful.

They back up their claims with the transparency tool to provide ingredient provenance, a key factor determining the quality of the food within AFNs (Watts et al. 2018). Provenance differentiates Open Farm from the other brands as the first company to offer such tool. Just underneath the claim of meaningful labels, the pet owner can click 'trace our ingredients', which brings them to the tool. Just above where you enter the lot number, the website says "Detailed ingredient lists are good, but tracking every single thing in your pet's bowl back to its source is even better" (2024c). With this tool, Open Farm caters to the owner's desire of quality ingredients and their fear of unknown ingredients. The human-dog relationship creates this desire and therefore 'opens' the supply chain for the owners to 'see' other relationships that make certification meaningful. However, as I discussed in the methodology, the tracing results are vague and limited to the name of a region or state rather than specific locations. I discuss this further in the following sections but before we move on, we must make a stop at the pet shop.

The high-end pet store as a signifier

In AFNs, trust and transparency are established through labeling, vendor knowledge, farmer relationships, and visual inspection (Watts et al. 2018). Pet stores are sites of social interaction where these avenues of trust come together. It is an environment that adds value to the brands they sell through delivery of knowledge and emotional connections with pet owners. High-end pet stores are small, independent shops that often share color schemes and sell premium products. All stores in Seattle that I visited had a similar layout and products. Importantly, all locations facilitated relationships between vendors, brands, the pet, and the owner.

The employees are trained to be knowledgeable in pet food to establish consumer trust. Angie, the previous pet store employee, spoke of the extensive training the employees go through in the small Seattle chain she worked for. Pet food manufacturers provide informational videos that "[give] a background into the foods and how they're made and what's in them and what's not" (interview) or send representatives to discuss the product with employees. The employees then transfer this information to the pet owner which mitigates consumer anxieties about labeling and providing the best nutrition. Angie spent anywhere from ten minutes to an hour with customers. When approaching salespeople, customers often had a specific need. The most frequent complaints that were heard in pet stores were surrounding coat and stool – often attributed to food – but the local chains in Seattle offer dietary advice for problems ranging from fleas to weight loss. Employees also help consumers to evaluate and understand product packaging, a significant factor in consumer decision-making (Kamleh et al. 2020). Employee knowledge creates a preferred reading of labels, and therefore certification, with the knowledge they gain from the company and brands themselves.

The employees are also establishing an intimate relationship with the pet: "schmoozing the pet-parent" and their pet is built into the model of the pet store (excerpt from training modules, personal experience). The owner of one store said he intentionally tried to create a family, remembering his clients' and their pets' names; and another store had polaroid pictures of the furry family members and customers on the wall. The personability and 'small' scale of the high-end pet stores intentionally creates a 'family' that keeps customers coming back to those stores to make their purchases, and this family relies on the human-animal bond.

Intimate interactions between the pet owner, dog, and employee build value in the products they sell. In this way, pet stores are contributing to the value of certification. At the same time, certification adds value to the store. According to their store training material, offering Open Farm dog food will drive new customers to the store by "delivering pet parent values" vis-à-vis the consumer values highlighted on the website (Open Farm 2020a). It continues to explain that Open Farm consumers purchase 1.25 more products than the average consumer. Certification and the high-end pet stores work in tandem to validate and build value in each other (Scollon 2008). However, to do so, Open Farm must demonstrate their relationship to producers is meaningful.

Open Farm's intimate relationship with their producers

Open Farm leans heavily on direct, local sourcing and discursively draws upon existing narratives in alternative food movements to contribute to the value of their certified food. Watts et al. found in their study of local food chains that trust in AFM appeared "to be predicated on direct personal contact" (2018, 28). Consumers in their study resisted large scale, conventional food networks by "shopping at small local retailers" (2018, 28). Open Farm approaches the local in three ways (in addition to the pet store). First, they highlight their attention to detail, giving the food and the process a small-scale feel. Second, images of single farmers on the ranch websites and a picture of hands holding the tops of dirt covered carrots makes it seem like the process is intimate and manual instead of the mechanized processes of industrial agriculture (Fig. 1). Third, suppliers center their relationship with *specific* farmers, which tend to be 'local', white, and Western. These relationships function as signifiers that are visually accessible to the consumer to give

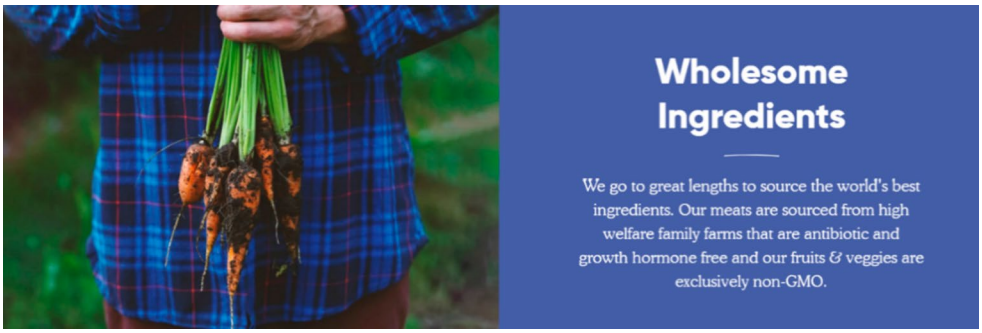

Fig. 1 Open Farm's ethical sourcing page: screenshot from website (2021)

meaning to the certification sign; yet the intimate nature is misrepresented.

