

The vegan industrial complex: the political ecology of not eating animals

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Abstract

Many political ecologists and geographers study ethical diets but most are curiously silent on the topic of death in the food system, specifically what or who is allowed to live and what is let die in the "doing of good." This article aims to show how the practice of eating produces the socio-ecological harm most ethical consumers set out to avoid with their dietary choices. I examine the food systems that produce ethical products for 1) the hierarchical ordering of consumer health in the Global North over the health and well-being of workers in the Global South and 2) how vegetarianism involves the implicit privileging of some animals over others. This article takes a genealogical approach to the political ecology of food ethics using Black and Indigenous studies in conversation with animal geographies. I draw on Mbembe's (2016) necropolitics, Weheliye's (2014) "not quite human" and Lowe's (2015) critique of humanism to develop a conceptual framework for what lives or dies as a result of ethical dietary choices. I use this framework to examine commodities for the socio-ecological harm that their production extends into the world under the guise of "doing good" or "being ethical." Taking a harm reduction and food sovereignty approach, I advocate for a new ethical framework that includes a limited case for consuming animals.

Key words: ethics, political ecology, animals, food, environment

Résumé

De nombreux 'political ecologists' et géographes étudient les régimes alimentaires éthiques, mais la plupart d'entre eux sont curieusement silencieux sur le sujet de la mort dans le système alimentaire, plus précisément sur ce qui ou quoi est autorisé à vivre et ce qui est laissé mourir dans le "faire du bien." Cet article vise à montrer comment la pratique de l'alimentation produit les dommages socio-écologiques que la plupart des consommateurs éthiques cherchent à éviter par leurs choix alimentaires. J'examine les systèmes alimentaires qui produisent des produits éthiques pour 1) l'ordre hiérarchique de la santé des consommateurs dans le Nord global sur la santé et le bien-être des travailleurs dans le Sud global et 2) comment le végétarisme implique le privilège implicite de certains animaux sur d'autres. L'article adopte une approche généalogique de la 'political ecology' de l'éthique alimentaire en utilisant les 'études noires et indigènes' en conversation avec les études des 'géographies animales.' Je m'inspire de la nécropolitique de Mbembe (2016), du "pas tout à fait humain" de Weheliye (2014) et de la critique de l'humanisme de Lowe (2015) pour développer un cadre conceptuel permettant de comprendre ce qui vit ou meurt à la suite de choix alimentaires éthiques. J'utilise ce cadre pour examiner les produits de base sous l'angle des dommages socio-écologiques qu'ils produisent sous couvert de "faire le bien" ou d'"être éthique." En adoptant une approche de réduction des dommages et de souveraineté alimentaire, je plaide pour un nouveau cadre éthique qui inclut une justification limitée de la consommation d'animaux.

Mots clés: éthique, political ecology, animaux, alimentation, environnement

Resumen

Muchos "ecologistas políticos" y geógrafos estudian las dietas éticas, pero la mayoría guardan un curioso silencio sobre el tema de la muerte en el sistema alimentario, concretamente sobre qué o quién se permite vivir

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y qué se permite morir en el "hacer el bien." Este artículo pretende mostrar cómo la práctica de la alimentación produce los daños socioecológicos que la mayoría de los consumidores éticos tratan de evitar a través de sus elecciones alimentarias. Examino los sistemas alimentarios que producen productos éticos por 1) el orden jerárquico de la salud del consumidor en el Norte global sobre la salud y el bienestar del trabajador en el Sur global y 2) cómo el vegetarianismo implica el privilegio implícito de algunos animales sobre otros. Este proyecto adopta un enfoque genealógico de la "ecología política" de la ética alimentaria utilizando "estudios negros e indígenas" en conversación con estudios de "geografías animals." Me baso en la necropolítica de Mbembe (2016), en el "no del todo humano" de Weheliye (2014) y en la crítica del humanismo de Lowe (2015) para desarrollar un marco conceptual que permita entender lo que vive o muere como resultado de las elecciones alimentarias éticas. Utilizo este marco para examinar la producción de alimentos en términos del daño socio-ecológico que producen bajo la apariencia de "hacer el bien" o "ser éticos." Defiendo un nuevo marco ético que incluya una justificación limitada del consumo de animales.

Palabras clave: ética, ecología política, animales, alimentación, medio ambiente

1. Introduction

All eating causes harm.

No matter how food is produced, be it through regenerative agriculture or massive industrial operations, natural ecosystems are disrupted, animals are killed and plants are harvested as humans seek nutrition, sustenance and pleasure in eating. Knowledge about and responsibility for this harm has led some people to adopt prohibitions on the consumption of certain foods in the name of ethics and to advocate on a global scale for their widespread adoption in the name of justice. Capitalism, commodity fetishism, and marketing however obscure the realities of production. People think that choosing one food over another is somehow effective at reducing harm. In many cases, that choice, which is rooted in unacknowledged hierarchies embedded in spatial distance and racism, is actually causing more or different kinds of harm. Embracing the reality that no food is free of causing harm in the food system is meant not to demoralize and prohibit, but to radicalize and mobilize.

Meat eating is the subject of especially intense feelings on the topic of harm, and there are many arguments for the reduction or elimination of meat consumption. The publication of *A diet for a small planet* (Moore Lappé, 1971) sparked a public debate that has persisted for decades about the environmental ethics and general morality of animal consumption in the context of diminishing resource quality and quantity. Extreme views on meat consumption appeal to the individuality of certain animals, and human's shared position with animals that we consume in the taxonomic hierarchy (the latter is itself a complex social construction). Climate scientists argue that reducing meat eating is one of the most significant actions an individual could take to mitigate climate change for reasons that have little to do with consumption, but with production (i.e., meat involves methane gas production and clear-cutting forests for pasture). Physicians and their organizations have encouraged cutting back on meat for decades since it has a role in diseases of affluence (i.e., heart disease, diabetes and cancer). These are ever more tightly linked to animal consumption, although some links have since been disproven (Ebbeling *et al*, 2022).

