



Animal Liberation Journal

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ABOUT ANIMAL LIBERATION JOURNAL

Animal Liberation Journal (ALJ), a scholarly peer-reviewed open-access journal, founded in 2023, was designed to take the articles that are submitted to the Journal for Critical Animal Studies that are not focused on the critical animal studies principles, such as, total liberation, intersectionality, theory-to-practice, collaboration, transformation, ending all oppression and domination, and anarchism, but are rather single-issued on animal liberation, animal advocacy, animal rights, and the end of speciesism.

Values and Uniqueness

- The *Animal Liberation Journal* publishes rigorously peer-reviewed academic work of the highest quality.
- The *Animal Liberation Journal* is a free open-access electronic journal.
- The *Animal Liberation Journal* does not charge publication fees.
- The *Animal Liberation Journal* supports and encourages submissions that are excluded from mainstream journals, including the use of photographic, video, and new media work.
- The *Animal Liberation Journal*, while an academic journal, provides space and place for contributions from activists.

SUBMITTING

Publication Dates

ALJ uses a **rolling submission process**, allowing authors to submit at any time during the year without time restraints or quota of articles in an issue. Rolling submission, the most current scholarly method of accepting publications, allows for more timely publications and current scholarship to enter the public sphere quicker, rather than to conform to traditional academic print journal guidelines.

We are pleased to accept your **submissions at any time**.

Please note that we are a 100% volunteer enterprise and, as such, it may take time to peer review your essay and return. **Wait times can range anywhere between six months to a year**. Please keep this in mind when you submit.

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ALJ submissions are expected to follow the formatting and research documentation [criteria prescribed by the American Psychological Association](#) (APA). If you are not familiar with APA formatting, [you can review it here](#).

Please do not use footnotes or endnotes.

For submission guidelines, see [ALJ Formatting Guide](#). Please follow these guidelines when preparing your submission. **Failure to comply with these guidelines will delay the processing of your submission!**

For general questions and to submit your article, please email your documents to journalforcas@gmail.com

Review Policies

1. **Submissions must be grounded in the field of animal liberation.** In short, animal liberation is the end of the oppression, domination and exploitation of nonhuman animals.
2. **Submissions must not be under review for any other publication.** Here's a [very thoughtful article](#) about why you should not submit your article to more than one journal at a time.
3. **Submissions must be original and not previously published.** If you are submitting a version of a previously posted or published piece, please tell the editors.
4. **Upon acceptance for review, the editors will send manuscripts, under a double anonymous peer-reviewed process, to no less than two, and usually three, reviewers.** Reviewers provide their recommendations to the issue editor(s), who makes the final decision to accept the manuscript.

Type of Submissions

1. **Research articles/essays** – 5,000 to 10,000 words
2. **Film, book, art, and media reviews** – no more than 3,000 words
3. **Interviews and dialogues** – between 1,000 to 10,000 words
4. **Course/class summaries** – no more than 2,000 words
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6. **Lecture summaries** – no more than 2,000 words
7. **Conference summaries** – no more than 2,000 words
8. **Protest summaries** – no more than 2,000 words
9. **Poems** – no more than 10,000 words

Suggested Topics

ALJ is dedicated to focusing on animal liberation and the animal liberation movement. This is a single issued journal for animal advocacy, animal rights, anti-speciesism, and animal justice. We especially encourage contributions that engage animal liberation in disciplines and debates that have received little previous attention. If you are looking to write on total liberation or intersectionality please submit to the Journal for Critical Animal Studies.

Review Process

1. Everyone who submits text to be reviewed for publication in ALJ will work with the Editor, and this will be the only person with whom the submitter should have a contact at ALJ.
2. If a dispute/conflict arises that cannot be resolved with the Editor, the author(s)/reviewer(s) may contact the General Editors of ALJ, but not anyone affiliated with the Institute for Critical Animal Studies (ICAS), which is a separate entity.

Submissions will be assigned to one of the four following categories:

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5. Once accepted for publication, ALJ author(s)/reviewer(s) will work within a structured timeline to edit the text for publication. A final draft of the text will be sent from the Issue Editor to the author(s)/reviewer(s) of the text to approve. At that time, author(s)/reviewer(s) can only make minor changes in grammar, spelling, and formatting and must send the article back within five days in a Word Doc (or a simply approve via

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6. After the issue is formatted by the Issue and General Editors, it is uploaded via Word Doc, PDF, and Issuu.com. Once published/uploaded, *no re-editing is allowed*; the only situation in which publication would be retracted is if legal questions arose about the material an author(s)/review(s) submission.
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3. Contributors agree and acknowledge that no royalty, payment, or other compensation will be provided by ALJ in exchange for or result from the publication of the submitted work.

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Does Cultured Meat Decouple Animals from Meat?

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Abstract

Cultured meat has been the subject of a variety of claims, and recently, said claims are coming under greater scrutiny. One claim, however, has not seen particular challenge. The notion that cultured meat “will decouple animals from meat” has been generally accepted as an accurate claim, with only a few notable challenges to the idea. The normalization of cultured meat has primarily occurred by way of narrative, given the lack of definitive data. This paper investigates four narratives surrounding cultured meat, interrogating the place of animals within these narratives and the implications for animal life therein. The paper concludes that the concept of “decoupling” does not align with the implications of these narratives for animal life.

Keywords

Cultured meat; decouple; meatmakers in the kitchen; business-as-quasi-usual; the pig in the backyard; the 99.6%; sustainability; narrative.

Does Cultured Meat Decouple Animals from Meat?

Richard Giles

Introduction

Will consumers be eating lab-grown meat in the near future? Such a question seems to be on the minds of media sources, academics, and some members of the general public. The possibilities and costs of scaling cultured meat production are the subject of prominent, increasingly passionate, focus; the alleged environmental benefits are coming under scrutiny; and the “naturalness” of the cultured meat enterprise remains a point of contention. However, with claims of market introduction and production facility construction continuing at a steady pace, one selling-point seems to be generally accepted – “cultured meat decouples animals from meat.” This paper investigates whether cultured meat actually decouples animals from meat, concluding that this “decoupling” is questionable. This paper will consider four narratives across the discourse (“business as quasi-usual,” “the meatmaker in the kitchen,” “the pig in the backyard,” and “the 99.6%”), situate the animal within such narratives, and investigate the (theoretical) material and immaterial existence of animals under these narratives. The paper will demonstrate that animals are not, ultimately, decoupled from meat, even under the best-case scenarios of each narrative. The paper will conclude by considering the implications of this line of argumentation for animal-rights activists and cultured-meat proponents.

Background

Since cultured meat’s inception, it has been difficult to cast aside the utopianism the concept invokes. Producing meat through a small biopsy – by placing the biopsied cells into a culture medium and using the power of a bioreactor to produce meat from animals who do not have to die in order to provide meat – has proven intriguing for those concerned with animal welfare. The prospect proved so promising that Hopkins and Dacey (2008), five years before the first prototype was even produced, argued that there might be a moral obligation to support the production of cultured meat at various levels (p. 579). Early excitement for cultured meat grew following Tuomisto and De Mattos’s (2011) Life-Cycle Analysis, which claimed that, within the confines of their completely theoretical study, cultured meat would drastically reduce the GHG emissions, land use, water use, and electricity usage of meat (p. 6117) – this claim is still widely circulated.

The promises of early cultured meat proponents have proven invaluable for producers and those looking to develop a potential industry. Investments have crossed the \$2 billion point as of 2022 (Bomkamp et al., 2023, p. 11). Though most of these investments have been given to a small handful of companies – with other startups still in the stage of obtaining Seed and Series A funding – increases in investment have contributed to the legitimization of a supposed “cultured meat revolution.” These claims have been compounded by projected market shares that have been widely reported, such as A.T. Kearney’s claims that 35% of all consumed meat, by 2040, will be cultured (Best, 2020). In this scenario, billions of tons of meat would be cultured, and the power of industrial meat producers would be substantially disrupted. This ambition would also mark a rapid perpetuation in cultured meat’s development; currently, only Singapore has approved the sale of cultured meat in limited settings.

There is noteworthy doubt that these promises can be achieved. Despite production facilities being built at a considerable rate, the actual possibility of producing cultured meat at scale is under scrutiny. Humbird's (2020) analysis, the subject of a widely circulated article by Fassler (2021), indicates that cultured meat producers are attempting to build bioreactors at never-before-seen scales, working with cells that are considerably more prone to damage than typically used in biopharmaceutical production processes, all for an end-product that may never compete with traditional meat's cheapness. Even positive assessments of cultured meat's scalability are still alarming. Vergeer, Sinke, and Odegard's (2021) *Techno-Economic Assessment* argues that cultured meat can reach price parity, but this parity can only be reached by investors who must both take certain actions, and advocate for others to take significant actions: change from economic to social investment criteria (p. 17); reduce medium costs drastically alongside cultured meat's scalability (p. 16); and globally adopt renewable energy sources (p. 34-35). How these barriers can be overcome is entirely unclear at this juncture.

In tandem with scalability considerations, Mattick et al. (2015), and Lynch and Pierrehumbert (2019), have raised concerns that cultured meat is not environmentally sustainable, with the latter raising the possibility that cultured meat could be more damaging than industrial meat production, in the long term, due to carbon emissions from electricity usage relative to methane emissions from the number of animals in captivity. Escobar et al. (2021) have noted that there is too little data to make any definitive claim of cultured meat's potential environmental impact at this stage.

While these issues are a small sampling of the overall questions surrounding cultured meat, they do present a concerning picture that investment and excitement for cultured meat may be premature. Various investors, academics, and even former CEOs are raising concern that cultured meat's promises are too lofty (Tatum, 2022a & 2022b). However, throughout the cultured meat discourse, there is still a general acceptance of cultured meat's ethical soundness, with only a few authors – such as Poirier (2018; 2019) – raising concern that cultured meat's ethical promises are not well-developed. I will return to these ethical concerns after investigating various narratives of cultured meat which contribute to its utopian ambitions.

At this point in the paper, a distinction should be made between “rhetoric”, and “narrative,” as both terms are used in tandem with one another, but are distinct. While rhetoric refers to the vocabulary, terminology, and general ideas employed in the discourse surrounding cultured meat, narrative refers to a more coherent, overall vision that can be identified *across* various debates and rhetorical discussions surrounding cultured meat. As an example of the distinction, there is rhetoric/discourse surrounding whether or not cultured meat is “meat.” Various definitions and concepts have been put into play, but whether these concepts fit under a certain narrative of cultured meat is another matter. Some of the following examples, like the “pig in the backyard,” are not dependent on the federal regulation of cultured meat's legally mandated terminology, even if the rhetoric used to convey this narrative could become more complicated if cultured meat is not considered “meat” by certain authorities. While the narratives of cultured meat do depend on rhetoric to be conveyed, the discussion of cultured meat can still be considered separate from the various narratives that are present at both the conscious and subconscious levels.

The Meatmaker in the Kitchen: Early Visions of Cultured Meat Production

Initial discourse surrounding cultured meat also served as the grounds for active imaginations of cultured meat's future. Cain (2005) introduces readers to the idea of “meat makers sitting next to bread makers in the kitchen.” This vision is not founded upon a clear, coherent idea of how cultured meat is to be produced – at the time, the idea was completely theoretical. This theoretical aspect allowed interested parties to imagine new ways of producing and consuming meat. Early speculation introduced the idea of reducing the number of animals necessary for supplying meat to the single digits (Knab, n.d.). However, this vision introduced considerable ambiguity as to how one is to understand cultured meat production. Who is to provide the cells for said meatmaker? What animal is supplying said cells?

On the former point, this matter is not addressed in early rhetoric. Given the theorized possibilities for cultured meat to “disrupt,” or even “eliminate” traditional meat production, a number of visions could be conjured – new companies supplying cells in place of old monopolies; governments at various levels taking over cellular production or management, and even individuals performing their own biopsies on their own animals, giving new credence to the idea of “local.” No references to the meatmaker in the kitchen, however, have commented on where cells are to come from, and who handles their production and distribution. Though the narrative has mostly disappeared from the discourse, for reasons discussed momentarily, individuals such as Charlebois (2021) still reference a vague vision of cultured meat creation being done in the home, in some small-scale form.

Reducing the world's supply of meat-producing animals to single digits has long served as a promising vision, but underneath the promise lie potential caveats. Who will own these animals? Would such a change mean only one company controls the entirety of the world's food supply? What if a government, maybe even at a global level, were to control access to, and the production of, this small group of animals? What role might geopolitical tensions play in such a supply? “Meatmakers in the kitchen,” as an early narrative of cultured meat's possibilities, ignored the underlying productive aspects of meat production writ large, in the process creating a narrative of difference that did not engage with the potential commonalities between cultured and traditional forms of production. This narrative, however, is not alone in its ability to erase the vast complications of food production, ethical dynamics, etc., in the promotion of cultured meat as a promising biotechnology.

