SLIDE 1

Slow violence and the animal-industrial complex: Unpacking the consequences of coercive confinement during the war against nonhuman animals.

In my recent book the war against nonhuman animals, I offer practical and operational guidelines on how we might protect nonhuman animals from the violence(s) of war. I do so by offering an original analysis of non-international armed conflict as outlined in IHL. I argue that the war against nonhuman animals involves industrialized slaughter as well as industrialized reproduction. In this paper I unpack the impact of the animal industrial complex.

SLIDE 2

Concentrated Animal Feeding Operations in the US

Concentrated Animal Feeding Operations are large industrial farms that raise nonhuman animals at high-density, for the consumption of meat, eggs, and dairy. CAFOs are classified by both the type and number of nonhuman animals they detain and the way waste is released into the water supply (see also Elefritz, 2018). In terms of the number of nonhuman land animals, to qualify as CAFOs, these facilities need to hold at least 125,000 broiler chickens, 82,000 laying hens, 2,500 pigs (in some instances this can be as much as 10,000 pigs), 700 dairy cows and 1,000 beef cattle (Four Paws, 2020; Moberg, 2020).

Mega farms are the British equivalent of CAFOs. In the UK there are 800. Indeed, as Wasley et al (2017) report, every county in England has at least one of these intensive mega farms. To qualify, the farm must include facilities that can detain more than "40,000 birds, 2,000 pigs or 750 breeding sows". To put this in perspective: "Herefordshire has more than 16 million factory-farmed

animals...which means the county has 88 times more factory-farmed animals than it does humans. Shropshire and Norfolk [have] more than 15 million and 12 million animals respectively" (Wasley et al., 2017). The same concerns raised about CAFOs in the US – relating to noise, smell, pollution, and disease - have been expressed in relation to mega farms in the UK (Four Paws, 2020; Wasley et al., 2017).

While radical changes are being implemented across Europe - 27 countries are planning to ban the use of cages for nonhuman farm animals by 2027- this is not the case with mega farms across Asia. In the book I discuss the following impacts of factory farming: public health and antibiotic resistance, environmental impacts, and the working environment of factory and slaughterhouse workers. Today I will focus on the environmental impacts.

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It is estimated that, globally, greenhouse gas emissions from factory farming comprise 14.5% of all greenhouse gas emissions (ASPCA, 2022). Research conducted by Nature Food found that livestock production, as well as livestock feed, is responsible for 57% of all food production emissions. Milman goes on to state: "[t]he global production of food is responsible for a third of all planetheating gases emitted by human activity, with the use of animals for meat causing twice the pollution of producing plant-based foods, a major new study has found.' The environmental impacts of CAFOs disproportionately impact vulnerable populations. Moberg (2020, p, 773) uses the terms "environmental justice (EJ) communities" when referring to these populations which comprise mainly of low-income, Black, Indigenous, and people of color. For example, Oregon's two largest CAFOs are located in a county with more than double the state average Latinx population.

The laborers employed by animal feeding operations are also members of marginalized demographics, as they are often undocumented immigrants. CAFOs pay their workers decidedly low wages even though the workers face serious physical dangers.

SLIDE 4

'There Are No Winners Here': Drought in the Klamath Basin Inflames a Decades-Old War Over Water and Fish

Drought has long fueled tensions between growers, who depend on the water for irrigation, and the Klamath Tribes, who hold two protected fish species as sacred. Like much of the American West, this dry, hilly, high-elevation landscape straddling the California-Oregon border is experiencing a summer of extreme drought. But when the federal government announced in May that, for the first time ever, it would cut irrigation water to about 180,000 acres of agriculture in the basin, tensions ignited between farmers and the Klamath tribes.

The U.S. Bureau of Reclamation made the cuts to preserve two endangered species of suckerfish sacred to the Klamath Tribes, as well as protected coho and chinook salmon that travel along the Klamath River to reach spawning habitat. After meeting the needs of the fish, the bureau determined, there would not be enough water left over for most irrigators in the basin.

https://insideclimatenews.org/news/16072021/drought-klamath-basinoregon-california-agriculture-tribes-fish/

Wildfire kills fish in Klamath River

A wildfire burning in a remote area just south of the Oregon border appears to have caused the deaths of tens of thousands of Klamath River fish, the Karuk Tribe said.