Intense feelings about animals, the environment and rights to consume food of one's choosing, however, obscure some essential and foundational aspects of the consumption of animal flesh. The first (and something that I've been arguing for decades in published articles and my classrooms) is that the opacity of the supply chain obscures the conditions of production such that consumers have little to go on in terms of making ethical choices of any kind. For example, palm oil, which is ubiquitous in organic plant-based foods, is produced in a way that can only be described as an ecological and human rights disaster. The palm oil industry, however, goes to great lengths to obscure its operations in remote areas of Borneo, Sarawak and West Kalimantan. Not only would an ethical consumer have to look past the plant-based and sustainably certified label, but they would also have to look for palm oil as an ingredient and then finally, know or care about the Indigenous people, plants and animals and the environment where it's produced. It's a lot to ask of a consumer, especially given how they are bombarded with messages of every kind. One cannot blame the person who prefers to identify a

diet (vegetarianism, veganism, pescatarianism, locavores) with which they can associate themselves and their politics and do little beyond seeking foods out that fit the (grocery) bill. This move to innocence, however, often (re)produces the harms that the consumer originally set out to avoid.

So what is an ethical consumer to do, beyond educating themselves about the potential costs and harms of every food item, the tradeoffs of which cannot ever be truly known? In this article, I make an argument that all foods, no matter their origin or provenance, are produced and consumed in the context of implicit harm. This is due to hierarchies that structure the food system and society in general, and that arise from the way in which spatial distance and racism distort the view consumers have of food production. In short, no food can be consumed without intentionally or otherwise producing some harm in the world. In this article, I advocate for a harm reduction approach to eating which seeks to acknowledge and place the accountability for harm done by consumers to their own communities. In what follows, I outline the history of ethical eating and its (un)intended consequences.

2. Literature review

Since the rise of the organic movement in the 1980s ethical diets have intersected with health and fad diets to enter the mainstream. Organic, fair trade, humane certified and other such labeled foods are now commonplace in supermarkets in the United States. While it is axiomatic that food choices involve a trade-off, deliberate decisions to eat one thing and not another are often made by consumers with a sincere and often passionately held desire to do good for people and the environment. Key to marketing products to such consumers is the "cultural good", or social premium that comes with consuming such products (Goodman, 2004; Guthman, 2008). The intentional opacity of the food system, however, means that many of these choices about food are based on false assumptions or the wrong information about the social or environmental impact of their choices. In some cases, the label itself may be misleading and encouraging a value system that does not exist in practice (Allen and Kovach, 2000). For someone to make an adequately informed decision about food system practices and ethics requires knowing much more about the product than most consumers are currently allowed to know (Castree, 2001).

I position this article as a contribution to political ecology because it was the interdisciplinary insights of Blaikie and Brookfield (1987) which led to the understanding that agriculture is both political and economic (Moragues-Faus and Marsden, 2017). It is rooted in systematic injustice that uses oppressive notions of gender, race and other axes of inequality that impoverished humans while it robbed nature (Rocheleau *et al.*, 1996). Settler colonialism and neoimperialism perpetuate these systems in the contemporary world, leaving dispossession, private property systems and broken food systems in their wake (Slocum and Cadieux, 2015). Disciplinary approaches separated natural resources, politics and economics, but agriculture and food systems must be viewed as socio-environmental processes, which political ecology is well positioned to do (Robbins, 2019). This approach can both identify the problems (i.e., Goodman and Watts, 1997) as well as the solutions (i.e., Gibson-Graham, 2006) but is not without critique (Loftus, 2019). Thus, a political ecology framework is useful for the critique I make here, of a conventional understanding of plant-based diets as ethical and good for the environment. In what follows I summarize the food social movements of the past eight decades, and trace the origin of ethical consumption and its relationship to meat consumption.

Ethics and food: a short history

In the 1960s and 1970s, in the wake of the Green Revolution and the publication of *Silent Spring*, the negative externalities of agriculture became more widely and publicly known. The environmental movement of the time raised awareness of the interconnectedness of human and environmental health and encouraged consumers to consider the consequences of their choices. The breakout bestseller, *Diet for a small planet*, published in 1971 argued that meat production was wasteful and drove food insecurity and hunger (Moore Lappé, 1971). The math was simple: grains such as corn and soybeans that fed cows could be fed directly to

people instead. While this was true then and remains true now², the simple math overlooked the basic metabolic relationship that drove human-bovine relationships for millennia: humans cannot digest grass, but cows and other ungulates (bison, goats, sheep etc.) can, thereby turning sunlight into protein in the form of milk and meat, and also crucially, Vitamin D, in short supply in northern latitudes in the winter.

In the late 1980s, social movements advocated for making agriculture better for the Earth. Consumer awareness of the horrors of industrial animal production and the widespread adoption of genetically modified organisms (GMOs) found a ready audience in concerned and well-meaning consumers. The contemporary organic movement was born and along with it a resurgence of back-to-the-landers who advocated for a more sustainable lifestyle. For many, including my own family, this included a diet focused on simple commodity production: fruits, vegetables and livestock products (eggs, milk, meat) rather than the highly processed foods that were having their first big moment in the marketplace thanks to fast food and frozen food technologies. The back to the land movement coincided with and drew inspiration from deep ecology, which advocated for connection to living systems, including those advocating for animal rights. A divide developed between those who argued for a return to the land and a closer connection to living things, including the animals that were to be consumed and those who advocated for rejecting meat eating altogether.

In the 1990s, the back to the land movement realized its capitalist potential in the growth of urban farmers' markets and spawned social movements advocating for better food in terms of health and quality (Winter, 2003). Again, this movement did not explicitly exclude meat from consumption, rather producers created new forms, such as artisanal meat products and grass-fed products, including veal. They reinvented old forms of food for new markets. High end restaurants would always have meat as a centerpiece; instead of removing it, they replaced it with more sustainable or ethically sourced products with a carefully-worded credit to a local farm. The emphasis was not so much on animal rights, but on the resurgence of rural livelihoods through local markets and the provision of better lives for the animals who were eaten. Joel Salatin, who pioneered new methods of animal production became something of a problematic icon in a new social movement called food sovereignty (Salatin, 2007). Food sovereignty advocated for autonomy from restrictive laws that prevented small farmers from practicing quality agriculture, and changes in policy that benefited large-scale producers who housed animals in inhumane conditions for profit.