Business as Quasi-Usual

Arguably the most important narrative on cultured meat, “business as quasi-usual” is more difficult to identify than others, given its widespread, assumptive dynamics. Though some early thinkers played with the idea of individualized meat-makers, most proponents (and critics) have presumed that consumers will be buying structured cultured meat products at grocery stores or in restaurants. By virtue of this approach, cultured meat would change the world behind the scenes – through the changes to the production process – but would not alter things for the everyday consumers, as they would still have access to the meat products with which they are familiar. Identified by Evans and Johnson (2021), and engaged with further in Giles (2022), this seeming

contradiction can be understood as the “disruption/reinforcement” binary of cultured meat discourse.

Cultured meat has often been presented as a disruptive force. It will allegedly change the environmental impact of meat production, resolve the ethical issues of meat consumption, and might allow for the creation of healthier, more varied, meat. However, in the process, the consumer desire/demand for meat – as well as the producer’s desire to perpetuate such demand – is not called into question, but instead relied upon cultured meat’s performance and legitimization. The cultural standing and consumptive patterns of consumers are instead reinforced by producers and advocates. Cultured meat would, in theory, not require any changes to consumer patterns, except for what company they purchase from.

The disruption/reinforcement dichotomy has been a mainstay in cultured meat discourse since its inception, usually by virtue of the production process itself; the idea is to produce meat that is not just identical in taste and appearance, but molecularly identical by virtue of meat that is “just grown differently.” However, this distinction between disruption and reinforcement has always been unstable. Mark Post – an essential cultured meat researcher – is on record as declaring to concerned farm groups that cultured meat would not erase traditional animal agriculture, but instead merely share shelf space (“Industry Leaders Say...,” 2013). The rhetoric of shared shelf space has been noticeable since Tyson and Cargill’s 2017 involvement with cultured meat investment. This nuance regarding cultured meat’s disruptive capacity is not particularly surprising, as cultured meat producers still depend on animals provided by traditional producers for cells, and traditional farmers will still be able to sell crops to these companies, as they will need materials for culture mediums.

Jonsson (2016) presents cultured meat as “ontologically unstable,” a way to disrupt typical understandings of meat and meat’s relationship to individuals, societies, and cultures. However, this disruption is still entirely theoretical, and has yet to account for the role of cognitive dissonance and rationalization after an initial engagement with cultured meat. Catts and Zurr’s (2002) study of individuals who consumed cultured frog has not provided evidence that this instability stayed with these individuals throughout the years; it is possible that these individuals have returned to old beliefs or have transformed their ontology to a new stability that does not necessarily require substantial ideological or ontological revision.

Such notions indicate that cultured meat perpetuates a new norm that mirrors the old norm. Meat consumption continues, unabated and apace, through a new means of production. As more clarity is being granted to the production process, new ideas have emerged as to how production could be handled. For example, Melzener et al. (2021) recently presented the possibility of producers slaughtering animals once they have reached their maximum capacity for cell-culturing (pp. 9-10) – though such a practice would contradict the supposed ethical superiority of cultured meat, it would make economic sense. With producers sharing shelf space alongside plant-based foods and traditional meat producers, a general sense has emerged that early promises of a total revolution in meat production have subsided in the cultured meat discourse. Consequently, most cultured meat narratives and visions have entered a stage which accepts the notion of “business as quasi-usual.” While different companies may vie for power and control of production and markets, the impact on consumers is supposed to be minimal, if not non-existent. The extent of

cultured meat's disruptive capacity has always been complicated from the outset of interest in the field. Throughout the years, a tension has emerged of attempting to disrupt by not disrupting, of changing how things are to stay the same. Some might argue that changing the way meat is produced is revolutionary by virtue of the functionality of said production, but that is a limited frame through which to understand cultured meat and the efforts of its proponents. As will be discussed later in the paper, the place of animals in such a system already points us towards a better understanding of the implications of business as quasi-usual. However, even when not considering animals, the general idea of cultured meat embodies this narrative. The Thanksgiving turkey is to be genetically the same, taste the same, and should serve the same theoretical functionality at the holiday-gathering dinner-table. With continual adjustment for the idea of sharing shelf-space, everyone gets to continue with their business as usual, though it would be preferable if consumers switch to the better "business as usual" than the old, outdated, but simultaneously still-valid, model. It is this tension which brings about the next narrative.

The Pig in the Backyard

In response to the industrialization of food production, considerable energy has been dedicated to responding to these trends through the promotion of local food. The concept invokes an array of ideas, from the reduction of food miles to a 100-mile radius to images of farmers markets, community gardens, and a return to what Stanescu (2010) identifies as the "literary pastoral." The local food narrative has gained considerable traction throughout the years, often as a response to the limitations of technological innovations for responding to various environmental and biodiversity issues which threaten food supplies and societal stability. Cultured meat has, from its inception, been likely to face a difficult relationship with the local food movement. In one way, however, cultured meat serves as a promoter of local food imagery, as the promises of drastically reduced land usage would, theoretically, free land for gardens and re-wilding projects. Yet, the way cultured meat is produced does not evoke a "literary pastoral." Instead, the process is highly scientific and specialized, failing to evoke images of the rustic farm run by a farmer and his family while connected with nature.

Seemingly aware of this crisis-of-image, some authors have engaged with the idea of "the pig in the backyard," first raised by Weele and Driessen (2013). Stemming from a group brainstorming session, the imagery contemplates the prospects of small communities holding an animal in a backyard or town square, harvesting its cells using a 20m³ bioreactor, which Humbird (2020) argues would still be at world-record levels for a bioreactor size (p. 22), even though Weele and Tramper (2014) later note that this bioreactor is to feed "a small village" (p. 296) This imagery has been further expanded by Wurgaft (2019), who posits that the pig in the backyard serves more than a basic biological functionality; the pig in the town square, backyard, etc., helps the human project of "becoming" come to greater fruition by allowing children and adults to interact with the animal whose cells they are harvesting for food (pp. 189-194). Though this imagery is not popular across the entirety of cultured meat discourse, it has been spread in Wurgaft's 2019 book, *Meat Planet*, attempting to rectify what is often seen as cold, sterile, and scientific, with the warmth of locality and local imagery.

Yet, questions of power, systemic structure, and population call such a narrative into question. The costs of producing cultured meat are considerably high, with scalability a questionable

possibility. How is a small, likely under-funded municipality supposed to fund, and maintain, an immensely complicated and expensive cultured meat production facility – and who is to train those who will work at said facility? How do we define the parameters of a backyard or town square, and what of those who do not live close to town squares? What would such a system mean for the variety of meats that consumers have become used to consuming from grocery store shelves? Can enough pigs be fit into town squares to feed a village, small town, city, etc? Finally, would such a system be truly “local” if the ingredients needed for a culture medium (or scaffolding) have to be imported from different places?

This narrative exists in a similar vein as the meatmaker in the kitchen: an ambitious, idealized image of cultured meat production which does not match what is known about cultured meat production, or even local food production. Bringing cultured meat to a local level will likely need seismic reductions in production costs in order to be manageable for multi-million, or even billion, dollar companies – there are likely unconsidered externalities which would have to be taken into consideration to make these reductions friendlier for local communities. Furthermore, the presence of just one animal in this narrative – the “pig” – does not account for a variety of matters, including the demands of individuals as consumers. While one can envision ways to bring communities together by celebrating the animal harvested for meat, those possibilities do not negate all of the issues which arise from the production process itself, or the business of cultured meat writ large. However, this narrative should not be dismissed; even if implausible, it does have the potential to generate interest and hype in cultured meat, especially when considered in tandem with the final narrative.

The 99.6%

Throughout cultured meat’s tenure, various pieces have mentioned the possibility that the meat consumed by billions of people could be further diversified, not just in terms of how it is produced, but what is produced and where. On the latter point, Meatech 3D Ltd (2022) recently declared that “from the Sahara to the Antarctic, cultured meat can be produced anywhere.” Such a claim continues the vision put forward by the meatmaker in the kitchen narrative, despite current cultured meat facilities – and projected future facilities – requiring considerable space which may not be available in the Antarctic. The proclamation also integrates the pig in the backyard narrative by proxy; different countries, localities, and cultures will use different animals for food, so if it can be produced anywhere, that also means a new variety in meat.

It is this new diversity of meat which the “99.6%” narrative highlights. In 2019, VOW Foods emerged as a prominent figure in media publications, an Australian company with lofty ambitions. One of those ambitions is to build a “Noah’s Ark” of cells. The rhetoric used by VOW indicates that consumers desire more variety in the meat they can eat; the ark would allow for the maintenance of a cell library not just for cellular preservation, but for the creation of new – presumably profitable – food experiences. The “99.6%” of this narrative – an admittedly flippant framing which I introduced (Giles, 2022) – stems from a comment by the company’s CEO: “at the moment we have only domesticated for food production less than 1% of what’s in nature so there are many unlocked food secrets to explore in the other 99.6%.... Nature has incredible diversity so there is great potential to create new food experiences. Our cell library will discover and catalogue new flavor, texture, and nutritional profiles” (Fortune, 2019; Harvey,

2019; Berry, 2021). This framing presents our current industrial animal agriculture system, which kills billions of animals (trillions if we try to count fish) every year, as insufficient. The idea is to reduce the number killed while expanding the variety of animals harvested for flesh.

If VOW were the only company using this rhetoric, it would not count as a narrative. However, between 2021 and 2022, Primeval Foods, Mogale Meats, and ANJY Foods have emerged as companies on a similar mission, and with similar rhetoric. Mogale Meats is focusing on building a cellular library of wild animals throughout Africa, and ANJY Foods once promised a \$900 Lion Burger once they have received seed funding. However, of primary importance is Primeval Foods, a company which claims to have held a tasting event, and has set its sights on Zebras, Lions, Tigers, Panthers, and even some implied interest in harvesting Elephants, for its products. Primeval employs similar rhetoric to VOW, framing meat production as an iceberg at which we are only at the tip; supposedly, we have only domesticated traditional animals because of ease and docility, not because of the necessary nutritional value, which Primeval aims to rectify with its products. The vision presented by Primeval forms a sort of utopia, in which animals who provide “exceptional umami experiences” are harvested for cells, can live their best lives, and finally fulfill their possibilities of providing a range of people with different tastes and nutritional possibilities (“Process,” n.d.).

This narrative can be framed as just the over-promises of start-up companies looking for funding; though that should not dismiss the use of possibly inaccurate and impossible ideas being used to bring in venture capital, those looking to dismiss this narrative should be concerned about ongoing changes in the business-as-quasi-usual narrative, and how these changes could normalize the 99.6% narrative over time. Until recently, cultured meat proponents referred to an imminent introduction of cultured meat to store shelves, even with constant failed promises of product introduction – likely a result of the complete lack of a legal framework for cultured meat’s introduction in all countries but Singapore. The Good Food Institute’s yearly industry reports, in 2020 and 2021, are reflective of this general optimism. However, their 2022 report changed course; for the first time, the institute acknowledged that cultured meat will likely depend on high-end restaurants as early customers (Cohen et al., 2022, p. 16). This revelation comes at a time when more companies are entering the space with promises of exotic foods and ethical meats. High-end restaurants and cultured meat companies exist in a competitive space; being able to access even a small portion of the 99.6% of undomesticated animals could serve as a tantalizing colonization of the rest of the animal world, all in the name of producer diversification and umami desire. While obviously entirely theoretical, the vision which emerges from this narrative is concerning, and should, I argue, prompt a genuine consideration of the notion of “decoupling.”

Does Cultured Meat Decouple Animals from Meat?

The idea behind “decoupling” is to disengage, separate, or disentangle two or more concepts, ideas, or entities from one another. The implication is that, even if the concepts have their own autonomy or functionality, they are still so closely associated with one another that they tend to be understood as one, in tandem with another. In the case of animals and meat, the relationship can be understood in the following way. Animals who are killed for food are coupled with meat; even if animals exist on their own and can be understood as not being meat, they are so often

killed, and turned into meat, that the animal is perpetually coupled with the concept, or function, of meat. Of course, such a framing still brings up various issues. Discussing (de)coupling without reference to material and immaterial considerations can create confusion. For example, are animals always symbolically coupled with meat? Pigs, chickens, cows, etc., are symbolically coupled with meat, but can also be used as other symbols (select usage in children's literature or other stories does not necessarily couple animals and meat together). Yet, that does not mean that there is not a subtext, in which the animal's status as meat still looms in the background, with inherent knowledge that non-meat symbols are the exception, not the norm. And what of hunted animals, who are often grouped with symbols of life, nature, beauty, etc.? Though immaterial symbols and ideology may decouple the hunted animal from meat in a certain sense, the animal that is hunted is still coupled with meat through the actions of a hunter who is using various weaponry to kill the animal.