Open Farm takes a moral stance that the best way to create ethical dog food is through "painstakingly sourcing" ingredients and they spend their time "obsessively formulating" the recipes for optimum nutrition (Open Farm 2022). On their mission page under the banner of ethical sourcing, they state that their "days revolve around ridiculously meticulous sourcing" of ingredients (2022). Open Farm narrates the process as such:

> All our meat is sourced in a way that's aligned with our dedication to treating animals with kindness and respect. We work with certification partners who hold us accountable to the highest standards of farm animal welfare. The healthier, happier the animals are, the more nutritious the beef, pork, and poultry is for your pet (Open Farm 2024a).

In this quote, we see that Open Farm uses a narrative about their process to legitimate their claims of being ethical and transparent, then having the process authorized by a third party to further establish trust (Scollon 2008). They back up their claims with details of the ingredients, making sure that consumers can trace "every single thing" back to its origin, which would not be possible without the personal connections they have with the farmers, some of which are named. Their confidence in their food consistently being high quality, humane, and sustainable establishes authority that is difficult for a consumer to challenge, which the transparency tool solidifies. Even if consumers choose not to trace their ingredients, having the option is a symbol of the measures the company takes to ensure that this dog food is an ethical and healthy option to feed their pet. The extra steps taken adds value and legitimates the extra costs transferred to the consumer.

Another way Open Farm portrays intimate relationships is through images. On the premium nutrition page in 2021, there was an image of hands holding a bunch of dirty carrots (Fig. 1). As a former employee of a small-scale farm supplying 300–400 families and a handful of restaurants, we still used tractors to harvest carrots because hand-pulling was time consuming, and labor is costly. Additionally, hand-harvesting crops would not be profitable, as many farmers must innovate production techniques to produce enough product to stay competitive on the market (Guthman 2004). According to a representative, Open Farm manufactures hundreds of thousands of pounds dog kibble for over 5,000 retailers. It is unlikely that supplying many retailers with products would permit manual harvesting of ingredients: labor and land cost would increase ingredient cost which would make the final product cost prohibitive for much of the US population, especially since pet owners are looking for healthy pet food, not necessarily humane food. Regardless, the image of dirty carrots represents the goodness of the process because it allows consumers to see and therefore imagine how production works, even though it is a simplification of actual production. The assumption that each ingredient is treated with individual care forms part of the imaginary (Goodman 2004; Watts et al. 2018).

Both Open Farm and Atkins Ranch center their relationship with specific farmers. The hands in Fig. 1 are also white[4]; and Atkins Ranch, which is a family "of over 100 ranching families," promotes their lamb with photos of white farm owners (Atkins Ranch 2025; FAQ). These images offer a point of personal association with the supply chain actors, but only for specific people. The brands are indexing the predictable traits typically associated with AFNs, such as whiteness, and excluding images of farm workers and animal slaughter (Alkon and McCullen 2011; Slocum 2007). Alkon and McCullen call this the "white farm imaginary" in which white farmers as the face of the operation render "invisible the low-paid, predominantly Latino/a workers who do the bulk of the cultivation" (2011, 938-9).

Open Farm's commitment to quality ingredients of Western origins alludes to pet food recalls and reinforces anti-Chinese sentiments (Chen 2012; Hanser 2013). Historically, it was more than just a nod: An archived version of their website specifically stated "non-China" in the ingredient

[4] Some of the images and wording have changed since 2021 but remain similar. In June 2024, there is a white hand plucking an apple off a tree.

descriptions (Open Farm 2020b). Now Open Farm is not as blunt, but the brand still subtly recontextualizes pet food recalls and anti-Chinese sentiment to add value to their brand. On their mission statement, Open Farm claims that there is no "mystery meat" in their recipes (Open Farm 2022). While this could be referencing 'unknown' by-products processed into dog food[5] (Ward 2020), the language of mystery reflects the discourse of the unexplained illnesses around 2007. On their "ethical sourcing" page, the second banner states that they get "Better meat from better places," with the better place meaning certified humane farms in the Global North (Open Farm 2022). When I put the lot code of a bag of turkey and chicken kibble into the transparency tool, twenty-six of the ingredients came from the United States and Canada, with ten ingredients from Europe and four from Asia limited to Japan, the Philippines, and India. There is no harm in sourcing the ingredients primarily from the United States, except the website indexes the ethics and quality of the ingredients in relation to their origin. Although they no longer mention China, Open Farm maintains the discourse of toxic products coming from China by excluding Chinese ingredients (Chen 2012; Hanser 2013). Or rather, Open Farm has value because of their *lack* of relationship with China.

One exception to the ideology of being local is Open Farm's sourcing of lamb from New Zealand, although Atkins Ranch uses language to fit in with the register of being local. Atkins Ranch supplies North American Whole Foods markets in addition to Open Farm. Atkin's Ranch 'join our family' page encourages new farmers by stating they can join "our small and focused New Zealand supply chain" (2021a). Meanwhile, on the 'our story' webpage, they provide a narrative that excuses the thousands of miles the lamb has to travel while still being part of the local and sustainable alternative food movements (2021c):

> While our lamb starts its journey many miles away, we know the importance of being around the corner, which is why our American home is San Francisco, California. We're likely to be sitting down to dinner the same time that you are. We invite you to slow down, share and savor the delicious, healthy taste of Atkins Ranch lamb.