In the early 2000s and later, these social movements came under fire for their exclusionary politics and practices which allowed those with high incomes to enjoy high quality foods while those without were left to an unhealthy diet, including the foods that were produced through animal cruelty and inhumane working conditions (Hinrichs, 2000). Labeling and auditing systems failed to keep up with the innovations of capitalism that put workers, animals and environments in ever worsening conditions through their pursuit of profit. Fair trade and organic labels reassured anxious consumers that they were doing good in the world through their consuming practices. Investigations by researchers and independent agencies and journalists revealed that all was not what it seemed in the world of extended supply chains. Human rights abuses, child labor, environmentally destructive practices continued in spite of attempts by third party certifiers to document their absence (Trauger, 2014). In short, the labels made organic or fair labor practices "safe for capitalism" and did little to mitigate the harms at the other end of the supply chain (Guthman, 1998).

Veganism and vegetarianism persisted as "ethical" food choices into the 2010s, gaining some popularity through "Meatless Mondays" and "flexitarianism" as new forms of advocacy by social movement activists for reducing meat consumption (de Boer, Schösler & Aiking, 2014). Labels proliferated along with fad diets, providing consumers with a whole new world of options: sustainable salmon, grain free bread, keto ice cream, transfat free chips. If a consumer could imagine it, it could be produced and consumed. In this new world of options, alternative milks (nut, oat, seed) flourished as "sustainable" and ethical alternatives to milk produced by dairy animals. The understanding that partially hydrogenated oils (the main ingredient of margarine or dairy free imitation butters) contributed to heart disease and their subsequent phase-out, left an opening for a new fat player to enter. The palm oil industry in Malaysia, built to produce cheap fuels, found in that opening a ready market for a product that is naturally solid at room temperature (Haiven, 2022). Palm oil, compared to transfats,

² With one exception: most of the corn and soybeans grown in the United States today are genetically modified and destined for consumption by livestock or transformation into industrial products and food additives (Rissing, 2021).

is easily marketed as a more natural alternative, which uncritical consumers of snacks, sweets and spreads, especially those looking to replace animal products in their diets, readily swallowed (McNamara, 2010).

In early 2020s, two trends in artificial animal protein research and development that were slightly more palatable emerged. Two slightly different interventions, they use similar techniques to produce imitation and lab grown meats. The first, imitation meat, is made from plant protein. The most popular and available brand, Impossible Burger is made from soybeans and potatoes, fats from various oilseeds, and other binders to hold it together. What makes this glorified veggie burger taste like meat, however is the inclusion of an iron-containing compound called heme. It's found in all plants and animals, but the folks at Impossible Burger inserted heme from soy into genetically engineered yeast and fermented it to improve the taste. Impossible Burger is widely available at fast food and upscale restaurants alike.

The second innovation is lab-grown meat, which takes cells from living animals and grows them in large bioreactors and then combines them with plant-based products in a patented process. The energy requirements for lab-grown meat are still quite high, making it an unviable alternative to meat in terms of mitigating climate change, although that may change as production is scaled up (Smetana *et al*, 2015). Lab-grown meat is too expensive and still in development to be readily available, although late in 2020 lab-grown chicken was approved for human consumption in Singapore. Mouat, Prince and Roche (2019) argue that the imitation and lab-grown meat innovations are simply capitalizing on consumer anxieties and desire for sustainable alternatives. In what follows, I describe the evolution of animals and rights in the collective human imagination.

Animals geographies, sentience and rights

The intense anxieties about human-animal relationships spawned animal geographies, a significant subfield of human geography and an intellectual leader in the debate about animal rights and welfare as part of the "cultural turn" in the 1990s (Emel, Wilbert & Wolch, 2002). Driven by the relatively small amount of attention given to animals by geographers and political ecologists, animal geographers took up questions of human/animal divides as a function of the nature/culture and human/environment dichotomies and placed their inquiries in the realm of animal subjectivity, agency and the social constructions of identity through animals. Later work built on an uncritical and problematic conflation of racial violence with animal studies to advocate for "trans-species justice" (Lorimer and Srinivasan, 2013; White 2021). Used as both a foil for the development of human subjectivity and a justification for rights, animal sentience (or lack thereof) provided grounds for granting agency to (some) nonhuman/natures (Whatmore & Thorne, 1998). This follows the debate led by Singer (1973) and Regan (1983) both of whom made a case for animal rights based on sentience, with a few caveats. Regan advocated for rights based on consciousness, while Singer drew the line at the capacity to suffer.

Both inspired a campaign to end the increasingly cruel forms of industrial animal farming on the horizon in the 1980s and some took the extreme view of eliminating animal consumption and captivity altogether. Neo & Emel (2017, 2) argue that the consumption of meat is either driven by "the complicity of an amoral and/or unaware consumer" and urge consumers to take a greater role in changing the food production industry that commodifies "sentient beings" as food (p. 5). In this view, animals deserve the right to freedom from suffering and captivity. The charismatic species on the farm (tiny calves locked in crates) and in the laboratory (chimps, puppies, rabbits) understandably stoked the fires of well-meaning animal lovers to advocate for their rights as sentient beings who feel pain and react negatively to captivity (Johnston, 2013).³ Once the Pandora's box of sentience and pain was opened, advocates for the non-charismatic species such as insects argued that speciesism operates in the division of the deserving and not deserving of life and freedom (Gunderman & White, 2020).