When it comes to animal agriculture, it is much more difficult to claim that animals can ever be decoupled from meat. By existing within the anthropocentric food system, animals are bred by human interests, brought into existence for the purpose of growing to an edible point, and then killed in order to serve as food. Regardless of whether the animal is in an industrial barn, or lives on a family farm where it can roam free and may even have a name, the animal's existence and death are essentially pre-determined. The coupling extends throughout the animal's entire life. Even those who are not killed are still often coupled together with the production of various animal products.

Cultured meat, in theory, is supposed to decouple the animal from meat. Such a claim arises from the belief that animals will not have to die for cultured meat to be created and brought to store shelves/high-end restaurant dinner plates. This notion has been part of the cultured meat narrative from the beginning. I argue, however, that the idea of decoupling has been underdeveloped in the cultured meat literature and discourse. Even if animals do not die to produce meat, that does not mean they are immediately decoupled from meat. There are considerations beyond the animals' death, such as where they will be housed, what type of life they will live, what their status will be in a newly "cultured" society and food system, and whether the animals are decoupled in all aspects of their lives. To investigate this point further, I will return to each narrative, contemplating the animal's theoretical presence therein.

The Meatmaker in the Kitchen

Imagine a coordinated global effort to ensure that, for each type of animal that is used for meat, a new global organization is created to house the 5 or 6 animals for each type of meat; this organization will guarantee that every place in the world can access the cells of these animals for "the meatmakers in the kitchen." As a result, billions of animals are no longer required to be killed for meat. Does this new world actually decouple animals from meat?

For the animals who are still classified as "meat providers," they are not decoupled from meat. This small handful of animals must still be housed and managed, as biopsies require post-biopsy health monitoring, regardless of their size. The animals may not die to provide meat, but they are still providing meat in their lived existence. Cultured meat is championed as "the real thing," with real animal cells delivering real "umami experience." Decoupling these animals from meat

would defeat the purpose of cultured meat; if they are not animals destined to provide meat, what are they? This narrative creates an oxymoron, intentional or not, in which the dependence on animals for meat is still essential for the creation of cultured meat, even though advocates and proponents claim otherwise.

The animals who are no longer classified as “meat providers” should, in theory, be decoupled in such a shift. If they are no longer required to fulfill the need for meat, they are no longer necessary for meat production, consequently becoming “decoupled” by virtue of the cultured meat project. Such a notion is optimistic and unrealistic. The animal’s status at one level might be decoupled from meat – at the level of producers – but that does not mean individuals and cultures suddenly decouple animals from meat by virtue of cultured meat’s existence. There is no evidence that cultured meat disrupts how animals, themselves, are understood; meat may be conceptually challenged, but as Weele and Driessen (2019) demonstrate, the disruption does not extend to animals. The status of animal as meat is perpetuated as part of numerous complicated systems, immaterial and material in functionality; cultured meat may decouple these animals in one sense, but this narrative presumes that cultured meat companies hold culture-altering power. Once these theoretical animals are no longer in the slaughterhouse, unless they are protected by some sort of governance regime or cultural change in status, they are “fair game,” their status still negotiable and determinable by other actors.

Business as Quasi-Usual

The meatmaker in the kitchen narrative demonstrates cultured meat’s inability to decouple animals from meat; the animal who provides cells is not disengaged from meat production, and the animal who does not provide cells is not automatically disqualified from being rendered meat. Instead, what is at play is the animal’s life. The death of the animal, theoretically, can be decoupled from meat production; no longer does the animal have to die for meat production. This notion does not automatically equate to a complete decoupling – let alone liberation – of the animal from the status of meat, nor from some sort of material production of meat.

The meatmaker in the kitchen, however, does not accurately reflect the likely ways cultured meat will be produced. Melzener et al. (2021) have estimated that the production of cultured beef, globally, will require 20,000 cows (pp. 9-10). While obviously a reduction from the millions that are killed each year, 20,000 cows is still much more sizeable than 5 or 6. I call attention to “business as quasi-usual” in action, since the action is reduced in scale and scope, but business continues apace, in a new form. However, if business as quasi-usual can maintain the ambitions of proponents to decouple animal death from meat production, that does reinforce the “quasi” aspect.

Yet, there is much to take into account. As mentioned earlier, there has been considerable cooling of the revolutionary rhetoric that once defined cultured meat discourse and investment. Images of store shelves with more variety for consumers are increasingly common in the literature. In walking away from the revolutionary rhetoric of early proponents, companies are reinforcing the business-as-quasi-usual narrative. Yet, cultured meat companies cannot neglect the traditional aspects of meat production. Cells are still provided primarily by traditional producers from the bodies of dead animals, feedgrains must still be produced for these animals,

as well as for the inputs needed for culture mediums, and companies still depend on the same consumer base as do traditional producers, potentially limiting their framing strategies.

For animals, this business-as-quasi-usual approach changes little about their (theoretical) daily lives and symbolic (non)existence. For the “20,000” cows – and other similar sized animal herds – even if they do not have the fate of being killed for food hanging over their heads, their daily existence is likely going to be dictated by the demands of private capital. Newborn animals are still metaphorically branded under a cultured meat system of production, not just because of the need for umbilical cords for culture medium production (Morrison, 2022), but because they are going to be placed under the control of human ownership and anthropocentric demands. Animal life tends to be of such minimal focus in the discourse that these matters are not discussed when it comes to cultured meat’s ethical possibilities; there is a need to account for the animal as more than just a being who may or may not be “destined” to die for human meat consumption.

Concerningly, Melzener et al.’s (2021) article also points out that the assumption of “decoupled from death” cannot be accepted uncritically. The authors posit that, while doing so would contradict the moral value of cultured meat, it would make economic (and environmental) sense to slaughter animals that have reached the limit of their “culture-ability” (pp. 9-10). If producers were to follow this model, then the basic promise of decoupling animals from meat is false. In fairness, proponents may reject such a model for cultured meat production. However, these producers do not exist outside of capitalist industrial production systems; even under theoretical socialist and anarchist systems, producers still have incentive to slaughter animals after they have gone beyond their maximum productivity (Giles, 2022, pp. 117-119; 122). Cultured meat does not decouple animals from the expectations of efficiency and productivity which are placed upon animals by anthropocentric interests. Jonsson (2016) posits that cultured meat is the absolute logic of industrial meat production, reducing animals to their cells in order to overcome the numerous other problems of the animal. Animal existence, beyond the life/death binary, is not present in cultured meat discourse, a matter especially reflected by the business-as-quasi-usual discourse, which purports to provide an ethical solution to the slaughter of animals, yet provides a narrow understanding of animals within meat production systems, failing to decouple animal life and death from meat.

The Pig in the Backyard

The pig in the backyard cannot escape the instrumental use of the animal that exists in other narratives. However, some may argue that, by taking the animal out of the cold, industrial barn, and placing them in the village square/backyard, a new appreciation of the animal can emerge, and by extension, an appreciation of the animal’s life and role in the development of human society. Wurgaft (2019) presents the pig in the village square as an opportunity to observe the pig in a more natural setting and, further, to ask the pig questions in order to better develop the constantly unfolding process of becoming, on which humanity has been long embarked. The combination of biotechnological innovations and local food imagery attempts to combine the best of both worlds, with Wurgaft also introducing such an image as a response to “urban, abolitionist” veganism which supposedly desires a world without animals.

The pig in the backyard/village square must still be considered with a perspective on the animal itself, not just the anthropocentric benefits the animal can either offer, or have taken by force,

depending on the framing. Previously discussed narratives still erase the animals by placing them in small theoretical facilities, away from public life and consumer eyes. The pig in the backyard turns the use of the animal into a spectacle of individual life and community building. The animal is not decoupled from cultured meat just because it is in a town square or backyard – it still has to be biopsied for cells, housed for the sake of food system stability, and, depending on the village, could still be slaughtered once no longer culture-able, if a Melzener et al. (2021) model is adopted. However, by placing the pig (or other animal) in an observable, interactive space meant to foster community and self-development, the animal is further coupled with meat by virtue of the symbolism placed upon it by the community in question. The pig in the backyard requires a certain “gratefulness” that supposedly connects human and animal further than the isolated, modernist industrial system does. This deified animal is still under human control, subject to the whims of human demand. Newfound gratefulness for obligated animal contributions to human society does not decouple animals from meat. While animal death may, once again, be decoupled, repackaging how animals are to live their lives does not equal a genuine engagement with animal life, interest, and desire.

The 99.6%

Animal death may be decoupled in best-case scenarios in the other narratives, but animals are both their lives and deaths, and consideration of animal life is scant in cultured meat discourse. This argument makes the 99.6% narrative all the more concerning. Wild and exotic animals have never necessarily been exempt from being rendered as meat – various populations and groups have hunted animals of all sorts, and will define “meat animals” differently. However, the industrial machine of global meat production has, generally, left animals like lions, zebras, elephants, etc., alone. That does not mean these animals are not affected by the clear-cutting of forests for grazing land, the increasing encroachment of urbanization, etc. My focus, here, is on the specific need for direct violence towards these animals to produce meat.

The 99.6% narrative represents an expansionist ideology which desires the creation of new nutritional and taste profiles for consumers to swap in and out. Companies like Primeval promise that the cells they harvest – or will harvest – will come from animals who are biopsied in the wild and will be able to lead peaceful lives. Putting aside that it is more likely the company has only the capital to obtain exotic cells through domestic means at this time, imagine that, eventually, a small handful of companies will have the capital to head deep into the jungles, saharas, and caves of the world. Suddenly, a number of animals, on both an individual and species level, would be valued for their cells when they may have been mostly able to avoid the label of meat up to this point. Already stressed ecosystems could become subject to sudden human presence, with proponents looking for animals to anesthetize in order to harvest their cells. If said animals need post-biopsy health monitoring, that could mean the removal of an animal from an ecosystem for a period of time; this matter is especially worth considering in light of BlueNalu’s claims that it will culture cells from wild fish (Kruse, 2021). Finally, if cultured meat companies successfully introduce cultured exotic meats, those who reject cultured meat could, in theory, still desire the traditional meat of these animals for a more “authentic, diverse umami experience.”

Inherent to the logic of these companies, their proponents, and their investors is an image of expanding how many animals are integrated into meat production, regardless of actual

possibility. Animals are not decoupled from meat under the 99.6% narrative; ultimately, more animals would be coupled with meat, especially consistently available, culture-able meat in a variety of global markets. As I have argued elsewhere, this logic is also being applied to insects, plants, and even air (Giles, 2022). The implications for the remaining 99.6% are concerning, as even an effort to move from “0.4%” to “0.6%” places more animals under the productive consideration of meat producers who do not decouple animals from expectations of efficiency, productivity, and “contributions” to human society and diet.

Discussion

By reviewing these four narratives, I argue that it is clear that the animal is not, *a priori*, decoupled from meat. Obviously, because cultured meat is a completely theoretical ordeal at this time, I cannot make a definitive claim about this decoupling, as unexpected factors could arise which change the overall trajectory of my argumentation. At this preliminary point, however, the notion of decoupling – a key selling point for cultured meat proponents and advocates – does not align with how we are to understand the existence of animals within these scenarios. Across all four narratives, the animal is hardly present, seemingly an afterthought to its own supposed necessity, granted little more than a binary checkmark of “dead or not dead.” While that does not mean that questions of animal life and existence may not arise beyond the narratives in question, it has been difficult to get a sense that proponents are considering animals in substantive form. This paper calls attention to the animal within these narratives. That, however, should not be the end point, as it is important to unpack the implications of this failure to decouple animals from meat.

If animals are not decoupled from meat entirely, one of cultured meat’s most important promises is rendered false. As questions of environmental impact, consumer acceptance, and (non)scalability all continue to put pressure on advocates and producers, there is a possibility that this failure also puts more pressure on proponents to respond to doubts about the necessity and validity of cultured meat. This point is not just a producer concern; even animal welfare groups, such as PETA, who have endorsed cultured meat, may be unable to account for the failure to decouple animals from meat. The inability to decouple animal death from meat production may cast doubt not just on cultured meat, but much of the alternative protein movement, as accusations of ethical hypocrisy are often leveled against supporters of dietary changes such as veganism whenever the possibility of pointing to contradictions may arise. Proponents still, routinely, frame cultured meat as the most effective form of dietary change that there is, a revolution without any change to what people are used to on store shelves. A failure to deliver on a fundamental promise may allow doubters to cast claims of hypocrisy before cultured meat can even reach a high-end restaurant, which could have impacts for the rest of the meat alternatives sector.