Atkins Farm invites the consumer to slow down – a key term in 'slow-food' AFNs. They refer to corporate headquarters as a friendly neighbor and home in which people sit down to dinner. Atkins Ranch constructs an intimate relationship with the consumer with language such as family, home, and share (and by sharing images of their families as described above). In this case, local is "predicated on direct personal contact" (Watts et al. 2018, 28) with white and Western farmers even when those farmers are "many miles away" (Atkins Ranch 2021b). Using Watts et al.'s argument on local food imaginaries, local is more of "a marker of the scale of human relationships, rather than as signifying specific places" (2018, 28).

It makes sense why Open Farm would use images and rhetoric that portray small scale farming given that consumers are skeptical of big brand name dog food. They also source nearly 40% of their vegetables from towns nearby the manufacturing facility. However, representing relationships to be more intimate than they are and centering white, local, and Western ingredients reflects larger critiques of AFN promotion.

Excluded relationships and animal farming

The last empirical section of this paper discusses the relationship between the farmer and the farmed animals and land, as well as the farmed animal-dog-human relationship. The dog is linked to the farmed animal through consumption because of the human's perception of what the dog needs. Open Farm markets to this relationship with claiming the meat they source is superior to other animal meats. In this way, the human develops a relationship to the farmed animal because of the nourishment they offer the dog. Besides sourcing and premium nutrition, humane handling is a pillar of Open Farm's marketing because it is what they claim makes the meat better. Yet, the relationships between humans and farmed animals – especially at the time of slaughter – and ongoing colonial relations are excluded. Excluding these relationships is an important tactic for the preferred reading of humane certification but also obscures continued violence. I discuss briefly Open Farm's role, but then I return to Atkins Ranch.

The relationship between the dog, dog owner, and farmed animals is best illustrated by 'protein' choice. Many brands in the premium pet food industry emphasize animal-based protein requirements as part of high-quality nutrition, necessitating the killing of animals (Baker 2023; Wrye 2015). For example, on their premium nutrition page, Open Farm claims that "dogs and cats thrive on quality protein, and quality protein starts with the animals, farms and fisheries" (Open Farm 2024b). This understanding comes from an evolutionary standpoint and nutritional requirements, but it also comes from the development and marketing of

[5] Traditional or conventional pet food is made from the by-products (BP) of animal agriculture (parts that humans in the US do not typically eat). There are debates in the pet food industry whether this impacts pet food safety. The most common complaint is that by-products might contain the 4Ds – dead, diseased, dying, or down animals – or that BP even include euthanized pets (Ward 2020).

commercial dog foods (Baker 2023; Buff et al. 2014; Dodd et al. 2018; Heinze, n.d.; Hill et al. 2022). Consequently, most dog owners select animal-based protein. The relationship between the dog and the farmed animal is commodified as the owner selects and purchases food that provides 'quality protein'.

Human consumers also develop a relationship to *species* based on values and their dog's needs. Consumers frequently complain of their dog's intolerance to some ingredients, especially cows and chickens, so they may avoid these products and will select another 'novel' protein such as lamb or rabbit. Angie said that people may also choose a protein based on how they feel about the animal, whether it is disgust or love. For example, they may not choose to feed rabbits to their dog but will feed fish or chicken because they love rabbits; or they may not choose insects (another alternative on the market) because they find them gross. This shapes the lives of the farmed animals on the other side of the supply chain, especially as brands start incorporating more 'novel' proteins. At the time of study, humane standards covered land animals but not fish.

For owners that place animal welfare as a priority, certified humane dog food is a fair place to start. Atkins Ranch associates humaneness with naturalness. They state that "We raise our lambs as nature intended: 100% grass fed and free to roam on pasture in fresh air and sunshine in pristine New Zealand" alongside images of sheep on rolling hills with their young (Atkins Ranch 2024). The images on their websites permit the caring dog owner to connect with the farmed animal. However, the conditions of the animals represented in the images also do not always reflect the reality of their environment as allowed by the standards (Baker 2023), nor does it acknowledge that the animals are still slaughtered. Humane certification eases anxieties about killing because the animals are thought to have 'good lives' but this obscures the lived reality for the farmed animals.

The consumer can develop a relationship with the land as well. Atkins Ranch invites the consumer to be a part of the family, communicating their values among images of white families. Their values include caring for the land in the face of conventional corporate food systems to "keep the environment as pristine as possible," which consumers may contribute to by purchasing their products (2021c). Yet, white ownership of land rests on colonial land theft and erasure, often done through confiscation and agriculture (Anderson 2006; Belcourt 2014; Stanescu 2019). Colonizers used the idea of pristine or untouched land to justify its theft (Denevan 1992). On the 'Our Ranchers' page, they state that many of their family ranchers are "tending third, fourth and fifth generation ranches" and that "their ancestors worked hard to create the land and lifestyle they call home" (Atkins Ranch 2021b). Four to five generations ago is approximately the same time colonizers confiscated 1.3 million hectares of land from Māori in the New Zealand Settlement Act of 1863 (Te Puni Kōkiri, n.d.). So, the consumer may care for the environment through an 'ethical' relationship where the white farmer conserves it while tending to farmed animals. However, this cements "a generic future-past that is disembedded [from histories] of land acquisition and management" (Mahuika 2015; Cusworth et al. 2022, 1022). This also applies to animal farms in the United States and elsewhere (Belcourt 2014; Stanescu 2019).