Some animal liberationists take the approach of eliminating the consumption of animals and their products in a "total liberation framework" of veganism (White 2015, 24). Veganism as a political approach to

³ It's worth pointing out here that personally I feel animal cruelty laws should apply to animals in whatever context they live, a barn, backyard or laboratory, which appears to be part of our contradictory approaches to different kinds of animals (Herzog, 2010). I can't chain my dog in the backyard, but I *can* chain a dairy cow. The law interprets the difference between those two animals for me, and it is not without tremendous pressure from industries who benefit from animal cruelty.

problems of animal cruelty and abuse in the food system rejects reformism as an answer, and links animal suffering to exploitation (Gunderman & White, 2020; Hodge *et al.*, 2022). Frequently charged with whiteness and elitism, veganism has gained little ground in its campaign to end meat eating⁴ and many vegan products are profitably incorporated into corporate food product lines (Sexton, Garnett & Lorimer, 2022). McGregor & Houston (2018) suggest veganism as one solution to the contemporary problem of cattle in the food system. The downsides to veganism the authors list include the negative environmental externalities of scaling up veganism, but they do not include the negative impacts on the human laborers who produce animal product and protein substitutes. The proposition that the authors favor, which is to make better consumers, also does not include how policy shapes where and how animals can be produced and harvested and the way they prevent this from happening under better conditions.

Animals, consumption and care

The literature on animal geographies documents two shifts in thinking about farm animals in recent decades. The first, originating in animal liberation debates in the 1970s, emphasizes the bequeathing of rights to nonhuman animals (Francione & Charlton, 2015), thus removing them from the category of "property" (Braverman, 2017) and liberating them from the fate of being eaten or otherwise killed for human uses. This move falls prey to some ethical entanglements, including a variant of speciesism that favors the charismatic (Lorimer, 2007). The second shift, following in the wake of the development of and subsequent outrage about industrial models of farming, occupies itself with improving animal welfare so that those animals destined for human consumption would live better, perhaps even happier, lives (Miele, 2011). This approach also falls short of its stated goal, often being a tail wagging the dog of consumer faith in labels and practices (Miele & Lever, 2013). In short, the effort to improve animal welfare only makes it onto the label and not into the lives of individual animals, and their capacity to be authorities on their feelings about their fate is quite open to debate (Miele, 2011).

This emphasis on consumer motivations and behavior is a popular, although highly problematic, one for many reasons (Cairns & Johnston, 2018). Consumer power is expected to have influence in the most quotidian of interactions between individuals while it is mobilized on a global scale by such diverse institutions as the United Nations to fight climate change, and PETA (People for the Ethical Treatment of Animals) to fight animal cruelty. This approach underscores two presumptions that I'd like to unpack. The first is that animals as sentients deserve rights that look a lot like human rights and secondly, that the killing of animals always causes harm. The assignment of rights to some animals, but not others, parallels the assignment of human rights to some humans, but not others in the history of humanism, which I will explore more below. Sentience of some kind remains a significant and persistent threshold in spite of protestations otherwise – as does the "charisma" of the species (Lorimer, 2007). The second assumption is that individual eaters have power over a massive global industry propped up by powerful state governments. What one individual does or does not eat in the context of an overly structured capitalist economy is simply a form of neoliberal governance that works to offload responsibility from states and corporations onto individuals (Bee, Rice & Trauger, 2015).

The fact that people engage in conspicuous consumption of "ethical products" underscores how the act of eating one thing and not another is inherently contradictory. Narcissism and empathy are often positioned as opposite concepts, but a great deal of research into ethical consumer behavior indicates that it is driven by a particular form of self-involvement. Goodman (2016) and Guthman (1998) argue that the "doing of good" through consumption is a form of "moral selving" (Barnett *et al.*, 2005) that is wrapped up in identity formation and impression management. Notions of care and mitigating harm are entangled with ethical behavior that seemingly benefits only the "moral selver." But, there are objects or subjects of concern for whom this behavior is meant to benefit: presumably these are other humans, nonhumans or nature. Moral selving often has much more to do with the consumer than the object/subject of concern. Labels being what they are as tools of marketing, ethical consumers often reproduce the harm they set out to avoid (Trauger, 2014).

⁴ Some vegans of color have joined the debate with convincing arguments about a non-violent praxis associated with the healing of trauma (Harper 2016) and decolonization (Dunn, 2019).

Geographers argue that care at a distance, however contradictory, is an inherently spatial process that can offer insight into the ethics of consuming animals (McEwan & Goodman, 2010). Bauman (1989) for example, argues that proximity is a key factor to extending an ethic of care to others. Manyukhina (2017) however, argues that knowledge of vulnerability, suffering and harm that informs ethical decision-making is superior to one that focuses on space and place. They argue that it escapes "parochialism and perpetuation of patterns of unequal well-being" (p. 608) found in an "ethics of partiality" based on proximity (Friedman, 1991). Vetlesen (1993) offers a resolution to this debate that is useful: space matters only to the degree that people have developed a sense of empathy, or concern for others and a consideration, whether emotional or intellectual, of their suffering (Hoffman, 1990). Mencl and May (2009) further refine this argument by suggesting that "degree of harm" and "type of closeness" (p. 219) have a greater influence on ethical decision-making than either factor alone, and this is key to my argument.

"Type of closeness" begs some interesting questions about cognitive distance, or the mental frameworks that shape spatial interactions. The substitution of one food for another (e.g., palm oil produced in Malaysia for butter produced in the U.S.) implies a geographical hierarchy where the doing of good and the doing of harm are displaced from one human to another, or from one animal to another or from one place to another based on how close, cognitively or geographically, one is to the subject of harm. The persistent separation of animals into the categories of pets, livestock, and wildlife puts them in hierarchal relations "with human social groups, *as well as with other animal social groups*, in ways that produce and reproduce species-based differences and inequalities" (Hovorka, 2019, 750) in ways that are often spatial. Pets (in our homes) are obviously off-limits for eating, livestock should be as well (on farms nearby) but wildlife (in Malaysia) are curiously absent from this discussion. Even charismatic species such as orangutans are rarely considered as part of the ethical tradeoffs in dietary choices either due to a lack of knowledge, or geographical distance.

The "degree of harm" also raises questions about the capacity of human imagination to conjure images of suffering and harm at a distance. It also questions whether and how accurate those images are, given that for most consumers images of suffering and harm that inform decisions are the result of a sophisticated and well-funded advertising machinery and rarely result from personal experience. So, while PETA might present a doe-eyed veal calf as a victim of suffering, calves can and do live good lives on pasture and have good deaths in humane slaughterhouses if only civil society and government support that option for farmers.