For animals, the most pressing aspect of this *a priori* failure to decouple will relate to the questions of animal’s daily lives in an anthropocentric, human-dominated system. For the animals who would be subject to any of the narrative visions of cultured meat, their daily lives may not change much, if at all; all that might change is when they reach the final, predetermined mortal destination. Claims that cultured meat saves animal lives need to be investigated in greater detail. The animals who would not be part of any of these narratives are not suddenly

guaranteed to live lives under a protected status; by failing to frame cultured meat as a potential tool of radical change, proponents and producers have – unknowingly or not – placed non-cultured animals in a dilemma. Either they become subjects of another regime of slaughter, such as a local food system, or they find themselves the subjects of an ambiguous status. Do they lose their status as meat just because they are not to be “cultured?” Who dictates this status, and is their power universal? Will “former meat animals” become welcome members of society, or cast out to a nature that is neither ready for them, nor they for it? The four narratives of cultured meat all too quickly wash their hands of the animal, keeping the important ones and casting the others out to make their own ways in a world that is violent towards animals, and especially violent towards the animals who are not protected by statuses such as being “pets” or “cute.” Cultured meat does not exist in a vacuum; in being “one part of the protein basket,” it is also just one institution and practice which dominates and exercises control upon animals. Without reference to the potential relationships between cultured meat and other entities, we must be wary of narratives which present a “clean-fix” or “potential utopia” arising from cultured meat. By proclaiming to be moving humanity into unprecedented territory, even through consumer inaction, proponents who are failing to address these matters are doing no favors to their claims of revolution, and certainly give no impetus for entrusting these individuals with the driver’s seat of the future.

These revelations also point to the need for understanding these narratives under different contexts. This paper has demonstrated the need to juxtapose cultured meat narratives with various systemic understandings. Furthermore, animals must be given due consideration within these assessments, as cultured meat’s utopian ambitions may be undesirable for the billions – trillions if we count live fish – of animals who would be impacted by such widescale societal change. Calls for a non-anthropocentric future, and, more specifically, a sustainable non-anthropocentric future, cannot be answered with biotechnological changes which are inconsistent in their understandings of the subjects of their efforts.

Concluding Remarks

This paper proposes a concerning interpretation of cultured meat’s alleged benefits – even if it can prove more economically and environmentally viable than traditional meat production, it seems unable to decouple the animal from meat. Even the basic idea of decoupling animal death from meat is questionable. If cultured meat is to represent a supposed synthesis of human demand and animal desire, it is not a complete synthesis. By unpacking four narratives – of admittedly variable prominence in the current discourse – I have demonstrated that the animal, if given notable consideration, is reduced to a binary of “alive/dead,” which, even for those who do not want to grant animals any consideration beyond such a binary, is an undeniably limited way of considering life and daily existence. This paper does advocate for a more detailed consideration and demonstrates the revelations which can arise from such an approach.

Of course, the entirely theoretical nature of this endeavor can be criticized, a point I discuss in a recent dissertation (Giles, 2022) – proponents may claim that it is condemnatory before a product is even on store shelves. To this point, I stress that not only is theoretical assessment important for understanding underlying ideological drivers and potential points of inattention, but this critique essentially wants the “cultured meat revolution” in motion before it can be critiqued.

Such an ordering is of great concern, especially if cultured meat may not be able to resolve inherent contradictions.

As cultured meat progresses, to an admittedly difficult-to-envision state, it is of tantamount importance that it be subjected to rigorous assessment and thorough questioning of its possibilities. Especially for scholars concerned with animal life and well-being beyond the animal's role as a product-provider for human interests, cultured meat should not be welcomed without strong, robust assessment, the likes of which have not yet been seen. Until researchers can access research facilities and final products, theoretical assessment is the best means through which cultured meat can be engaged with in some form.

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Book Review
The Imaginary of Animals, by Annabelle Dufourcq

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Abstract

With this paper, I present a review of Annabelle Dufourcq's *The imaginary of animals*. In her work, Dufourcq explores the influence non-human animals have over the human imagination. Furthermore, Dufourcq seeks to establish an alternative approach to what she considers to be the rationalist and reductionist study of the imagination and non-human animals. In short, she argues that rationalism has traditionally reduced non-human animals to passive automatons. Against this view, Dufourcq argues that non-human animals are creative creatures that actively inspire our imagination. To achieve this, Dufourcq draws on a wide range of sources, mainly from phenomenology, ethological research, and biosemiotics. Firstly, I introduce Dufourcq's work. Secondly, I provide a brief summary of the text's main arguments. Lastly, I give an assessment of Dufourcq's work. Although I find some shortcomings, her work is still a valuable resource for thinking about non-human animals in new ways.

Keywords

Animal; book review; imagination; phenomenology; rationalism.

Book Review
The Imaginary of Animals, by Annabelle Dufourcq
Jonas Müller

In her work *The imaginary of animals*, Annabelle Dufourcq seeks to explore the profound influence non-human animals have over our collective human imagination. Indeed, from the earliest known depictions of animals in prehistoric cave paintings to talking cats in popular family movies, it is quite obvious that the creatures with whom we co-inhabit Earth somehow capture our imaginations. Dufourcq's aim is twofold. By drawing on a wide range of sources from philosophy, ethological research, and biosemiotics (the study of meaning-making in the biological realm), Dufourcq argues that animals are imaginative beings that actively inspire our imagination, and that our imagination is crucial for furthering our understanding of animals.

Dufourcq wants to establish an alternative approach to the rationalist study of animals and imagination. Dufourcq's unfortunately overly broad definition of rationalism corresponds mainly (but certainly not exclusively) to the positivist, physicalist, and realist worldviews prevalent in scientific literature. The roots of this rationalism can be traced back all the way to at least René Descartes, who is generally considered to be the father of modern philosophy and science. Dufourcq argues that rationalism defines animals as a mere accumulation of blind instincts, and that it sees imagination as nothing more than an afterthought, a faculty of the human mind that is inferior to reason.

Dufourcq attempts to show that animals are not machines, and that imagination is not a phenomenon that is inferior to reason. She therefore explicitly adopts a phenomenological method to achieve her analysis. Phenomenology, the study of how the world directly appears to the subject, is needed to overcome the shortcomings of rationalism. According to Dufourcq, phenomenology is helpful, because it does not have rationalism's dogmatic tendency to reduce the organism to a set of impulses and reflexes. More specifically, Merleau-Ponty's approach to phenomenology, which stresses the ambiguity of experience and meaning, is always implicit in Dufourcq's work.

In the first chapter of this work, the central question that Dufourcq poses is the following: Can we speak literally of animals being in pain, animals being subjects, animals knowing things, or can we only possibly mean such expressions metaphorically? Tomasello, for example, presents a theory of "true imitation" (Tomasello, 1999, p. 39). Tomasello argues that only humans are capable of true imitation, whereas animals merely emulate certain behaviors. Thus, when we speak of imitation in animals, we are speaking merely metaphorically, not literally.

Dufourcq calls such a position "anthropological hygienism" (p. 33). By saying that only humans can achieve "true" imitation, we are just desperately clinging on to the idea of human purity, which could never be matched by lowly animals. Furthermore, it is not at all clear that such a thing as "true" imitation even exists between humans. What would such a pure behavior consist of? This is not obvious. Rather, we should avoid using such clear-cut concepts and not be afraid to embrace the ambiguity of meaning. The meaning of a word like "imitation" is ambiguous and context-sensitive, which means that there cannot be any completely clear and determinate use of the word. Embracing ambiguity also means that we should avoid the opposite mistake and say that animals are just like us. Indeed, they are like us, but at the same time we are always

confronted with the differences between species and even between individuals. Therefore, we ought to avoid complete identity (animals are just like us) and complete difference (animals are nothing like us).

In the second chapter, Dufourcq reiterates the necessity of a phenomenological approach to the study of animals and imagination, and shows how such an approach might improve our understanding of both. Rationalism, Dufourcq maintains, tries to capture the world in clear-cut essences. However, in doing so, it fails to provide a satisfying account of the subjectivity of humans and other animals. A phenomenological approach will be better equipped to deal with such a problem. Phenomenology teaches us that the world appears first and foremost as an ambiguous whole, and that it is therefore open to interpretation. Therefore, subjects have to interpret the ambiguous world through imaginative acts to establish a “real” world. Dufourcq calls this intersection between the real and the imaginary the “imaginareal” (p. 11). This concept is used to emphasize that we never merely inhabit a ready-made world, but that we must always use our imagination to, so to speak, fill in the gaps and interpret the messy situations we find ourselves in.

Especially important for the interpretation of the world is the notion of empathy, which entails taking up a certain perspective in an imaginative way. In one’s encounter with other subjects, the imaginative act of empathy plays a crucial role. For example, when someone tells me about the terrible day he or she is having, I can imagine the things this person has gone through and understand his or her perspective. Yet I may always fail this task to a certain degree or even completely. I take up this person’s perspective through an act of imagination. This imaginative act is thus not some lesser faculty that comes after reason. Rather, empathy is a fundamental structure of subjectivity, which also allows for interaction between humans and non-human animals. Empathy is a useful way to understand and interact with animals. To use an example of my own, I can interpret a cat’s angry behavior by imagining myself in his or her position. But as the world is ambiguous, I can always fail to imagine the cat’s perspective correctly.

In the third chapter, Dufourcq argues that animals are phantoms. That is to say that animals do not possess clear and stable essences by which they are completely determined, as rationalism would have it. Rather, they are open to the virtual. This means that animals are always prepared for that which is not actually present. In other words, their bodies, functions, and behaviors can always adapt to suit a new situation. Dufourcq argues that such a conception of animals is already present in Charles Darwin’s *On the origin of species*, in which he conceives of certain organs rapidly taking on new functions depending on the requirements of the organism’s environment (Darwin, 1996, p. 153).

Here, Dufourcq introduces the concept of the Gestalt, which she borrows from Merleau-Ponty and thus indirectly from Gestalt-psychology (Merleau-Ponty, 1960, p. 47). A Gestalt is a meaningful whole, which cannot be reduced to its proper parts. Dufourcq thus sees the notion of the Gestalt as a challenge to physicalism, which is the view that everything must ultimately supervene on physical processes. Since a Gestalt cannot be reduced to its constitutive parts, it would be mistaken to claim that “a Gestalt has been produced by a certain physicochemical configuration” (p. 99). To clarify the concept of Gestalt, I offer the example of a melody. Analyzing a melody note by note will not provide a full understanding of the whole. A melody is

also open ended, as it allows for infinitely many variations of its main theme. Similarly, animals can only be truly understood as such a meaningful whole. They are living beings, open to the virtual and cannot be reduced to a set of instincts or physicochemical processes.

In chapter four, Dufourcq wants to establish that animals too have access to the symbolic order. That animals have access to the symbolic order, or the world of communication through signs, is made clear through Dufourcq's example of dogs who are engaged in play. They must constantly remind each other that they are, in fact, not fighting. A nibble becomes a sign that means "I could bite you, but I will not". The other dog then needs to interpret this behavior. But miscommunications are always possible, as interactions between individuals are ambiguous and thus open to interpretation.

Finally, Dufourcq returns to the imaginative interactions between individuals of the same and of different species in chapter five. As Dufourcq explains, "The other ... necessarily takes the form of a foreign perspective that cannot be referred to without recourse to imagination, also because what is going on "over there" – "in" the other's mind – is also a form of imagination" (p. 205). To recycle my earlier example, when a cat angrily hisses at me, I imagine what is going through his or her mind: I imagine that he or she must be angry and defensive. Likewise, the cat must imagine my intentions: he or she sees me as a threat, intending to harm him or her in some way. With such acts of empathy, then, an interface of mutual influence between humans and non-human animals is established.

The imaginary of animals is an ambitious work, of which I have only been able to provide a very brief sketch. Dufourcq engages with a truly impressive range of sources. And although her main influence is phenomenology, she is clearly not content to look at the issue from a single point of view. This attempt to include as many perspectives as possible to arrive at novel conclusions about animals and imagination is generally laudable. I especially appreciate Dufourcq's willingness to seriously engage with empirical research, mostly in the field of ethology. However, Dufourcq can be a bit overzealous, which unfortunately leads to rather sprawling chapters. Because of this, the exact aim and structure of arguments remain vague at crucial moments and the reader is at risk of losing sight of the central claim that is being argued for. A more concise way of arguing would have improved the general clarity and rigor of Dufourcq's arguments.

Moreover, I am skeptical of Dufourcq's claim that the notion of Gestalt ought to be understood as a challenge to physicalism. I do not follow how a physicalist approach is necessarily at odds with such a holistic approach. It is of course true that a strict behaviorist account of animals would not be compatible with the notion of Gestalt. To put it briefly, behaviorism understands organisms as a mere sum of reflexes. This is clearly not consistent with the notion of Gestalt, which maintains that the whole precedes its parts. However, functionalism, which views the animal as a functional unit, does not appear to suffer from the same difficulty. It is holistic, in the sense that it needs to take the environment of the organism into account in order to understand the creature's functions and behaviors. Moreover, as illustrated by Dufourcq herself, an evolutionary account can explain the flexibility of an organism's functions. Nevertheless, this can be achieved entirely without abandoning physicalism.