Conclusion: The implications of certified humane dog food

This article demonstrated that the pet food industry has adopted key discursive practices of alternative food networks, including health, transparency, sustainability, and welfare, particularly around animal agriculture. Humane certification signifies these practices to achieve a preferred interpretation of the sign by the consumer: that Open Farm provides pets "with premium nutrition that came from ingredients that were grown and raised the right way" by sourcing from humane certified farms (Open Farm 2025). They narrate their process in marketing – with a focus on intimate relationships through the supply network – which gives meaning to the humane certification sign. However, I have shown that these narrations are partial and simplified representations of complex networks and relationships. As such, Open Farms marketing and Humane certification are an example of re-semioticization (Scollon 2008).

My narration of the sign and signifiers is also partial and simplified because the relationships in food networks are far more complex than can be expressed in an article. I cannot claim that these findings represent every actor in the APFN – I am a solo researcher with conflicting topical values presenting one case study in the US. However, Open Farm's sentiment "that pet food can both be good for your pet, and [sic] do some good for farmed animals and the environment, all at the same time" represents larger shifts in the premium pet food industry (Open Farm 2021). Many premium pet food brands generalize the signifiers of humane certification, adding images of maps and free-range animals to their uncertified products.

As Julie Guthman succinctly pointed out, "good intent doesn't necessarily make for good solutions" (2024, 183). Humane pet foods cannot resolve the issues with contemporary food systems, and providing such solutions permits the continuation of capitalism without altering or responding to the crises within industrial food production (Guthman 2024). Like AFNs, APFNs perpetuate a moral economy and commodify the commodity chain by making food a 'less

problematic' option while still operating within harmful food systems (Cook and Crang 1996; Cusworth et al. 2022; Watts et al. 2018). It is up to the consumers to make 'good' purchasing decisions to solve the issues of industrial food production (Guthman 2006; Watts et al. 2005).

APFNs prioritize relationships with the financially-able consumer. Open Farm lamb-based kibble runs $89.99 for a 22-pound bag of lamb-flavored kibble, or $2.50 per day for a 50-pound dog. Meanwhile, another "free-run" chicken kibble is $63.99 for a 25-pound bag. Both companies advertise humane handling and transparency. Open Farm has added value because of certification and ethical claims they make as the first certified premium pet food on the market. Still, both brands are priced on the high-end of kibbles, which excludes other consumers from engaging with APFNs. If APFNs are not financially accessible to all consumers, it cannot radically alter the lives of many farm animals.

Even if APFNs were accessible, Open Farm and other mammal meat-focused brands exclude the relationship between farming animals and environmental crises, such as deforestation, eutrophication, and climate change (FAO 2020; Poore and Nemecek 2018; Stanescu 2010). As one example, farming uses 38% of land surface and two-thirds of that is for grazing animals (FAO 2020). If meat consumption stayed the same, there would not be enough land to transition from concentrated animal feed operations to free-range animals (FAO 2020; Stanescu 2010). It has been suggested that increasing animal productivity may reduce environmental impact (Poore and Nemecek 2018) but it comes at the cost of animal welfare.

My critique is not about the solution itself (Guthman 2024). It is likely that the kibble is good for the pet and humane certification does do some good for the farmed animals. My critique is about how companies represent the solution to complex problems (Guthman 2024). The consumer must (intentionally or unintentionally) be spatially distanced from material processes for the certification to maintain the preferred reading. If read properly, the seal of humaneness represents intimate and direct relationships with farmers, and therefore the humans and nonhumans involved in production. I investigated the relationships that brands center and called out how this representation inevitably shadows other relationships in complex food networks. This limited representation highlights how specific consumer values and aspects of the supply network are centered to create a higher exchange value of certified humane pet foods.

The representation of the human-dog relationship is likely accurate though (within the context of super-premium pet foods), and many dogs eat meat-based diets. As such, the dilemma persists. Feeding an animal-based diet to a dog will always necessitate the killing of other animals even if certified humane makes animals more psychologically edible. There are alternative proteins on the market – from cultured meat to insects – but all attached to their own ethical dilemmas. Even with the availability of alternative proteins, employees often stated that most people did not go in looking for humane or sustainable dog food, although many employees were not well-versed on the impacts of pet food. Owners prioritized dog health and selected dog food accordingly, which often meant dog food with high quantity or quality of animal meat thanks to industry marketing. More research could be done on the 'protein obsession' and desire for 'human-grade' ingredients in the pet food industry, or on how the pet food industry shapes consumer desire (as it has done to encourage meat by-product consumption). Dogs are omnivores who evolved to digest starches alongside eating human food scraps (Axelsson et al. 2013), yet maximum protein is currently equated with maximum nutrition (PSC 2021). The pet store might be a suitable place to research this more as it remains under-studied. On a brighter note, research could also be conducted to determine approaches or responses that have not yet been imagined or have been stifled by the optimism of industrial solutionism (Guthman 2024; Tsing 2015).

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Data Availability The data that support the findings of this study are available from the corresponding author upon reasonable request.