In addition, the idea that all killing of farm animals is harmful and wrong overlooks the way the *not killing of them* produces harm elsewhere, to less interesting and adorable species and perhaps does more long-term damage to ecosystems *and* to individual humans and their societies. Thus, the degree of harm varies from consumer to consumer and for some, the saving of the calf is apparently worth the wholesale destruction of rainforests. Finally, and ultimately, the enormous gaps in the knowledge base of consumers, however ethical, are useful for corporations, and the governments that support and benefit from the production of their products.

Multi-species flourishing

While orangutans are not discussed much when it comes to diet, cattle are disproportionately well documented in the animal geographies literature (Robbins, 1999; McGregor & Houston, 2017; Sellick, 2020). Cattle and their off-gasses as a source of climate change are of the target of campaigns to reduce meat consumption, to little effect. There are two positions for cattle in the rather copious literature on this species: either they are abused and exploited rights-bearing sentient creatures worthy of protection from ownership and consumption, or they are destructive forces in need of elimination from our food system. In either case, I'm not sure the outcome is all that great for cattle as individuals or as a species (which face extinction either way), nor for those who depend on their existence for livelihoods and well-being the world over (not gross profiteering from human and animal suffering, which is another story altogether). If the goal is to inhabit a world in which we all enjoy "multi-species flourishing", and many in this debate agree that it is, (Tsing, 2015; Haraway, 2016) perhaps a middle ground could be sought? One in which cattle (and other animals, including reptiles, amphibians, fungi, nematodes and insects) live good lives in small numbers on small farms and a few cattle are sacrificed for the good of their human caretakers and their communities, while a great number of other species are saved?

In fact, the ecosystem approach to protecting life, such as assigning rights to nonhuman others that are not sentient, such as rivers, water and *manoomin* (wild rice) (Trauger, 2017) has had more success than protecting animals with rights. In 2006 the residents of Tamaqua Borough in Schuylkill County, Pennsylvania worked with the Community Environmental Legal Defense Fund (CELDF) to establish a local ordinance that recognized the rights of nature to prevent the dumping of toxins in their community. In 2008 Ecuadorian citizens voted to enshrine the rights of nature and food sovereignty as part of their national constitution. In 2017, in New Zealand a Maori tribe successfully advocated for legal personhood for a river central to their identity and livelihoods. In 2018, the White Earth band of Anishinabe in Minnesota established legal rights for *manoomin* in order to block the construction of a pipeline. Environmental personhood is a legal strategy that at worst tangles courts in complicated and lengthy debates about rights – and at best recognizes the responsibilities humans have toward the nonhuman. A middle ground, established by CELDF, creates a legal category where none existed before, thereby opening conceptual and practical basis for protecting against the abuse of the human and the nonhuman.

While certainly an important strategic step forward, the assignment of rights in order to protect animals and ecosystems all suffer from a significant shortcoming in their rationale: that rights as imagined in the philosophies of liberalism and humanism have failed to protect all humans. That the communities who seek to protect nature through giving it rights are either poor, post-colonial or Indigenous (or all three) speaks volumes about the miserable failure of humanism to protect certain categories of humans, or what Weheliye (2014, 19) calls the "not quite human." That these groups resort to appealing to the law to protect their environments over protecting them as *humans* is a categorical failure of human rights that nearly every book or article on animal rights completely overlooks. Notable exceptions include Braverman (2017, 2018) and Margulies (2019), but these articles do not adequately do the work of calling out the failure of humanism because they are entangled in the debates about the rights of nonhumans.

In summary, I advocate for a political ecological approach that focuses on animals as collectives (i.e., breed, species) that occupy ecological niches, rather than ignoring the way certain animals (e.g., fungi, insects, nematodes) are essential parts of ecosystems. This approach to animal rights or welfare, posits that what is good for an ecosystem must be good for individual animals, even if this means the death of certain individuals through culling, natural selection or predation (Hovorka 2017). Hovorka (2017, 459) argues that within geography and indeed, political ecology, "there is room to push further...to facilitate holistic and meaningful insights into the lives of animals." This will be towards the end of "making animals matter" (Evans & Miele, 2012) but without granting them rights in a way that frustrates the aims of humanism and liberalism. I propose, following Hovorka (2017) a human-animal-environmental approach, but one that takes seriously the lives of animals as well as the lives of the "not-quite-human" (Weheliye, 2014). Bridging Black studies, Indigenous studies and animal geographies, I further develop this framework using the concept of nonhumanism.

3. The rise of nonhumanism

Humanism, as an important, but limited shift in thinking during the Enlightenment toward a belief in human rationality led to the development of the philosophy of liberalism in which rights, namely freedom, were granted to humans via democracy. Lowe (2015) writes that slaves, colonized and Indigenous people were always already exempted from the category of "human", thus ensuring the stability of the concept for those who enjoyed its associated rights. She writes "colonized peoples created the conditions for liberal humanism...this particular violence continues to be reproduced in liberal humanist institutions..." (pp. 39-41). The power over space, territory and borders, known as sovereignty, gives the power to states and non-state actors, sometimes working together "to manufacture an entire crowd of people who specifically live at the edge of life, or even on its outer edge" (Mbembe, 2016, 38) and "institutionalizing a regime of inequality at the planetary scale" (Mbembe, 2016, 20) based on racialized exclusions from the category of "human" and its associated rights to freedom, consent to be governed, and equality before the law.

Mbembe (2016) addresses the racial deficiencies in the work of Agamben and Foucault to illustrate how colonization and sovereignty create particular forms of death and killing. He writes that democracies and their colonies have never been entirely separate, and that these "societies of separation" (p. 42) become constitutive

of each other, particularly in relation to who lives and who dies. Together they create "a form of government of the world" (p. 60) that promotes life in one population *a la* Foucault's biopolitics (1978, 2008) while another population is either actively killed or "let die" through various states of exception to laws that protect human life (Agamben 1995). Mbembe argues that Agamben's "camp" functions in the contemporary world via the plantation and the colony, and that sovereignty is not just the power to promote life, but also to kill. He writes that "the question needs to be asked about the place that is given to life, death and the human body" (p. 66) though the "*the material destruction of human bodies and populations*" (p. 68, original emphasis).