Tribal fisheries biologists believe a flash flood caused by heavy rains over the burn area caused a massive debris flow that entered the river.

The debris entering the river led to oxygen levels in the Klamath River dropping to zero on Wednesday and Thursday nights, according to readings from tribal monitors at a nearby water quality station.

The fish kill was a blow for the Karuk and Yurok tribes, which have been fighting for years to protect fragile populations of salmon in the Klamath River. The salmon are revered by the Karuk Tribe and the Yurok Tribe, California's second-largest Native American tribe

https://eu.registerguard.com/story/news/2022/08/07/karuk-tribe-mckinneyfire-near-oregon-border-kills-klamath-river-fish-happycamp/65394657007/

SLIDE 5

Francois Knoetze - From 6 different waste materials he made enormous sculptures that explored the city of Cape Town. Those sculptures serve as costumes to wander through different parts of the city, looking for places where they belong, where they come from and where they do not belong. It is about the abundance of waste that pollutes the South African city.

A giant robot made of scrap metal cans looks at revolution, industrialisation, the loss of farmers and the fast-food monopolies, food security, disturbing violence and those that are remembered as farmer-warrior-statesman. The irony is clear when the robots goes for a hike in the most beautiful natural environment.

Following Davies I believe it would be fruitful to draw on Mbembe's (2003) necropolitics and Nixon's (2011) concept of slow violence to unpack the environmental impacts of the animal-industrial complex. Slow violence is violence that it out of sight and that develops over time. It involves "delayed destruction that is dispersed across time and space, an attritional violence that is typically not viewed as violence at all" (Nixon 2011, p. 2). Typically, violence is viewed as something immediate and visible, whereas slow violence is gradual but not harmless (Davies, 2018). Environmental pollution is often used as a prime example of slow violence, where the harms of pollution accumulate over time, with serious consequences (Davies, 2018). As discussed above, the agricultural industry, through its greenhouse gas emissions, contributes to climate change. I argue therefore, that the animal-industrial complex, and the pollution it causes, can be placed within this framework of slow violence.

As Davies (2018) notes, slow violence does not involve actively killing individuals through environmental harm rather, communities exposed to pollution, for example, are victims of state inaction, which results in the "subjugation of life to the power of death" (Mbembe, 2003, p. 39). "Slow violence, then, can be read as a form of late-modern necropolitics, where communities are exposed to the power of death-in-life. It is a nondeliberate consequence of polluting industries that they expose subaltern populations (especially) to the experience of 'death-worlds'" (Davies, 2018, p. 1540).

Indeed, as highlighted above, racialized and marginalized communities are often the most at risk of the violence of 'let die' (Davies et al., 2017). Slow violence captures the delayed destruction that follows from environmental pollution. Human populations exposed to this invisible, yet inevitable, destructive violence, occupy "spaces of contamination that are akin to 'death-worlds'" (Davies, 2018, p. 1540). Put simply, they are the "living dead" (Mbembe, 2003, p. 40). In stark terms: the 'death worlds' and the 'living dead' status of nonhuman animals within the animal-industrial complex will, inevitably, become the reality for many human populations.

SLIDE 6

The alt-milk industry is worth £400 million a year in the UK (Wood, 2022). As Wood (2022) explains: "[f]or many alt-milk fans the attraction is they offer a route to reducing the environmental impact of their diet due to the level of greenhouse gas emissions associated with traditional dairy farming."¹ However, the green and sustainability claims made by certain companies have been contested. For example, "the Advertising Standards Authority recently banned a marketing campaign by Oatly, ruling that the green claims made were misleading" (Wood, 2022). Below, drawing on empirical data, I review the green and sustainability credentials of various plant-based alternatives.

Comparing a number of environmental metrics - land use, greenhouse gas emissions, water use, and eutrophication² - Ritchie (2022) found that dairy milk, when compared with oat, soy, almond and rice milk, scores higher across all metrics. Based on her research she states: "dairy milk causes around three times as much greenhouse gas emissions; uses around ten times as much land; two to twenty times as much freshwater; and creates much higher levels of eutrophication". To put it another way: a glass of dairy milk, produced daily, for

¹ It is worth noting that, in 2022, according to Stuart Roberts, deputy president of the National Farmers' Union, 90% of households in the UK were still consuming meat and dairy (as cited in Harvey 2022).