Declarations

Ethical approval This research was reviewed and approved by the IRB at University of Kentucky

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References

Alexander, Peter, Aiden Berri, Dominic Moran, David Reay, D. A. Mark, and Rounsevell. 2020. The global environmental paw print of pet food. *Global environmental change* 65:102–153. https://doi.org/10.1016/j.gloenvcha.2020.102153

Alkon, Alison Hope. 2008. From value to values: Sustainable consumption at farmers markets. *Agriculture and Human Values* 25(4):487–498. https://doi.org/10.1007/s10460-008-9136-y

Alkon, Alison Hope, and McCullen Christie Grace. 2011. 'Whiteness and Farmers Markets: Performances, Perpetuations … Contestations?' *Antipode* 43 (4): 937–59. https://doi.org/10.1111/j.1467-8330.2010.00818.x

American Veterinary Medical Association. 2022. 'U.S. Pet Ownership Statistics | American Veterinary Medical Association'. https://www.avma.org/resources-tools/reports-statistics/us-pet-ownership-statistics

American Pet Products Association. 2024. 'Pet Industry Trends and Stats'. https://www.americanpetproducts.org/research-insights/industry-trends-and-stats

Anderson, Virginia DeJohn. 2006. *Creatures of empire: How domestic animals transformed early America*. Oxford, New York: Oxford University Press.

Andersson, Helen, Angela Smith. 2021. Flags and fields: A comparative analysis of National identity in butter packaging in Sweden and the UK. *Social Semiotics* 33(4):861–888. https://doi.org/10.1080/10350330.2021.1968276

Arluke, Arnold, Clinton Sanders. 1996. *Regarding animals*. Philadelphia: Temple University.

Atkins Ranch. 2021a. 'Join Our Family'. 2021. https://www.atkinsranch.com/our-ranchers/join-us

Atkins Ranch. 2021b. 'Our Ranchers'. 2021. https://www.atkinsranch.com/our-ranchers

Atkins Ranch. 2021c. 'Our Story'. 2021. https://www.atkinsranch.com/our-story

Atkins Ranch. 2024. 'Homepage'. 2024. https://www.atkinsranch.com

Atkins Ranch. 2025. 'Homepage'. 2024. https://www.atkinsranch.com

Axelsson, Erik, Abhirami Ratnakumar, Maja-Louise Arendt, Khurram Maqbool, Matthew T. Webster, Michele Perloski, Olof Liberg, and Jon M. Arnemo. 2013. The Genomic Signature of Dog Domestication Reveals Adaptation to a Starch-Rich Diet. *Nature* 495(7441):360–364. https://doi.org/10.1038/nature11837. Åke Hedhammar, and Kerstin Lindblad-Toh.

Baker, Carly. 2023. Humane dog food? Caring and killing in the certified humane dog food? value chain. *Environment and Planning E: Nature and Space* 7(1):311–329. https://doi.org/10.1177/25148486231165457

Belcourt, Billy-Ray. 2014. Animal bodies, colonial subjects: (Re) Locating animality in decolonial thought. *Societies* 5(1):1–11. https://doi.org/10.3390/soc5010001

Blokhuis, H. J., I. Veissier, M. Miele, and B. Jones. 2010. The welfare quality® project and beyond: Safeguarding farm animal well-being. *Acta agriculturae Scandinavica section A - animal science* 60(3):129–140. https://doi.org/10.1080/09064702.2010.523480

Bruckner, Heide K., and Annalisa Colombino, Ulrich Ermann. 2019. Naturecultures and the affective (Dis)Entanglements of happy meat. *Agriculture and Human Values* 36(1):35–47. https://doi.org/10.1007/s10460-018-9884-2

Buff, P. R., R. A. Carter, J. E. Bauer, and J. H. Kersey. 2014. Natural pet food: A review of natural diets and their impact on canine and feline physiology. *Journal of Animal Science* 92(9):3781–3791. https://doi.org/10.2527/jas.2014-7789

Buller, H., and E. Roe. 2012. Commodifying animal welfare. *Animal Welfare* 21(1):131–135. https://doi.org/10.7120/096272812X13345905674042

Butz, David, and Kathryn Besio. 2009. Autoethnography: Autoethnography. *Geography Compass* 3(5):1660–1674. https://doi.org/10.1111/j.1749-8198.2009.00279.x

Chen, Mel Y. 2012. *Animacies: Biopolitics, racial mattering, and queer affect*. Durham, NC: Duke University Press.

Cole, Matthew. 2011. From animal machines to happy meat? Foucault's ideas of disciplinary and pastoral power applied to animal-centred welfare discourse. *Animals* 1(1):83–101. https://doi.org/10.3390/ani1010083

Conway, Danielle M. P., and Korinn E. Saker. 2018. Consumer attitude toward the environmental sustainability of grain-free pet foods. *Frontiers in Veterinary Science* 5. https://doi.org/10.3389/fvets.2018.00170

Cook, Ian, Philip Crang. 1996. The world on a plate. *Journal of Material Culture* 1(2):131–153. https://doi.org/10.1177/135918359600100201

Cook, Ian, Philip Crang, and Mark Thorpe. 1998. Biographies and geographies: Consumer understandings of the origins of foods. *British Food Journal* 100(3):162–167. https://doi.org/10.1108/00070709810207522

Coulter, Kendra. 2016. Beyond human to humane: A multispecies analysis of care work, its repression, and its potential. *Studies in Social Justice* 10(2):199–219. https://doi.org/10.26522/ssj.v10i2.1350

Crang, Mike, Ian Cook. 2007. *Doing ethnographies*. Los Angeles: SAGE.