Mbembe (2016) writes that the process of "instrumentalization of human existence" and the disposability of human bodies is everywhere constituted as "a form of organization for death" (p. 7, see also Wright 2013). Mbembe (2016) and others (McKittrick, 2006; Weheliye, 2014; Lowe 2015; Sharpe, 2016) argue that the rights enjoyed by those in the white race are guaranteed only through the non-life, the living deadness, the ongoing "abjection from the realm of the human" (Sharpe 2016, 14) and the disposability of the laboring bodies of nonwhites (Wright, 2013). Mbembe writes that "no 'human' exists that does not immediately participate in the 'nonhuman', the 'more than human', the 'beyond human' or the 'elsewhere-than-human'" (p. 164), especially those who enjoy life in democracies. Democracy, according to Mbembe, takes on meaning and shape through the construction and maintenance of borders, the "dead spaces of non-connection which deny the very idea of a shared humanity" (p. 99). In short, democracies do not exist without their opposites, their colonies.

While the territory of the colony provides the grounds for establishing sovereignty and its terrorism, the discourse of liberalism and rights provides the justification for conferring the status of "human" on its subjects on the basis of race. Weheliye (2014, 19) writes that race is "an assemblage of forces that must continuously articulate nonwhite subjects as 'not quite human'." Much like the resources of the colony which have served to enrich and make comfortable the lives of those in the metropole, "racism always served as a *subsidy* for capital" (Mbembe 2016, 180). According to Lowe (2015, 16) the lives of the "liberal subject and society in the imperial center are possible only in relation to laboring lives in the colonized geographies or 'zones of exception' with which they coexist, however disavowed." She writes that "we must reckon that present contests over the life and death of the 'human' are often only legible in terms of those spaces still authorized by liberal political humanism" (p. 41).

Racism structures social hierarchies that are formed through absences and presences, forgetting and erasures to normalize, "a set of processes that discipline humanity into full humans, not-quite-humans and nonhumans" (Weheliye, 2014, 4). The categories of race and gender were formed through imperial processes of capture, dispossession and abjection (Rizzo and Gerontakis, 2016). Lowe (2015) writes that the ongoing social inequalities of our time are resultant of the freeing of some humans through liberal humanism, such that nonwhite subjects are barred from the category of human. Weheliye urges scholars to integrate race into biopolitics and place it "front and center in considerations of political violence...as a set of sociopolitical processes of differentiation and hierarchization" (p. 5). McKittrick (2006) urges scholars to recognize that the hierarchies of human and inhuman made possible by racism "reveal how this social categorization is also a contested geographic project" (p. xvi). This insight draws on and compliments Gilmore's work, who writes that "racism is a practice of abstraction, a death-dealing displacement of difference into hierarchies that organize relations within and between the planet's sovereign political territories" (Gilmore, 2002, 16).

The territory of the colony thus provides the grounds for establishing sovereignty outside the bounds of democracy. Mbembe (2016) writes that "liberal democracy and racism are fully compatible. Democracy...has always needed a constitutive Other for its legitimation, an Other who is and is not at the same time part of the *polis*" (p. 162). The space of the colony and the plantation generated the conditions that made sovereignty through occupation possible and one of its functions was to relegate "the colonized to a third zone between subjecthood and objecthood" (p. 79) which defined "who is disposable and who is not" (p. 80) and conferring on them "the status of the *living dead*" (p. 91). The "vertical sovereignty" (p. 81) of "modern colonial occupation is a concatenation of multiple powers: disciplinary, biopolitical and necropolitical" (p. 82). The contemporary colony or "*death world*" is controlled by what Mbembe calls a "war machine" (p. 85) which is composed of armed men who operate in cooperation with each other or separate into groups to divide and conquer. Examples abound: military occupations (Gregory, 2004), corporate land grabs (Tsing, 2005),

neoliberal states of exception (Ong, 2006), globalization (Ferguson, 2006), prisons (Gilmore, 2007) and settler colonialism (Simpson, 2014).

In the context of partial and variegated democratic sovereignties and the ongoing production of the "not quite human" as a resource for capital, the assignment of rights to nonhuman others is cognitively dissonant. It follows, however unfortunately, from the logic of liberalism and humanism that some humans and some nonhumans are chosen over others to receive rights and liberties not granted to others. Few scholars of animal geography have acknowledged the problems of liberalism in the first place or the philosophical complications of giving rights to nonhumans when not all humans enjoy them equally. The persistence of pursuing rights for nonhumans in spite of the critiques from Black, post-colonial and Indigenous studies is telling of the liberalism and whiteness that pervades animal studies, and animal rights advocacy more generally (with some exceptions). It is premised on the same logic of liberal humanism: that rights only take on meaning when they are denied to others. The pursuit of this strategy has given rise to what I call *nonhumanism*: the hierarchical privileging of rights of animals over the rights of humans, the origin of which is in the creation of the "not quite human" (Weheliye, 2014).

This has its origins in colonialism and the "societies of separation" which includes the geographic displacement of laborers from view and at a distance from the *polis*. This displacement is ongoing today in the form of extended supply chains for food products that disproportionately originate in former and current colonies. This is nowhere more apparent than in the proliferation of food products generated for ethical diets, which include such foods as plant-based spreads and milk alternatives which are made up of tropical oils and nuts which originate in places characterized by the "death worlds" of the settler colony, governed by the war machine and produced through the labor of the "not quite human." This operates through what I call the "vegan industrial complex" which is a set of state and corporate actors using the power of sovereignty (including states of exception) to legislate life in zones of accumulation, and producing the living deadness of the "not quite human" in order to promote their plant-based products as better for the planet (see also Trauger, forthcoming).