² According to the European Commission n.d - and its section on oceans, seas and coasts - "Eutrophication is a process driven by the enrichment of water by nutrients, especially compounds of nitrogen and/or phosphorus, leading to: increased growth, primary production and biomass of algae; changes in the balance of organisms; and water quality degradation."

a year, uses 650 sq m (7,000 sq ft) of land (Guibourg & Briggs 2019). This, Guibourg and Briggs (2019) note, is the equivalent of two tennis courts. This is ten times greater than what is required to produce the same quantity of oat milk. And while the production of plant-based milks requires relatively large amounts of water – for example a glass of almond milk uses 130 pints of water – they still use less water than dairy milk (Guibourg & Briggs 2019.³See also Marinova & Bogueva, 2020).

Kanyama et al (2021) extend the analysis beyond milk and provide a detailed review of the literature that measures the differences in the environmental impact between a range of dairy products and plant-based alternatives. They draw on 21 studies that compare the environmental impacts of dairy products with plant-based alternatives – milk, butter, cream, cheese, and yogurt. The environmental metrics included greenhouse gas emissions (as well as other emissions), land, water, and energy use. From these studies they conclude that overall, plant-based alternatives "have a lower environmental impact than the dairy products."

SLIDE 7

What about the impact of soy?

Soy milk has received a lot of attention stemming from concerns about soy's role in the deforestation of the Amazon. However, as the research demonstrates, while there has been an increase in the demand for soy over the past 50 years, changes in land-use in Brazil are attributed to the need for pasture for beef production (Ritchie, 2022).

³ The article by Guibourg & Briggs draws on the study by Poore and Nemecek 2018 -*Reducing Food's Environmental Impacts through Producers and Consumers.*

In Brazil, for example, 95% of soy is used for animal feed. And globally three quarters of soy is used for animal feed (Ritchie, 2022). "This means that very little of Amazonian land-use pressures from soy have been driven by crops for direct human consumption; most is for animal feed" (Ritchie, 2022).

So, while the production of soy has increased rapidly, drawing on data published by the University of Oxford's Food Climate Research Network (FCRN), Ritchie and Roser (2021) note that this proliferation is based on the increase demand for soy-based animal feed, biofuels, and vegetable oil. Between 1990-2013 the use of soy-based food products, such as tofu and soy milk increased from 7.4 to 10.7 million tons. However, for the same period, the use of soy-based animal feed, biofuels and vegetable oil increased from 88 million to 227 million tons (Ritchie & Roser, 2021).

However, as the research suggest, while soy may not be the main *direct* contributor to deforestation, it still has indirect impacts when it comes to land-use. As noted above, the increased demand in soy results in an increase demand for land. And in certain regions of the Legal Amazon, such as Mato Grosso, soy crops are replacing pastureland. In other words, pastureland is being displaced by soy crops and is moving into forested areas, thereby implicated soy production in indirect deforestation.

SLIDE 8

If Not Us Then Who is a US registered charity, 501(c)(3) that supports a global awareness campaign highlighting the role indigenous and local peoples play in protecting our planet. We work in partnership with communities to make films, take photographs, curate content, commission local artists and host events. Our work aims to build lasting networks, target unjust policies, and advocate for

greater rights for indigenous and local peoples to bring about positive social change.

...given the scale and scope of the threats that they face with regard to climate change – including specific threats to their livelihoods, cultures and ways of life – their situation is different from that of other groups and from that of the poor. On the other hand, indigenous peoples, with their traditional knowledge and occupations, have a unique role to play in climate action, cutting across both climate mitigation and adaptation efforts, and also just transition policies.

Indigenous peoples and climate change – International Labour Office – 2017 https://ifnotusthenwho.me/about/demands/

Conclusion

As sentient beings I believe we need to replace the status of nonhuman animals as property, adopt a rights-based approach that considered the feasibility of legal personhood status.