Furthermore, Dufourcq also makes somewhat questionable and sweeping statements about her “opponents” in order to achieve this book’s ambitious aims. The main opponent is rationalism, broadly conceived. So broadly conceived, in fact, that this rationalism is more of a strawman than a clearly defined philosophical tradition. Unfortunately, here Dufourcq follows Merleau-Ponty, who also defined rationalism in a similarly broad way. For Dufourcq, rationalism is basically any kind of theory or argument, philosophical or scientific, that allows for the identification of clear-cut essences to any kind of degree.

Thus, when she says she is arguing against “the Western rationalist tradition” (p. 8), she does not only refer to philosophical theories in the tradition of Descartes or Leibniz. She also refers to all kinds of empiricist philosophies, contemporary natural sciences, Platonic theories, materialism, and idealism. This is a haphazard and broad category, which is rather uncharitable to all the theories and thinkers included in it. For example, it leads Dufourcq to characterize both Descartes and Tomasello as being in the Western rationalist tradition. However, such a characterization overlooks the fact that their work is separated by several centuries and are consequently based on entirely different philosophical and scientific backgrounds. Moreover, Dufourcq seems to imply that an any kind of realism is identical to rationalism when she writes that she opposes an “objective/rationalist approach” (p. 6). That is a rather bold claim to make and unfortunately threatens to make a strawman of the traditions Dufourcq criticizes.

Nevertheless, Dufourcq offers a creative and unique look at animals and imagination, which attempts to do justice to the way we experience them. I expect that Dufourcq’s arguments that animals have access to the symbolic realm might be of interest for research in the field of biosemiotics. Furthermore, I find her focus on animals as Gestalten particularly insightful and important. In an age where zoology is shifting more and more attention to the genetic level, we tend to lose sight of animals as whole beings that are compelled to engage with their environment in a meaningful manner. Dufourcq’s work will make ethologists consider adopting a more holistic approach which makes room for the subjectivity of animals. This will especially be the case if my view is correct that such a holistic approach need not contradict the physicalism that is predominant in contemporary research. *The imaginary of animals* will therefore be of interest to those who are fascinated by animals and are prepared to tackle an ambitious and theoretically dense work.

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**Rape, sexual violence and forced pregnancy:
The expressions and consequences of reproductive violence
committed during the war against nonhuman animals**

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Abstract

Based on an original interpretation of non-international armed conflict this article argues that we are currently engaged in a war against nonhuman animals. During this war, War Crimes and Crimes against Humanity are committed against nonhuman animals: rape, sexual violence and forced pregnancy. These acts, their aims, and their outcomes are framed as the expressions and consequences of reproductive violence. Female farmed nonhuman animals capable of reproduction – dairy cows and sows – are the targets of this violence. Drawing on the International Criminal Court statute, *Other Serious Violations of the Laws and Customs Applicable in Armed Conflicts not of an International Character*, this article offers a unique interpretation of the three cumulative elements of the crime of forced pregnancy: (1) unlawful confinement and sexual slavery (2) forcible impregnation and the absence of consent and (3) grave violations of International Law, specifically rape and sexualized violence. It demonstrates how dairy cows and sows meet all three criteria contained within the International Criminal Court definition of forced pregnancy. By granting nonhuman animals legal personhood – and treating them as protected persons rather than the property of protected persons - we can use International Humanitarian Law to protect them from the violence(s) of this species war.

Keywords

Forced pregnancy; crimes against humanity; international humanitarian law; legal personhood; reproductive violence; war crimes.

Rape, sexual violence and forced pregnancy: The expressions and consequences of reproductive violence committed during the war against nonhuman animals

Stacy Banwell

Introduction

In an article published in *Critical Animal Studies* in 2013, Cusack described in detail the sexual violence dairy cows are subject to on dairy farms. Her article provides a critique of feminists' consumption of dairy as well as a critical review of the terms rape, husbandry, and bestiality. The official definition of animal husbandry describes it as the science of breeding farm animals, a branch of agriculture involved in the production of farm animals, and the management and care of domesticated animals. For Cusack (2013) however, animal husbandry – which stems from the normative consumption of dairy - is a euphemism for "...rape and sexual slavery/trafficking" (p. 25). It involves repeated non-consensual penetration, either with hands or objects, of the nonhuman animal, and non-consensual insemination for the purposes of reproduction (Cusack, 2013).

In this article I build upon and extend the work of Cusack in several ways. First, I argue that we are currently engaged in a war against nonhuman animals. Second, I describe the violence(s) that take place on factory farms as War Crimes and Crimes against Humanity. The specific War Crimes and Crimes against Humanity that I focus on include rape, forced pregnancy, and sexual violence. These are listed in International Humanitarian Law (IHL) and International Criminal Law (ICL). I frame these acts, their aims, and their outcomes as the expressions and consequences of reproductive violence. It is the latter – the consequences of reproductive violence, in the form of forced pregnancy – that forms the basis of this piece. Here, drawing on Kelty-Huber (2015), reproductive violence refers to "the systematic exploitation; physical and mental violence, and trauma experienced by female farmed animals" whose reproductive systems are controlled within the animal-industrial complex (p. 4). Third, extending beyond the dairy industry, I include the experiences of sows who are also subject to these War Crimes and Crimes against Humanity. In terms of female farmed nonhuman animals, the reproductive bodies of egg-laying hens are also exploited and manipulated within the animal-industrial complex. However, given our focus on forced pregnancy, their experiences will not be reviewed here.¹

Outline of the article

The article proceeds as follows. First, it outlines the relevant key arguments presented in my recent monograph, *The War Against Nonhuman Animals: A Nonspeciesist Understanding of Gendered Reproductive Violence*. One, we are currently engaged in a war against nonhuman

animals; two, during this war, War Crimes and Crimes against Humanity - in the form of rape, sexual violence and forced pregnancy - are committed against human and nonhuman animals and three, as sentient beings, nonhuman animals should be granted passive legal personhood status. Following this the article addresses the three cumulative elements contained within the crime of forced pregnancy: the unlawful confinement of the victim, the forcible impregnation of the victim and the intention of the perpetrator. It demonstrates how cows and sows meet all three criteria contained within the International Criminal Court (ICC) definition of forced pregnancy.

The first element of forced pregnancy is discussed in relation to deprivation of liberty and the inability of nonhuman animals to challenge the legal status of their confinement. Additionally, the crime of sexual slavery, which also occurs during their unlawful confinement, is reviewed. The second element focuses on consent. It draws on the literature pertaining to ethics, human and veterinary medicine as well as experimental research on nonhuman animals. When deliberating the issue of consent readers are reminded of the coercive environment and the forced nature of the impregnation, as well as the visible distress exhibited by nonhuman animals subject to this crime. The article closes by highlighting that forced pregnancy is not exclusively genocidal in nature, it can involve ‘*other grave violations of international law.*’ For cows and sows this involves rape and sexualized violence. The latter is discussed in relation to the forced separation of mother and child. In sum, the article reviews forced pregnancy in relation to the following ICC Statute: *Other Serious Violations of the Laws and Customs Applicable in Armed Conflicts not of an International Character* (Dörmann, Doswald-Beck & Kolb, 2009). It argues that dairy cows and sows are victims of the War Crimes and Crimes against Humanity contained within this statute.

The war against nonhuman animals

In *The War Against Nonhuman Animals*, I argue that we need to view the reproductive violence and slaughter of nonhuman animals within the framework of non-international armed conflict (Banwell, 2023). Below I will provide a summary of the contents of the book before proceeding with the focus of this piece.

Drawing inspiration from Dinesh Wadiwel’s *The War Against Animals* (2015), 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. For Wadiwel (2015) the war against nonhuman animals is biopolitical in nature. It is a war that centers around life and death, as industrialized killing requires industrialized reproduction. While both elements are addressed in this article, our focus is mainly on the latter, specifically the expressions and consequences of reproductive violence for female farmed nonhuman animals (in the book I also include the experiences of bulls and male calves, thereby offering a gendered analysis of these crimes).

Explaining the war against nonhuman animals Wadiwel (2015) states:

The scale by which we kill and harm animals would seem to confirm that our mainstay relationship with animals is combative or at least focused upon producing harm and

death. Factory farming and industrialized slaughter technologies ... enable a monstrous deployment of violence and extermination. (pp. 5-6)

War, according to Wadiwel's thesis is a "phenomenon of mass or corporate organized violence that aims at total domination" (Wadiwel, 2015, p. 16). We can trace this interpretation of war to the military theorist Carl von Clausewitz who, in his book, *On War*, described war as "an act of violence to compel our opponent to fulfil our will" (von Clausewitz, 1968, p. 1). Within this analysis the focus is on the *objective* of the violence (compelling the enemy to fulfil our will) rather than the *means* used to wage war. If we accept this interpretation of war, then, as Wadiwel (2015) suggests, we can conclude that we are engaged in a war against nonhuman animals. I accept both perspectives outlined above: the war against nonhuman animals is biopolitical in nature and it involves complete domination of nonhuman animals. However, I move beyond rhetorical reasoning and consider how we might use key international instruments within IHL to protect nonhuman animals from War Crimes and Crimes against Humanity (Banwell, 2023). The violence(s) that I review in the book - rape, forced pregnancy and sexual violence - are examples of War Crimes and Crimes against Humanity. As noted, they are listed in IHL and ICL. IHL protects those who are not (or no longer) taking part in the conflict. It aims to alleviate the impact of armed conflict by restricting the means and methods of warfare (International Committee of the Red Cross [ICRC], 2004). It is also referred to as the law of war or the law of armed conflict (ICRC, 2004). The four Geneva Conventions (1949), the Additional Protocols (1977) and the ICC (formed in 1998) fall within the jurisdiction of IHL (Dallman, 2009). Finally, ICL prohibits serious international crimes and holds individuals criminally responsible for their involvement in, among other acts, the commission of War Crimes and Crimes against Humanity (ICRC, 2012). We will start by unpacking the latter.

Crimes against Humanity refer to a range of acts that are committed "as part of a widespread or systematic attack directed against any civilian population, with knowledge of the attack." This includes, but is not limited to "rape, forced pregnancy... or any other form of sexual violence of comparable gravity" (Rome Statute of the International Criminal Court, 1998, p. 4). War Crimes include rape, forced pregnancy and "any other form of sexual violence also constituting a grave breach of the Geneva Conventions" (Rome Statue of the International Criminal Court, 1998, p. 8). War Crimes "must always take place in the context of an armed conflict, either international or non-international" (UN Office on Genocide Prevention and the Responsibility to Protect – War Crimes n.d., para 1 under Elements of Crime). The Geneva Conventions (1949) and their Additional Protocols (1977) apply to both cases of armed conflict (ICRC, 2008). They "focus on the protection of persons not or no longer taking part in hostilities" (UN Office on Genocide Prevention and the Responsibility to Protect - War Crimes n.d., para 1). The central thesis of my monograph is that nonhuman animals should be considered persons in need of protection from War Crimes and Crimes against Humanity. I arrive at this conclusion by revising the current definition of non-international armed conflict. Unlike international armed conflicts, which comprise two or more opposing states, non-international armed conflict includes governmental forces and nongovernmental armed groups (ICRC, 2008). Elaborating on the criteria that needs to be met for a non-international armed conflict, Kathleen Lawland notes: "...fulfilment of these criteria is determined *on a case-by-case basis, by weighing up a number of factual indicators*" [emphasis added] (ICRC, 2012). Elements that are taken into consideration include the intensity,

duration, and gravity of the violence, the type of government forces, the weapons used, and the number of casualties incurred (ICRC, 2012).

On average it will take just over 33 mins to read this article. During that time, approximately 403, 920 nonhuman animals will have been killed for food in the UK and approximately 3, 480, 840 in the US.ⁱⁱ The Animal Kill Clock also includes real-time data for the number of nonhuman animals killed every year in these countries, as well as Canada and Australia. Based on this information and the criteria that needs to be met for non-international armed conflict, I believe we should revise the existing definition of non-international armed conflict. To accommodate the situation of nonhuman animals I propose the following reformulation of non-international armed conflict: *the war against nonhuman animals involves violence committed by government and non-governmental groups against non-armed, non-combatants (nonhuman animals) within a state*. The focus is on the goal of the violence (compelling the enemy to fulfil our will) rather than the *means* used to wage war (Banwell, 2023).

Too often nonhuman animals who die during wars waged by humans are treated as collateral damage. However, as Nocella (2015) argues, they are also “the casualties of an unspoken and unseen war that humans wage, and are winning, against nonhuman animals” (p. 129). Existing research on the relationship between nonhuman animals and war has focused on the following issues: the use of nonhuman animals as vehicles to transport weapons and humans; the use of nonhuman animals as test subjects to test weapons and train humans to be violent; the exploitation and use of nonhuman animals as weapons; the killing of nonhuman animals during war, and, finally, the aftermath and impact of war on nonhuman animals (Nocella, Salter & Bentley, 2015). In my own work I claim that *war itself* is being waged against nonhuman animals. In other words, nonhuman animals are not the incidental victims of war, rather, they are the targets of the war.