Cudworth, Erika. 2015. Killing animals: Sociology, species relations and institutionalized violence. *The Sociological Review* 63(1):1–18. https://doi.org/10.1111/1467-954X.12222

Cusworth, George, Jamie Lorimer, and Jeremy Brice, Tara Garnett. 2022. Green rebranding: Regenerative agriculture, future-pasts, and the naturalisation of livestock. *Transactions of the Institute of British Geographers* 47(4):1009–1027. https://doi.org/10.1111/tran.12555

De Silva, Sena S., Giovanni M. Turchini. 2008. Towards understanding the impacts of the pet food industry on world fish and seafood supplies. *Journal of Agricultural and Environmental Ethics* 21(5):459–467. https://doi.org/10.1007/s10806-008-9109-6

Denevan, William M. 1992. The pristine myth: The landscape of the Americas in 1492. *Annals of the Association of American Geographers* 82(3):369–385.

Dodd, Sarah A. S., and Jennifer L. Adolphe, Adronie Verbrugghe. 2018. Plant-based diets for dogs. *Journal of the American Veterinary Medical Association* 253(11):1425–1432. https://doi.org/10.2460/javma.253.11.1425

Dodd, Sarah, Nick Cave, Sarah Abood, Anna-Kate Shoveller, and Jennifer Adolphe, Adronie Verbrugghe. 2020. An observational study of pet feeding practices and how these have changed between 2008 and 2018. *Veterinary Record* 186(19):643–643. https://doi.org/10.1136/vr.105828

Dutkiewicz, Jan. 2018. Transparency and the factory farm: Agritourism and counter-activism at fair Oaks farms. *Gastronomica* 18(2):19–32. https://doi.org/10.1525/gfc.2018.18.2.19

Fairclough, Norman. 2023. Critical discourse analysis. In *The Routledge handbook of discourse analysis*, 2nd ed. Routledge.

FAO. 2020. 'Land use in agriculture by the numbers'. Food and agriculture organization of the United Nations. 2020. http://www.fao.org/sustainability/news/detail/en/c/1274219/

Forssell, Sini, Leena Lankoski. 2015. The sustainability promise of alternative food networks: An examination through alternative characteristics. *Agriculture and Human Values* 32(1):63–75. https://doi.org/10.1007/s10460-014-9516-4

Friedrich, Bruce. 2015. When the regulators refuse to regulate: Pervasive USDA underenforcement of the humane slaughter act. *The Georgetown Law Journal* 104(1):33.

Galt, Ryan E. 2017. 'Alternative food movement'. *International Encyclopedia of Geography: People, the earth, environment and technology*, 1–7. https://doi.org/10.1002/9781118786352.wbieg0427

Gillespie, Kathryn. 2011. How happy is your meat? Confronting (Dis)Connectedness in the alternative meat? Industry. *The Brock Review* 12(1):100–128. https://doi.org/10.26522/br.v12i1.326

Gillespie, Kathryn. 2014. Sexualized violence and the gendered commodification of the animal body in Pacific Northwest US dairy production. *Gender Place & Culture* 21(10):1321–1337. https://doi.org/10.1080/0966369X.2013.832665

Gillespie, Kathryn. 2021. For multispecies autoethnography. *Environment and Planning E: Nature and Space* 251484862110528. https://doi.org/10.1177/25148486211052872

Goodman, Michael K. 2004. Reading fair trade: Political ecological imaginary and the moral economy of fair trade foods. *Political Geography* 23(7):891–915. https://doi.org/10.1016/j.polgeo.2004.05.013

Guthman, Julie. 2004. Back to the land: The paradox of organic food standards. *Environment and Planning A: Economy and Space* 36(3):511–528. https://doi.org/10.1068/a36104

Guthman, Julie. 2006. Neoliberalism and the making of food politics in California. *Geoforum* 39(3):1171–1183. https://doi.org/10.1016/j.geoforum.2006.09.002

Guthman, Julie. 2024. *The problem with solutions: Why silicon valley can't hack the future of food*. Oakland, California: University of California Press.

Hanser, Amy. 2013. Yellow peril consumerism: China, North America, and an era of global trade. *Ethnic and Racial Studies* 36(4):632–650. https://doi.org/10.1080/01419870.2011.631559

Haraway, Donna Jeanne. 2008. *When species Meet*. Minneapolis: University of Minnesota Press.

Heinze, Cailin R. n.d. 'They are feeding what?! raw, vegetarian and vegan diets'.

Hill, Kristine, Michelle Szydlowski, Sarah Oxley Heaney, and Debbie Busby. 2022. Uncivilized behaviors: How humans wield feral to assert power (and Control) over other species. *Society & Animals* 31:907–925. https://doi.org/10.1163/15685306-bja10088

Hobbs, Lonnie. 2018. and Aleksan Shanoyan. 'Analysis of consumer perception of product attributes in pet food: Implications for marketing and brand strategy'. In 2018 Agricultural & Applied Economics Association Annual Meeting. Washington DC.