This operates through the ongoing maintenance of democracies and their borders and their "double", the colony, through which globalization structures the reproduction of social and biological life. Decisions are made by states and corporations about the relative value of the life of humans, animals and nature. These decisions include choices about who or what will be made to live, who will be let to die, who will inhabit the liminal zone between living and dying in conditions that neither promote life, nor deliver death, according to the interests of capital. These decisions are made in the context of only what they can do to satisfy the needs and desires of consumers, even and especially the "ethical" ones who care about the harm they cause to animals without thinking about the harm that accrues to humans. Biological life, the functioning of the laboring body and what it can produce for capital (even vegan capital) rather than "(full human existence) forms the core of political modernity and increasingly comes to define the scope of state power, particularly in the legal state of exception" (Weheliye, 2014, 34).

I argue that together, racism, capitalism, nonhumanism and the vegan industrial complex work to generate and perpetuate three harmful social hierarchies. The first is the privileging of consuming human over producing human. This is the idea that what is "good" for the consumer should be made available at any cost, including the dispossession of Indigenous people, the enslavement of workers and the destruction of ecological resources. Food geographers have long examined the ecological and social problems that hide behind ethical labeling (Goodman, 2004; Guthman, 2008). The second hierarchy is composed of charismatic nonhumans over the "not quite human." This is at work when the life of an individual (often imagined) animal is valued over the lives of laborers or Indigenous people. This is evident in the study by Margulies (2019) where tigers are protected, but the lives of tea plantation workers are not. The last hierarchy is the valuing of some nonhumans over other nonhumans or one species group over another. This includes the valuing of livestock (cows, pigs, chickens) over wildlife, including birds, snakes, insects or nematodes, many of whom continue to attempt to live in places disrupted by agriculture (Hovorka, 2017). In what follows I present an example of nonhumanism at work in the vegan industrial complex to produce and perpetuate these three hierarchies.

4. Nonhumanism and the vegan industrial complex

Soybeans have been a popular source of plant-based proteins since the *Diet for a small planet* revolutionized soybean cuisine in the 1970s. While the benefits of soy as a health food are much debated, little is written in relationship to ethical diets with regard to its production. Soybean production is concentrated in four countries: the U.S., Brazil, Argentina, and India. The vast majority of food grade soybeans are grown organically, largely due to consumer demand for non-GMO food products and the low margins for conventional food grade soybeans for North American farmers who mostly grow them for livestock and export (McBride & Greene, 2009). A relatively small percentage of acreage is devoted to organic soybean production in the United States (Hartman *et al.*, 2016) and India produced more than 70% of organic food grade soybeans to the US market in 2020 (Fatka, 2021). Six large corporations trade in soybean and the vast majority are grown on large-scale plantations associated with widespread deforestation and habitat loss, particularly in the Brazilian Amazon. Smallholder production of soybeans is a small sector and is characterized by poverty and exploitation in Brazil (Ioris, 2015). Soy is a versatile food product most famous for tofu, but it is also included in the production of various soy-based products such as plant-based spreads, oil blends, other meat alternatives and milks. Tempeh, which is a fermented soy product pressed into cakes that can be smoked and seasoned to taste like a bacon alternative, is used an example in what follows.

Some humans over the "not quite human"

Ethical consumers reach for plant-based foods in the belief that they are protecting animals and the planet and do not consider how their actions impact other humans. India (until very recently)⁵ exported the vast majority of organic soybeans destined to be made into soy-based foods for North American consumers, including certified organic livestock consumers (Whoriskey, 2017). Since the Green Revolution, India has been induced to export its food to its former colonizers and their allies in spite of a much-protested and well-documented situation of widespread hunger and food insecurity (Patel, 2013). Turkey is also a large exporter of organic soybeans, most of which are destined for animal production, although its certification scheme has recently raised suspicions (Whoriskey, 2017). Turkey's agricultural labor practices have long been a source of contention for its inclusion in the European Union as well (Taymaz & Ozler, 2005). The margins on food grade ('Vinton') soybeans are low enough that few organic producers grow them, instead opting for animal grade or combining food and animal grade on one farm.⁶ That is now changing and the price of organic soybeans has skyrocketed in the wake of the anti-dumping campaign against India, who remains at the mercy of global trade institutions and allies of its former colonizer.

Some nonhumans over the "not quite human"

If the point of eating tempeh bacon is to avoid killing the pig and discouraging the wasteful, cruel and harmful practices of conventional pork production, then what does this say about the wasteful, cruel and harmful practices associated with soybean production? While it is difficult to say for sure what kinds of labor practices exist on organic soybean farms, largely because they are few in number, located in obscure locations and cannot be traced for proprietary market and trade-related reasons, *all* soybean production in the United States is premised on the (ongoing) dispossession of Indigenous people, the destruction of prairie habitats and the near total extermination of bison, an essential food source for Indigenous tribes in prairie ecoregions and an important part of the prairie ecological niche. Soybean production abroad is associated with the same kinds of ecological and genocidal violence but it happens in a different place, often out of sight and at a distance from the accountability of the eater. The eater is only then accounting for the life of the pig and discounting the lives of those who survived on the land before it was turned into soybean fields, those who produced the soybeans and those who processed the soybeans into something edible.

⁵ The USDA opened an investigation in 2021 of manipulation of prices via dumping, and has since paused the importation of Indian soybean meal.

⁶ Buying food grade soybeans from a farm where animal grade soybeans are grown is also implicitly condoning the slaughter of animals, much like the consumption of dairy or eggs.

Some nonhumans over other nonhumans

The ecological devastation wrought by monocultures cannot be overstated, and soybeans are no exception. One pound (0.45 kg) of soybeans makes two 14 oz (0.4 kg) cake of tempeh (20% protein). One acre (0.4 ha) of land can produce 300 pounds (136 kg) of soybeans in a single long growing season (May to November). By contrast, at low (humane) densities one acre of forest can support 3-4 pigs (600 pounds, 272 kg of meat at 27% protein). If one is simply eating the soybeans, it seems to make a lot more sense to grow soybeans than to raise a pig, especially if they're being fed soy-based feeds. But soybeans are not profitable without machinery (see the capital at work here) or at smaller scales unless people are growing them in small plots with unpaid human (usually women's) labor, like some farms in India. So, pigs and soybeans are roughly equivalent in terms of protein production per acre, but pigs are more efficient if they are eating things other than soybeans.