Currently, IHL protects nonhuman animals during armed conflicts when they are classified as property. Article 53 of the Geneva Convention - *The Protection of Civilian Persons in Time of War* - prohibits destruction to personal property of ‘protected persons.’ This includes nonhuman animals (Roscini, 2017, p. 8). In other words, the destruction of nonhuman animals, who are considered the private property of protected persons, is classified as a War Crime and a breach of the Geneva Conventions (Roscini, 2017). Further protections are put in place for the civilian population. For example, Article 48 of the 1977 Additional Protocols states that: “In order to ensure respect for and protection of the civilian population and civilian objects, the Parties to the conflict shall at all times distinguish between the civilian population and combatants” (United Nations Protocol Additional to the Geneva Conventions 1977, p. 264). It is my belief that nonhuman animals should be treated as civilians/noncombatants during war, and that existing protections within IHL should be applied to them as ‘protected persons’ not the *property* of ‘protected persons.’ To accept that we are currently engaged in a war against nonhuman animals, and that nonhuman animals should be protected from the violence(s) of this war, nonhuman animals must be recognized as sentient beings. Extending this argument further I posit that nonhuman animals should be afforded legal personhood status (Banwell, 2023).

Animal sentience and legal personhood

In the second chapter of the book, I review the varied and often opposing literature on animal sentience, speciesism, and legal personhood before making the case that nonhuman animals should be granted passive legal personhood status. I will assume that many readers of this journal will be familiar with this literature, therefore an overview of the main points will suffice.

In her chapter, *The Rights of Sentient Beings: Moving Beyond Old and New Speciesism*, Dunayer (2013) provides a blueprint for a non-speciesist law. Among other things, this law would “accord all sentient beings a legal right to liberty – physical freedom and bodily integrity” (Dunayer, 2013, p. 37). As a result, nonhuman animals would be released from captivity. To put it bluntly: it would be illegal to hold nonhuman animals captive. After reviewing the *Animal Protection Index* and the scientific philosophical literature on animal sentience and the status of nonhuman animals (Francione, 1997; Low et al., 2021; Regan, 1986; Singer, 1975; Wise, 2000), I proceed on the following basis: all vertebrate and invertebrate nonhuman animals with brains and nervous systems should be regarded as sentient beings. Based on this, they should all be granted legal personhood. Legal personhood in the context of our discussion here means treating nonhuman animals as civilians (Banwell, 2023). This means that protections afforded noncombatants targeted during war should apply to nonhuman animals. Let us pause here to unpack this in more detail.

Treating nonhuman animals as legal persons rather than legal ‘things’ would mean that we “...stop using animals for food, entertainment, or clothing, or any other uses that assume that animals are merely resources, and that we ultimately prohibit the ownership of animals” (Francione, 2004, p. 42). There are disagreements on the issue of granting nonhuman animals legal personhood. These are often centered around the following concerns: ‘equal consideration’, ‘consciousness,’ ‘autonomy and self-determination,’ and the ‘sameness argument.’ Briefly, debates emerge as to whether the interests of humans and nonhuman animals should be given equal consideration, as both experience pain (Black, 2019; Francione, 2004); whether the presence of core consciousness and practical autonomy among nonhuman animals is enough to grant them legal personhood (Benvenuti, 2016; Favre, 2010; Wise, 2013); and, finally, whether those nonhuman animals, that are most similar to humans, should be granted the same legal protections as humans. It is my contention that this work raises more questions than it answers. Sharing the views of Kurki (2019; 2021) and Fernandez (2019), I contend that the current project for granting nonhuman animals legal personhood is overly ambitious. Drawing on Kurki (2019; 2021), I believe it is possible (indeed, necessary) to ascribe nonhuman animals certain incidents of passive legal personhood, specifically the right not to be harmed, the right to personal freedom, liberty, and bodily integrity (Banwell, 2023). In sum, if we grant nonhuman animals legal personhood, then we can apply IHL to nonhuman animals who are subject to rape, forced pregnancy and other acts of sexual violence during non-international armed conflict.

As I argue in the book, debates about granting nonhuman animals legal personhood need to be placed within a broader discussion about humanity and what it means to be human. And part of this means acknowledging the precarious and exclusionary nature of humanity. Throughout history who and what counts as human, and, by extension, who is considered a legal person, with access to rights and protections, has been contested. Indeed, the category human is discursively

constructed along racial, gendered and speciesist lines. Phrased differently: discussions about what it means to be human are inseparable from discussions about racism, sexism, and speciesism. In sum, humanity is constructed as white, heterosexual, and male. One final point raised in the book that is worth repeating here: granting legal personhood to nonhuman animals requires reconfiguring what it means to be human. In this context the legal category ‘person’ is not to be conflated with the biological category ‘human.’ However, we cannot have one without the other. We cannot seek legal personhood for nonhuman animals without challenging human exceptionalism and the inherent racism, sexism, and speciesism that it is built upon (Banwell, 2023). Allied to this, and in the context of what we are discussing here, a case can be made for reframing crimes against humanity as crimes against sentient beings. This would mean acknowledging that any being who has the ability to suffer and feel pain can become the target and victim of certain Crimes against Humanity. Hereafter, in order to capture how nonhuman animals meet the criteria contained within the *existing* (albeit exclusionary) ICC definition, alongside a call for a more biocentric future, I will use the term Crimes against Humanity/Sentient Beings. In the next section we will unpack forced pregnancy in relation to the ICC Statute *Other Serious Violations of the Laws and Customs Applicable in Armed Conflicts not of an International Character*.

Forced pregnancy during the war against nonhuman animals

“Forced pregnancy is pregnancy-orientated rape, combined with the use of unlawful detention to achieve the birth of a child” (Jessie, 2006, p. 330). This is the definition used to describe an act of intrahuman reproductive violence. Below I will review each element of forced pregnancy – the rape, the forced impregnation, and the birth of the child – in relation to nonhuman animals. I will demonstrate that, during the war against nonhuman animals, dairy cows and sows – as passive legal persons - are victims of these crimes.

The ICC defines forced pregnancy as: “the unlawful confinement of a woman forcibly made pregnant, with the intent of affecting the ethnic composition of any population or carrying out other grave violations of international law” (Rome Statue of the International Criminal Court, 1998, p. 5). To reiterate: forced pregnancy is a War Crime and a Crime against Humanity/Sentient beings in non-international armed conflict. Furthermore, the ICC Statute shifts the legal framework of these crimes from focusing on the violation of the victims’ honor, to addressing harms related to bodily integrity and the negation of the victims’ sexual and reproductive agency. As Boon (2001) notes: the statute provides “a new paradigm for the international criminalization of sexual crimes - one based on broader principles of human dignity, autonomy, and consent” (pp. 630-31). While it is possible to see how nonhuman animals benefit from the shift in focus from honor to bodily integrity – as noted above, under non-speciesist law, nonhuman animals would be entitled to “liberty, physical freedom and bodily integrity” (Dunayer, 2013, p. 37) – the issue of consent, however, is harder to apply to the situation of nonhuman animals.

I will dissect the issue of consent in due course. First, I want to address the three cumulative elements contained within this War Crime and Crime against Humanity/Sentient beings. First, “...the victim must be unlawfully confined by the perpetrator...” Second, “...the victim must have been forcibly made pregnant.’ And third, “the perpetrator acted with one of two specific

intents: to affect the ethnic composition of a population, *or* to carry out other grave violations of international law” [Emphasis added] (Amnesty International, 2020, pp. 8-9; Boon, 2001). We will review each of these in more detail below.

1. Unlawful confinement

Forced pregnancy, as outlined above, requires that a woman be both forcibly made *and* kept pregnant, often through confinement. Under IHL (specifically, Rule 99, Deprivation of Liberty), “arbitrary detention and unlawful deprivation of liberty of protected persons during ... non-international armed conflicts ... amount[s] to unlawful confinement for the purposes of prosecuting the crime of forced pregnancy” (Amnesty International, 2020, p. 13). Additionally, from a procedural perspective, the ICRC outlines the following: “All persons deprived of their liberty for reasons related to a non-international armed conflict must be given the opportunity to challenge the legality of the detention” (as cited in Henckaerts, J. M & Doswald-Beck, 2009, p. 352). In addition, under ICL, unlawful confinement in the context of forced pregnancy can also be established if the detained person is a victim of other crimes that involve unlawful confinement, for example, sexual slavery. To reiterate: under non-speciesist law (Dunayer, 2013), the confinement of nonhuman animals is illegal. Based on this, I make the case that nonhuman animals meet the first criteria of the ICC definition of forced pregnancy. This is based on my reformulation of non-international armed conflict (Banwell, 2023). It is worth pausing here to unpack the three main procedural elements of the ICRC in more detail:

i. Nonhuman animals are not able to challenge the legal status of their confinement

Given that nonhuman animals are unable to communicate with humans (in a way that is required/deemed sufficient in these circumstances) they cannot challenge their unlawful confinement under IHL. We know that factory farm animals are held captive in overcrowded facilities where they are deprived of their liberty. In the UK it is estimated that over 2,000 farms use zero grazing. This means that cows, for example, are permanently kept inside or held in yards that have restricted grazing systems (Chiorando, 2021). According to the Humane League (2021), 70% of cows are kept on factory farms. They state:

Most factory-farmed cows never get to step foot outside during their production years, confined instead to indoor sheds that are often filthy and crowded. They're denied the ability to graze, lie comfortably, nurse their young, or live in socially complex herds with their offspring. (para 7)

In a similar vein, sows are confined indoors in gestation crates during their pregnancy. The crates are so small they are unable to turn around. Before they give birth, the sows are then placed in a farrowing crate. As Animal Aid (n.d.) reports: “Farrowing crates are barren, metal and concrete cages, just a few inches longer and wider than the sow herself” (para 3). The sow “cannot step forwards or backwards or even turn around for the duration of her restraint” (para 3). As a result of selective breeding practices – which, for the purposes of meat consumption, results in faster-growing pigs - sows are now larger which exacerbates their confinement (Humane Society of the United States, 2009).

ii. They are noncombatants during this war

While it is important to take issue with the framing of nonhuman animals as the property of protected person during war, existing law does recognize nonhuman animals as civilian objects that should not be targeted during armed conflict.

iii. The detained person is a victim of other crimes that involve unlawful confinement

Nonhuman animals are victims of sexual slavery during their unlawful confinement. Sexual slavery is defined in the ICC Elements of Crime (2013) as:

The perpetrator exercised any or all of the powers attaching to the right of ownership over one or more persons, such as by purchasing, selling, lending or bartering such a person or persons, or by imposing on them a similar deprivation of liberty. The perpetrator caused such person or persons to engage in one or more acts of a sexual nature. The conduct took place in the context of and was associated with an armed conflict not of an international character. (p. 6)

Based on her first-hand experience of dairy farms and auction yards in the US, Kathryn Gillespie – author of *The Cow with Ear Tag #1389* (2018) and *Sexualized Violence and the Gendered Commodification of the Animal Body in Pacific Northwest US Dairy Production* (2014) – provides a detailed account of the commodification of bovine bodies within the dairy industry. Details of her research are recounted here. Female calves are forcibly impregnated through artificial insemination at 15 months old and they give birth at 24 months. If the calf is female, she is raised on the dairy farm where she was born, sold to another dairy farm or raised elsewhere by a heifer-growing contractor (Gillespie, 2014). As Gillespie explains (2014): the calf is fed discarded or substitute milk “...and [is] weaned at 6–8 weeks of age after which she would be group housed until she reached a reproductive age. Just before weaning, she would be dehorned, vaccinated, and have any extra teats removed” (p. 1326). The cycle of reproductive violence begins around 60-90 days after the cow gives birth. At this point she is artificially inseminated and is milked throughout her pregnancy. Milking ceases 60 days prior to her giving birth. This process is repeated for years until there is a decline in her fertility, her milk production or until she suffers from lameness and/or mastitis (Brown, 2016). These physical ailments are attributed to the cycle of reproductive violence outlined above (Gillespie, 2014). “At this point,” Gillespie (2014) continues, “the farmer would make a careful calculation of her profitability as a milk producer weighed against the cost of maintaining her” (p. 27). Once the cow is considered ‘spent,’ she is sold for slaughter then used within the meat industry.ⁱⁱⁱ

At this stage it is worth noting that global milk production increased by 59% between 1988 and 2018. According to projections reported by the Organization for Economic Co-operation Development (OECD) and the Food and Agricultural Organization of the United Nations, in their *Agricultural Outlook 2021-2030* report (2021), global milk production will grow by 1.7% per year between 2021-2030 (OECD and the Food and Agricultural Organization of the United Nations, 2021). It is the fastest growing commodity within agribusiness. Cow’s milk accounts for over 80% of the milk that is produced (Shahbandeh, 2023). This production of milk is the result of the repeated rape and forcible impregnation of dairy cows (Brown, 2016; Cusack,

(2013); Gillespie, 2014, 2018; Mackenzie, 2019). The acts of reproductive violence outlined above are of a sexual nature and take place in the context of the war against nonhuman animals. As such, I argue that these acts fall within the definition of sexual slavery. We will now consider the second element of forced pregnancy: the forcible impregnation of a woman.