Holbrook, Morris B. 2008. Pets and people: Companions in commerce? *Journal of Business Research* 61(5):546–552. https://doi.org/10.1016/j.jbusres.2007.07.010

Jackson, Peter, and Neil Ward, Polly Russell. 2009. Moral economies of food and geographies of responsibility. *Transactions of the Institute of British Geographers* 34(1):12–24. https://doi.org/10.1111/j.1475-5661.2008.00330.x

Jaffee, Daniel, and Philip H. Howard. 2010. Corporate cooptation of organic and fair trade standards. *Agriculture and Human Values* 27(4):387–399. https://doi.org/10.1007/s10460-009-9231-8

Kamleh, May, Deep K Khosa, Adronie Verbrugghe, and Cate E Dewey, Elizabeth Stone. 2020. A Cross-Sectional study of pet owners' attitudes and intentions towards nutritional guidance received from veterinarians. *Veterinary Record* 187(12):e123–e123. https://doi.org/10.1136/vr.105604

Kwak, Min-Kyu, and Seong-Soo Cha. 2021. A study on the selection attributes affecting pet food purchase: After COVID-19 pandemic. *International Journal of Food Properties* 24(1):291–303. https://doi.org/10.1080/10942912.2021.1879133

Leenstra, Ferry, Th. V., Vellinga, and Werner Bessei. 2018. Environmental footprint of meat consumption of cats and dogs. *Lohmann Information* 52(1):32–39.

Mahuika, Nēpia. 2015. New Zealand history is Māori history: Tikanga as the ethical foundation of historical scholarship in Aotearoa new Zealand. *New Zealand Journal of History* 49(1):5–30.

Martens, Pim, Bingtao Su, and Samantha Deblomme. 2019. The ecological paw print of companion dogs and cats. *BioScience* 69(6):467–474. https://doi.org/10.1093/biosci/biz044

Mc Loughlin, Eimear, Rebecca Leigh, Niels Duus Rutt, Nielsen, and Møller Alberte Skriver. 2024. Animal geographies of industrial animal agriculture in the pandemic era: The tragedy and insecurity of multispecies ethnography. *Scottish Geographical Journal* 14 0(3–4):563–580. https://doi.org/10.1080/14702541.2024.2331720

Melo, Cristian J., and Steven A. Wolf. 2005. Empirical assessment of eco-certification. *Organization & Environment* 18(3):287–317. https://doi.org/10.1177/1086026605279461

Miele, Mara. 2011. The taste of happiness: Free-range chicken. *Environment and Planning A: Economy and Space* 43(9):2076–2090. https://doi.org/10.1068/a43257

Misleh, Denise. 2022. Moving beyond the impasse in geographies of alternative food networks. *Progress in Human Geography* 46(4):1028–1046. https://doi.org/10.1177/03091325221095835

Mutersbaugh, Tad. 2005. Fighting standards with standards: Harmonization, rents, and social accountability in certified agrofood networks. *Environment and Planning A: Economy and Space* 37(11):2033–2051. https://doi.org/10.1068/a37369

Nast, Heidi J. 2006. Loving … whatever: Alienation, neoliberalism and pet-love in the Twenty-First century. *Acme* 5(2):300–327.

Nestle, Marion. 2008. *Pet food politics*. Berkeley, California: University of California Press.

Okin, Gregory S. 2017. Environmental impacts of food consumption by dogs and cats. *PLOS ONE* 12(8):e0181301. https://doi.org/10.1371/journal.pone.0181301

OmniPet. 2024. 'Discover'. 2024. https://omni.pet/pages/discover?srsltid=AfmBOoqUbsIQlPP6yaB6Va3A89tddU4iXjhV1HCIatj_Or_uqWznAr4M

Open Farm. 2020a. 'Open farm training'. PowerPoint Presentation 2020 v.10.21.2020.

Open Farm. 2020b. 'Transparency'. 2020. https://web.archive.org/web/20200513134415/https://openfarmpet.com/pages/transparency

Open Farm. 2021. 'About us'. 2021. https://openfarmpet.com/pages/about-us

Open Farm. 2022. 'Ethical sourcing'. 2022. https://openfarmpet.com/pages/ethical-sourcing

Open Farm. 2024a. 'Ethical sourcing'. 2024. https://openfarmpet.com/pages/ethical-sourcing

Open Farm. 2024b. 'Premium nutrition'. 2024. https://openfarmpet.com/pages/premium-nutrition

Open Farm. 2024c. 'Transparency'. 2024. https://openfarmpet.com/pages/transparency

Open Farm. 2025. 'About Us'. 2025. https://openfarmpet.com/pages/about-us

Pachirat, Timothy. 2013. *Every twelve seconds: Industrialized slaughter and the politics of sight*. New Haven, Conn.: Yale Univ. Press.