So, a pound (0.45 kg) of organic soybeans may cost a few dollars to buy, but to make that small amount affordable, hundreds of acres of land must be tilled to justify the equipment that makes it affordable. Often grown under contract and in rotation with other crops, organic soybeans will likely be grown with genetically modified conventional crops by the same farmer, which subsidizes the organic production. And organic soybeans are grown to feed certified organic livestock and no organic certification says that organic production must avoid fossil fuel use, which is required for diesel tractors and combine harvesters to plant, cultivate and harvest. The nonhumans harmed in the large-scale production of soybeans include everything from soil biota, charismatic megafauna, endangered species and untold numbers of species lost to extinction from monocultures. The animal lives lost to a plant-based label are unaccounted for and obscured from view with deceptive marketing.

5. Conclusion: toward multi-species flourishing

The avoidance of accountability for harm, through a facile association with ethics and a plant-based diet, generates more harm to societies and the environment than it prevents. There are two general points I want to extend from the empirics I've presented above. The first is that when plant-based foods are produced at a distance, the harm they generate is unseeable and unknowable. The eater is shielded from the knowledge through deceptive labeling and campaigns, and in so-doing is no longer responsible or accountable for that harm. The pig or the bison that may be slaughtered to feed a family for a year can have human accountability associated with its death, and potentially ecological and social benefit from its life. Toward that end, I want consumers to be accountable to the harm instead of displacing it, which may, in the best case possible, mean knowing personally the animal that was harvested for a purpose to give humans life.

Key to making this work is reducing the scale of consumption (eat less, but better) and make the benefits and harms of eating an ethical diet a part of one's own community and not someone else's. The benefits of a plant-based diet sourced through extended supply chains only accrue to the large corporations and states which benefit from its production. This is not purely reducible to the choice to eat one thing and not another (Fair, 2021). A world in which organic soybean or sustainable palm oil production happens in a purely ethical way does not exist. It is entangled in a state and corporate administered machine that integrates animal feed production with human labor violations and global trade that leaves hunger, exploitation, climate change, species extinction, Indigenous dispossession and deforestation in its wake. Long supply chains, corporate control of the supply chain and international trade governance that produces states of exception are the common denominators in all of these situations.

Welheliye (2014, 1) concisely articulates the project of Black studies and other critical humanities: it is

...to understand the workings of and abolish our extremely uneven global power structures defined by the intersections of neoliberal capitalism, racism, settler-colonialism, immigration, and imperialism, which interact in the creation and maintenance of systems of domination; and dispossession, criminalization, expropriation, exploitation, and violence that are predicated upon hierarchies of racialized, gendered, sexualized, economized, and nationalized social existence.

If such an ambitious goal can be agreed as the endgame of ethics and of political ecology more generally, I argue that the consumption of limited forms of animal flesh do more to advance this agenda than the abstinence from eating meat altogether. Such diets that preclude the consumption of animals do more to reproduce the violence of colonial relations than they do to mitigate them, against what their claims to non-violence might suggest. Embedded in white supremacy, which is the logic of social organization premised on racial hierarchies, ethical diets privilege the "doing good" of the often, white, settler eater and do not acknowledge or prioritize the welfare of the "less than human."

This project is following from Mbembe's (2016, 157) urging to "...examine the conditions for forming a properly human world" and to generate "...an idea of the Earth as that which is common to us, as our communal condition" (p. 189). Mbembe is against what he calls "fast capitalism" (p. 93), disconnection and displacement in which the consumer can enjoy the good of consuming without the responsibilities that come with that consumption. Fast capitalism shapes the vegan industrial complex through borders, corporate control of supply chains and state-sponsored land grabs to produce plant-based foods for profit. Ethical diets are infused with ideas of humanism and infect our interspecies relations to suggest that the 'not killing' of one animal is better than the wholesale destruction of entire ecosystems and Indigenous livelihoods. This article has attempted to engage with the harm that eating causes, and to replace it within communities of care and responsibility. To that end, I propose a solution:

One pig can produce over 150 pounds (68 kg) of meat and twenty pounds (9 kg) of bacon. Raised on pasture, outside in a forest with a diet of tree nuts, surplus milk and vegetable waste from nearby organic farms, a pig can contribute to increased soil, forest and ecosystem health. It could be just one part of multi-species flourishing on a small farm: trees, grasses, biota, other livestock, wildlife and humans can thrive together in such a system. The pig could be processed humanely at a small-scale family-owned meat processing plant which employs well paid, skilled labor and does not use plastic packaging. While one pig may have lost its life to eventually produce pork bacon, that one pig could feed a family well for several months, perhaps up to a year if bacon was a rare treat on a Sunday morning every other week. What is left in the wake of that pig's life, is soil restoration, small-business health, human health and a short supply chain that is both legible and traceable, thus making it accountable to the harm it may cause.

Most advocates for small-scale agriculture often blithely conclude at this point in an article that we just need to consume more humanely-raised animals without considering the dispossession of Indigenous people that make agriculture possible, the policies that make it difficult if not impossible to raise sustainable livestock, and the struggles that small-scale farmers face. Starting with returning political and economic control of Indigenous people in North America through a collective process called "LANDBACK", I advocate for a wholesale policy shift in agriculture that is Indigenous-led. As a settler, I don't have much to say about what follows from that (c.f., Tuck and Yang, 2012), but my hope is that bison may replace pigs in North America, because they have an even better nutritional and ecological profile and produce even more meat.

Land in the United States could be returned to Indigenous people through a New Land Act (perhaps part of the elusive Green New Deal) starting with publicly-held land and followed by idle and unproductive land, followed by privately-held land owned by retiring farmers. A New Land Act can purchase the land with public money so that settlers share the burden of its cost, or it could be held in land trusts, something advocated for by Soulfire Farm, which links abolition and reparations to decolonization (see Trauger, forthcoming). An ethic of life in the food system can and should recognize that for people to live, something must die. The loss of one life for the benefit of several, especially many different kinds of nonhuman others and those humans who have been abjected from the realm of the human is perhaps a more important ethic to pursue than one that is simply "plant-based."

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