2. The forcible impregnation of a woman

In this section we will review the terms ‘forcibly impregnation’ and the term ‘woman’ addressing the latter first. A recent analysis of the ICC Statute determines that the term ‘woman’ should be replaced with the term ‘pregnant persons’ in order to include all individuals capable of becoming pregnant. As pointed out by Amnesty International (2020), while the Statute uses the term ‘woman,’ there is no evidence to suggest that this was intended “to exclude other pregnant persons from the scope of the crime, including girls of any age or transgender or intersex persons who are biologically capable of becoming pregnant” (pp. 14-15). They go on to state: “If the essence of the crime is the denial of autonomy over a pregnancy by means of unlawful confinement... then the crime must be applied to all pregnant persons subjected to such treatment. To do otherwise would be discriminatory” (pp. 14-15). They further argue that the definition must be used in line with “internationally recognized *human rights*” that should not discriminate on the basis of “age, gender or other status” [Emphasis added] (Amnesty International, 2020, p. 14-15.). To avoid discriminating against nonhuman animals I count speciesism as the ‘other status’ that should be taken into consideration here. Based on my contention that nonhuman animals should be granted legal personhood, I would argue that they too, by virtue of being biologically capable of becoming pregnant, are ‘pregnant persons.’ As such, they are victims of this crime (this also applies to reproductive coercion). To exclude them is discriminatory. Based on this understanding, nonhuman animals meet the second criteria of the definition of forced pregnancy. To be clear: I am not equating the situation/experiences of nonhuman animals with transgender or intersex individuals, I am simply arguing that they can be counted as pregnant persons (Banwell, 2023).

Regarding the term forcible impregnation, in a footnote in the *Introduction to Crimes against Humanity, the ICC Elements of Crime* (2013), notes the following:

The term ‘forcibly’ is not restricted to physical force, but may include threat of force or coercion, such as that caused by fear of violence, duress, detention, psychological oppression or abuse of power, against such person or persons or another person, or by taking advantage of a coercive environment. (p. 3)

Furthermore, the definition does not require that a person be forcibly impregnated through rape, the issue is that the victim has been impregnated against their will, through (for example) artificial insemination (Amnesty International, 2020). I make the case that dairy cows and sows are forcibly impregnated through artificial insemination, which counts as an act of rape. We will return to this shortly.

What is evident from the War crimes and Crimes against Humanity/Sentient beings outlined above is the non-consensual nature of these acts. In the ICC’s *Rules of Procedure and Evidence, Rule 70 - Principles of Evidence in Cases of Sexual Violence* - acknowledges that certain

situations preclude the victim's ability to give genuine and voluntary consent. This includes cases where the victim has been subject to force, threat of force, or coercion. Furthermore, and of relevance to our discussion here, silence or lack of resistance cannot be read as evidence of consent.

Consent

To aid our discussion on consent I will draw on the literature pertaining to human and veterinary medicine as well as ethics and experimental research on nonhuman animals. What follows is an overview of the various debates that have arisen on the issue of whether or not nonhuman animals are capable of providing consent. Beauchamp and Childress (2013) outline four principles within the field of medical ethics: autonomy, beneficence (doing good), non-maleficence (preventing harm) and justice (fairness) (Beauchamp & Childress, 2013, p. 104, as cited in Ashall et al., 2018, p. 249). Research is considered ethical if it involves informed consent. Individuals capable of autonomous decision-making are believed to possess the ability to provide consent. Beauchamp and Childress (2013) suggest that to act autonomously one must be able to act intentionally, with understanding, and without controlling influences that determine their action (Beauchamp & Childress, 2013, p. 104 as cited in Ashall et al., 2018, p. 249). Put simply, informed consent respects an individual's right to make autonomous decisions regarding their own body (Ashall et al., 2018). In the context of human medicine, consent is defined as: "...a voluntary, uncoerced decision, made by a sufficiently competent or autonomous person...In this sense, consent requires action by an autonomous agent based on adequate information" (Mancini & Nannoni, 2022, p. 3).

While some similarities can be drawn between human and veterinary medicine – both require informed consent – in the case of the latter, consent is provided by a third-party on behalf of the nonhuman animal patient. As Ashall et al. (2018) explain: consent within veterinary settings upholds the idea that the nonhuman animal is the property of the owner and therefore consent protects the rights of the owner and not "any legal or moral rights enjoyed by the animal 'patient' themselves" (p. 250). In this instance, if the veterinarian acts without consent it would be treated as an act of damaging property. The difference between this and cases where doctors act without the consent of their human patients is that in the case of nonhuman animals, they are unable to consent for themselves. Consent is provided by their owner, who seeks to act in their best interests (Ashall et al., 2018). Interestingly, as Ashall et al., (2018) point out, while "non autonomous humans still possess rights over their own body which cannot be overruled by third party consent, the same situation is not true for animals" (p. 252). With nonhuman animals, consent is provided by mediators, for example, their owners, in the case of pets, or ethical review bodies, in the case of other nonhuman animals (Mancini & Nannoni, 2022, p. 3). Indeed, as Kantin and Wendler (2015) note, in the context of human research subjects, regardless of their ability to consent, their preferences are taken into account.

In such instances welfare-based preferences or agency-based preferences often inform the motivation surrounding the involvement of human participants (Kantin & Wendler, 2015). The first addresses the impact the research will have on a person's quality of life, while the latter is based on an individual's ability to engage in intentional action based on their assessment of the situation. It is generally accepted that welfare-based interests of nonhuman animals involved in

research should be taken into consideration. Conversely, apart from a few cases (for example, those with advanced cognitive capabilities, such as Chimpanzees), determining the presence of agency-based preferences among nonhuman animals is difficult. This is because, on the whole, nonhuman animals will not possess the required level of understanding of the situation to make an informed decision. Furthermore, research carried out on nonhuman animals raises the following contradiction: the recognition that nonhuman animals can feel pain but are incapable of consenting (or otherwise) to the procedures that cause them pain (Mancini & Nannoni, 2022). Russell and Burch's (1959) principles of replacement (replacing or refraining from the use of nonhuman animals); reduction (using the minimum number of nonhuman animals) and refinement (the prioritizing of animal welfare) – the 3Rs - go some way to addressing this tension (as cited in Mancini & Nannoni, 2022, p. 2). However, as Mancini and Nannoni (2022) highlight, the 3Rs ethical framework is premised on two main assumptions: first, nonhuman animals are the objects of research rather than the subjects. And second, nonhuman animals are unable to consent to the procedures they are subject to. Departing from this position Mancini and Nannoni (2022) believe we should treat “animals as active participants in research, capable of consenting or dissenting to experimental procedures, and as stakeholders in the research process, based on the relevance of the research to their own interests” (p. 2). They put forward guidelines for animal-centered research that merges the 3Rs with Beauchamp and Childress' four principles. This facilitates a shift from viewing nonhuman animals as the instruments of research to regarding them as subjects who participate on a voluntary and autonomous basis (as we will see in due course, not everyone agrees with this position; with some taking issue with the ability of nonhuman animals to willingly participate in research settings). In an earlier publication, Mancini (2017) outlined four core principles that should underpin animal-centered research: relevance to part-takers, impartial treatment of part-takers, part-takers' welfare prioritization and part-takers' consent. The first three are relatively straightforward. The first stipulates that nonhuman animals should only take part in research that is beneficial to them. The second requires that all those involved in the research should be afforded equal protection, while the third prioritizes the welfare of participants at all times (see Mancini, 2017). The fourth principle, consent, requires further deliberation.

When undertaking animal-centered research, Mancini (2017) believes that researchers have a duty to obtain the consent of nonhuman animals in two ways: through mediated and contingent consent. The former would be provided by a third-party who are able to discern and have a vested interest in protecting the welfare needs of the nonhuman animal. The latter, which is based on the consent of the nonhuman animal, requires that researchers ensure that participants can freely choose whether or not to engage in the research (Mancini, 2017). Mancini (2017) goes on to explain: “If a participant is enabled to choose the pace and modality of their engagement with, or withdrawal from, the research process at any time...their response can provide a measure of their consent to engaging with a specific research set-up” (p. 227).

I am not entirely convinced by Mancini's (2017) notion of mediated and contingent consent. Here I believe it is useful to draw on the work of Kantin and Wendler (2015) as well as Healy and Pepper (2021) to arrive at a more applicable interpretation of consent vis-à-vis nonhuman animals. To reiterate: it is widely accepted that nonhuman animals are sentient beings, what is more contentious is the claim that they are agentic beings (Healey & Pepper, 2021). For Healy and Pepper (2021) self-determination is bestowed to individuals who have the authority and

ability to decide on a course of action. Their choice requires obligations of non-interference from others (Healey & Pepper, 2021). The authors (2021) concede that nonhuman animals have claims to self-determination, but they do not believe that animals can provide consent. In their article they attempt to work through this dilemma. Of relevance to our discussion here is the discussion they offer in response to the following question: “If animals sometimes have rights to self-determination, but cannot give or withhold consent, then when, if ever, is it permissible for us to touch other animals, hold them, bathe them, confine them, or engage them in work or in sport?” (p. 1223).

Curiously, Healey and Pepper’s analysis (2021) is informed by a rather complex and, to my mind, rather anthropocentric understanding of consent, which also differs from the definition outlined above in relation to medical treatment. The authors regard consent as a type of normative power. Here it is worth quoting them at length:

The power of consent enables agents to waive claim-rights of theirs, thereby releasing others from duties they owe to them. Thus, valid consent will generally make an impermissible course of action permissible...An important feature of the power of consent (like other normative powers) is that the power is exercised intentionally...Specifically, to exercise the power of consent an agent must intend to waive a right and thereby give another permission. If consent requires the intentional giving of permission, it is very unlikely that we can obtain consent from animals. (p. 1231)

In lieu of animals being able to provide consent, as per their interpretation of consent, Healey and Pepper (2021) believe that animals can still communicate their preferences to us. This is through assent or dissent. Taking the notion of assent further, Kantin and Wendler (2015) argue that assent can only be obtained if researchers can communicate with nonhuman animals and that the nonhuman animal, based on a sufficient level of understanding of the situation, is able to make an informed decision as to whether they want to take part or not. They rightly observe that in most cases these criteria will not be met. Simply put, dissent is the opposite of assent. It is active resistance to a course of action that can involve either verbal or behavioral objection. For Kantin and Wendler (2015), dissent does not require a person to fully understand what is taking place: their lack of understanding may in fact be the cause of their dissent. For this reason, they believe that dissent among nonhuman animals is more achievable than assent as the latter requires a certain level of understanding. Interestingly, Arnason (2020) departs from this position and posits that the opposite of dissent is acquiescence. The latter, they state, involves respecting the agency of nonhuman animals who either acquiesce or dissent. A lesser requirement is that of voluntary participation which, unlike assent, Arnason (2020) argues, does not require an understanding on the part of the nonhuman animal of what is at stake during the research process.

So where does this leave us with regards to the War Crimes and Crimes against Humanity/Sentient Beings discussed in this article, specifically in relation to the unlawful confinement and forcible impregnation of sows and dairy cows? If, as I have argued, nonhuman animals should be granted legal personhood, does this mean they are entitled to similar ethical considerations as humans? To put it another way: can and should we obtain the assent or dissent (or indeed, the

acquiescence) of nonhuman animals and when is it necessary to do so? (Healy & Pepper, 2021; Kantin & Wendler, 2015).

For Healey and Pepper (2021, p. 1236), assent, like consent, must be obtained in all situations where nonhuman animals have a right to self-determination. While they concede that the full range of situations where this applies is “indefinitely varied,” and “beyond the scope of their paper,” they do note, however, that the “weightier the interests at stake, the more demanding the validity conditions are likely to be.” In sum, they believe that humans must be sure that the nonhuman animal they are engaging with understands the implications of what is required of them and that they freely consent to taking part in the interaction. And for Kantin and Wendler (2015), the fact that nonhuman animals are unable to attain the requisite level of understanding of the research setting should not preclude researchers from soliciting their preferences. As noted above, the precedence with human research subjects is to consider the preferences of all participants regardless of their cognitive capabilities. Indeed, even in cases where human subjects are unable to provide consent, researchers are still required to obtain consent. Therefore, “the inability [of nonhuman animals] to provide informed consent does not provide a justification for failing to take into account their preferences regarding whether they participate in research” (Kantin & Wendler, 2015, p. 460).