Pearce, Hillary, Clinton L Neill, Kenneth Royal, and Monique Pairis-Garcia. 2023. Can dogs help chickens? pet owners' willingness to pay for animal welfare-friendly pet food in the United States. *Animal Welfare* 32:e11. https://doi.org/10.1017/awf.2022.3

Phillipov, Michelle, Fred Gale. 2020. Celebrity chefs, consumption politics and food labelling: Exploring the contradictions. *Journal of Consumer Culture* 20(4):400–418. https://doi.org/10.1177/1469540518773831

Pirsich, Wiebke. 2017. and Ludwig Theuvsen. 'The pet food industry: An innovative distribution channel for animal welfare meat?' *Proceedings in Food System Dynamics*, 8:250–261. https://doi.org/10.18461/PFSD.2017.1726

Poore, J., and T. Nemecek. 2018. Reducing food's environmental impacts through producers and consumers. *Science* 360(6392):987–992. https://doi.org/10.1126/science.aaq0216

PSC (Pet Sustainability Coalition). 2021. 'The 4-Factor framework for sustainable protein evaluation in petfood'. https://petsustainability.org/portfolio/four-factor-framework-for-sustainable-protein-evaluation/

Rombach, Meike, and David L. Dean. 2021. Just love me, feed me, never leave me: Understanding pet food anxiety, feeding and shopping behavior of US pet owners in Covidian times. *Animals* 11(11):3101. https://doi.org/10.3390/ani11113101

Rose, Gillian. 2023. *Visual methodologies: An introduction to researching with visual materials*. Fifth: Thousand Oaks: Sage.

Rothgerber, Hank. 2013. A meaty matter. Pet diet and the vegetarian's dilemma. *Appetite* 68:76–82. https://doi.org/10.1016/j.appet.2013.04.012

Schroeder, Jonathan E. 2008. 'Visual analysis of images in brand culture'. In *Go figure: New directions in advertising rhetoric* 277–296, 2008, London New York: Routledge. Available at SSRN: https://ssrn.com/abstract=941431

Scollon, Ron. 2008. Nine processes of resemiotization. In *Advances in discourse studies*, 12 ed. Abington, Ohio: Routledge.

Seymour, Madison, Sean Connelly. 2022. Regenerative agriculture and a more-than-human ethic of care: A relational approach to Understanding transformation. *Agriculture and Human Values* 40(1):231–244. https://doi.org/10.1007/s10460-022-10350-1

Shreck, Aimee, Christy Getz, and Gail Feenstra. 2006. Social sustainability, farm labor, and organic agriculture: Findings from an exploratory analysis. *Agriculture and Human Values* 23(4):439–449. https://doi.org/10.1007/s10460-006-9016-2

Slocum, Rachel. 2007. Whiteness, space and alternative food practice. *Geoforum* 38(3):520–533. https://doi.org/10.1016/j.geoforum.2006.10.006

Stanescu, Vasile. 2010. Green eggs and Ham. *Journal for Critical Animal Studies* 8(1):8–32.

Stanescu, Vasile. 2013a. 'Meat eating and climate change Denial', 18.

Stanescu, Vasile. 2013b. Why loving animals is not enough: A response to Kathy Rudy, locavorism, and the marketing of humane meat. *The Journal of American Culture* 36(2):100–110. https://doi.org/10.1111/jacc.12017

Stanescu, Vasile. 2019. Selling Eden: Environmentalism, local meat, and the postcommodity fetish. *American Behavioral Scientist* 63(8):1120–1136. https://doi.org/10.1177/0002764219830462

Su, Bingtao, Pim Martens. 2018. Environmental impacts of food consumption by companion dogs and cats in Japan. *Ecological Indicators* 93(October):1043–1049. https://doi.org/10.1016/j.ecolind.2018.06.015

Te Puni Kōkiri. n.d. February 2025. 'Māori land History | Tūhono Whenua'. Accessed 13 https://www.tupu.nz/en/tuhono/about-maori-land-in-new-zealand/history-of-maori-land/

Tsing, Anna Lowenhaupt. 2015. *The mushroom at the end of the world: On the possibility of life in capitalist ruins*. Princeton: Princeton University Press.

US Bureau of Labor Statistics. 2021. 'Employed Persons by detailed occupation, sex, race, and hispanic or latino ethnicity', https://www.bls.gov/cps/cpsaat11.htm

Veissier, I., M. Miele, and L. Mounier. 2021. Animal welfare official inspections: Farmers and inspectors shared concerns. *Animal* 15(1):100038. https://doi.org/10.1016/j.animal.2020.100038

Ward, Ernie. 2020. *The clean pet food revolution: How better pet food will change the world*. Brooklyn, NY: Lantern Books.

Watts, David, and Brian Ilbery, Damian Maye. 2005. Making reconnections in agro-food geography: Alternative systems of food provision. *Progress in Human Geography* 29(1):22–40. https://doi.org/10.1191/0309132505ph526oa

Watts, David, and Jo Little, Brian Ilbery. 2018. I am pleased to shop somewhere that is fighting the supermarkets a little bit. A cultural political economy of alternative food networks. *Geoforum* 91(May):21–29. https://doi.org/10.1016/j.geoforum.2018.02.013

Wild Earth. 2024. 'What the research says'. 2024. https://wildearth.com/pages/research-articles

Wrye, Jen. 2015. Animality. Atfect, and killability in commercial pet foods. In *Economies of death: Economic logics of killable life and grievable death*, 21. S.l.: Routledge.

Carly Baker is a third-year postgraduate researcher (PhD candidate) in the School of Geography and Planning at Cardiff University. She received her Masters of Arts in Geography at University of Kentucky. Her current research interest is the marketing and development of alternative proteins dog food supply chains and human-animal relationships within them (including nonhumans such as insects, invasive species, and cultured meat).