My response to these questions is informed by the literature reviewed above, the broader philosophical literature on the ethical treatment of nonhuman animals, as well as the terminology included in the following ICC documents: *Elements of Crime* (2013) (specifically footnote 5, which addresses the term forcibly) and *Principles of Evidence in Cases of Sexual Violence* (ICC, 2019, Rules of Procedure and Evidence).

On the subject of consent, I identify the following as noteworthy: nonhuman animals are treated as property in medical settings; the welfare of nonhuman animals is, to a certain degree, considered within research settings; and, finally, there is an agreement that anthropocentric notions of consent must be adapted to fit the situation of nonhuman animals, with notions of assent and dissent offering the most applicable alternatives. Following Kantin and Wendler (2015) I believe that, on the whole (but not always), it is (*theoretically*) easier to determine whether a nonhuman animal dissents rather than assents to a certain course of action. However, in practice this may prove difficult as, in order to truly dissent from a course of action, one must have full knowledge/understanding of what it is they are dissenting from.

To enrich our discussion around consent I believe it is useful to think about the vulnerability of nonhuman animals. To do this I will draw on the work of Johnson and Barnard (2014). As the authors note, humans and nonhuman animals are inherently vulnerable, as we are all susceptible to illness and disease. However, when placed within research settings, individuals are at risk of harm and exploitation, which exacerbates their vulnerability. This is referred to as situational vulnerability. Nonhuman animals are particularly “...vulnerable to increased risk of harm and exploitation because they are reliant on humans to meet their basic survival needs, in addition to their cognitive, emotional, psychological, and social needs” (Johnson & Barnard, 2014, p. 135). The authors do not believe nonhuman animals can provide consent and - echoing Mancini’s (2017) notion of mediated consent – they advocate using a form of surrogate decision maker who can provide consent on behalf of the nonhuman animal. While I have reservations with regards

to the latter, the issue of vulnerability is an important factor to consider. Indeed, situational vulnerability is clearly present in the examples we are dealing with here: War Crimes and Crimes against Humanity/Sentient Beings capable of becoming pregnant. Here we turn to the philosophical literature on the ethical treatment of nonhuman animals, specifically Regan's (1986) belief in the dignity and inherent value of nonhuman animals, and his concomitant claim that nonhuman animals are subjects-of-a-life. In his words: "[nonhuman animals] have beliefs and desires; perception, memory, and a sense of the future, including their own future; an emotional life together with feelings of pleasure and pain; preference - and welfare interests" (Regan, 1986, p. 243). Based on his contention that nonhuman animals are subjects-of-a-life, Regan (1986) believed that we have a duty to treat them with respect rather than as resources to be exploited. This departs from the animal-centered research proposal put forward by Mancini (2017) which we can align more readily with utilitarianism. Utilitarianism contains two moral principles: equality and utility (Regan, 1986). The former presupposes that everyone's interests count, while the latter involves acting in ways that bring about the best outcome for everyone involved. Utilitarianism informs current approaches to research on nonhuman animals, where the goal is to (1) minimize suffering and (2) measure any potential suffering against the benefits of the research (Arnason, 2020).

I would argue that things become less contentious when we consider the language of the aforementioned ICC documents. As a reminder: in terms of forcible impregnation, the phrase forcibly, is not solely based on physical force. It can, among other things, include a person taking advantage of a coercive environment. I would suggest that the notion of forcibly impregnating persons capable of becoming pregnant (and by extension, holding them captive) overrides debates about whether a nonhuman animal is capable of assenting or dissenting. Furthermore, the fact that cows, for example, are restrained while they are artificially inseminated to my mind belies the notion of consent. That said, if a cow does not dissent from forced pregnancy, as will become evident in the following section, she clearly dissents from having her child removed from her. Therefore, to return to and elaborate on the point made above, assent or dissent for any kind of (violent) act, can never be fully given because the full extent of the crime can never be grasped by the nonhuman animal.

Finally, the *Principles of Evidence in Cases of Sexual Violence* notes that silence cannot be read as evidence of consent (ICC Rules of Procedure and Evidence, 2019). Although here I suggest contemplating the following by Catharine MacKinnon: "Who asked the animals?" And: "Do animals dissent from human hegemony [and dominance]?" In response MacKinnon states: "I think they often do. They vote with their feet by running away. They bite back, scream in pain, withhold affection, approach warily, fly and swim away" (MacKinnon, 2004, p. 270 as cited in Painter, 2016, p. 332). We now turn to the third and final element of the ICC definition of forced pregnancy: the intention of the perpetrator.

3. The intention of the perpetrator

According to Jessie (2006, p. 336) "[t]he ultimate goal of forced pregnancy campaigns is to destroy, in whole or in part, a national, ethnical, racial or religious group." This statement by Jessie requires qualification. Forced pregnancy, like rape, *can* constitute the crime of genocide, however, as per the ICC definition of forced pregnancy, the intention can also be based on

“carrying out other grave violations of international law” (Rome Statute of the ICC, 1998, p.5). It is the latter (*other grave violations of international law*) that I want to focus on. The ‘core’ crimes listed under International Law include the crime of Genocide, War Crimes, Crimes against Humanity/Sentient Beings, and the Crime of Aggression. As we have established, rape, sexual slavery, and other forms of sexual violence are listed as War Crimes and Crimes against Humanity/Sentient Beings. Under article 7 of the Rome Statute of the ICC, Crimes against Humanity/Sentient Beings also refer to: “Other inhumane acts of a similar character intentionally causing great suffering, or serious injury to body or to mental or physical health” (Rome Statute of the International Criminal Court, 1998, p. 5). Based on this, I propose the following revised definition of forced pregnancy:

The unlawful confinement of a person forcibly made pregnant, with the intent of carrying out inhumane acts that cause great suffering, or serious injury to body or to mental or physical health. Rape, sexual slavery, and other forms of sexual violence are used in the commission of this act. All of which are grave violations of International Law. (Banwell, 2023, p. 97)

Emphasis needs to be placed on the word *can*. To put it another way, forced pregnancy is not exclusively genocidal in nature, it can involve other crimes that violate International Law. As we have dealt with the issue of sexual slavery, I will limit the discussion below to rape and sexualized violence. Both are listed under ‘*other grave violations of international law*.’

The ICC Elements of Rape

In her article, Cusack (2013) draws on the revised FBI Uniform Crime Reporting definition of rape when describing what takes place on factory farms. In my own work, based on my belief that we are currently engaged in a war against nonhuman animals, I propose we draw on the definition of wartime rape outlined in the ICC. In the ICC’s *Elements of Crimes* (2013), the following definition of rape is provided:

The perpetrator invaded the body of a person by conduct resulting in penetration, however slight, of any part of the body of the victim...with a sexual organ, or...with any object or any other part of the body. The invasion was committed by force, or by threat of force or coercion...or abuse of power, against such person or another person, or by taking advantage of a coercive environment, or the invasion was committed against a person incapable of giving genuine consent. (p. 5)

Invasive non-consensual methods of penetration (both vaginal and rectal) are used to impregnate dairy cows (Cusack, 2013; Mackenzie, 2019). This includes the use of the ‘rape rack.’ This device forcibly restrains the cow with chains while she is forcibly impregnated artificially or by a bull (Cusack, 2013; Shuchat, 2016). This procedure is referred to as recto-vaginal rape (Vandermark, Salisbury & Boley, 1951, as cited in Cusack, 2013, p. 27). The process involves the worker inserting one arm into the rectum of the cow to locate the cervix, while using the other arm to insert the artificial insemination gun into the cow’s vagina. During this time the cow is restrained by the rape rack. The rod-like gun contains bull semen. It is forced into the cow until it reaches her cervix where the semen is injected into her uterus (Shuchat, 2016; see also

Gillespie, 2014). Sows are exploited in a similar way to dairy cows during routine animal husbandry practices. At around 6 months-old they are repeatedly impregnated through artificial insemination with an insemination rod.

Sexualized violence – the separation of mother and calf

Halbmayer (2010, p. 30) posits that “violent acts can be understood as sexualized if they are directed at the most intimate part of a person and, as such, against that person’s physical, emotional, and spiritual integrity.” In the book I argue that the experiences of dairy cows can be placed within this framework of sexualized violence, specifically the impact on the physical, emotional, and spiritual integrity of these nonhuman animals (Banwell, 2023).

Within the first 12 hours of being born, 97% of calves are taken from their mothers (Brown, 2016). This forced separation causes the cow great distress, and they will cry and bellow for days, sometimes weeks, after their calves have been removed from them (Cusack, 2013; Gillespie, 2014; Joy, 2020; Shuchat, 2016). Industrialized capitalism informs this forced removal of the calves from their mothers: once the calves are removed from their mothers, the milk can be retained for human consumption. Indeed, the milk produced for human consumption far outweighs the milk cows would produce for their calves (Humane League, 2021). For example, “[i]n the US, the average dairy cow produces more than 7.5 gallons of milk per day. If she was producing just enough to feed her calf, a dairy cow would only produce about one gallon of milk per day” (Compassion in World Dairy Farming, n.d. para 3). In other words, despite the decrease in the number of cows on dairy farms in the US, between 1950 and 2017 (an estimated 12 million fewer cows), milk production has increased from “116 billion pounds of milk per year in 1950 to 215 billion pounds in 2017” (PETA - *Cow’s Milk: A Cruel and Unhealthy Product*, para 5).

I interpret this forced separation as an assault on motherhood. For Aoláin (2000), the separation of children from their mothers is a gender-based violation and an assault on the mother’s bodily integrity. It is my contention that dairy cows experience this destruction of motherhood. Furthermore, I would frame this assault as a form of reproductive coercion, where the involuntary separation of mother and calf deprives the mother of her personhood and her intersubjective relationship with her calf (Banwell, 2023). In a similar vein, sows are also separated from their piglets after giving birth. Typically, the weaning process takes around 3 months; however, piglets are often removed after as little as three weeks. Once removed, the sow is forcibly impregnated again (Animal Aid, n.d.). As with cows, this separation of mother and baby causes great distress to both the sow and the piglet.

To meet the increased demand in milk, I argue that grave violations of International Law are carried out during the war against nonhuman animals. The intensification of dairy farming means that cows are subject to genetic manipulation, as well as antibiotic and hormonal treatment. Their natural diets of grass are substituted with diets that are unnaturally high in protein to fulfil the demand for dairy (PETA - *Cow’s Milk: A Cruel and Unhealthy Product*). A similar trend takes place within the meat industry. Regarding gestation and farrowing crates (discussed earlier), these are, as the Humane League (2022) points out, “standard in the multi [billion-dollar] pork industry, which views mother and baby pigs as mere products – a way to make the most profits at the pigs’ expense” (para 13). In sum, these measures, that are put in place to facilitate the

industrialized reproduction of nonhuman animals within the animal-industrial complex, reflect the intention of the perpetrator.

Conclusion

The war against nonhuman animals is based on my reformulation of non-international armed conflict. It involves *violence committed by government and non-governmental groups against non-armed, non-combatants (nonhuman animals) within a state*. In this article I focused on the following acts of violence: rape, forced pregnancy, and sexual violence. The article argues that these War Crimes and Crimes against Humanity/Sentient Beings (that is, the expressions and consequences of reproductive violence) are committed against persons capable of becoming pregnant: dairy cows and sows. As presented in this piece, to protect nonhuman animals from this species war we must recognize them as sentient beings and as a group who should be afforded legal personhood status. Allied to this, we should replace the term Crimes against Humanity with Crimes against Sentient Beings.

In this piece I have demonstrated that, as non-combatants/civilians during this war, female nonhuman animals – who are exploited due to their reproductive capabilities – meet the three criteria outlined in the ICC definition of force pregnancy. The unlawful confinement, the forcible impregnation and the intention of the perpetrator were discussed in relation to the following ICC statute: *Other Serious Violations of the Laws and Customs Applicable in Armed Conflicts not of an International Character*. Emphasis was placed on both the nature (deprivation of liberty) and implications (sexual slavery) of the unlawful confinement; the forcible and non-consensual nature of the violence(s) inflicted; and, lastly, the aim of these acts was considered in relation to ‘*other grave violations of international law:*’ rape and sexualized violence. The latter was discussed in relation to the forced separation from mother and child.

Currently nonhuman animals are classified as the *property* of ‘protected persons’ during war. We must replace this classification and treat nonhuman animals as ‘protected persons’ in their own right. Once we have done this, we can apply IHL to the situation of nonhuman animals to restrict the means and methods used during this war. My hope is that the arguments presented here and elsewhere (see Banwell, 2023) brings us a step closer towards developing a non-speciesist understanding of reproductive violence which, in turn, moves us closer to ending the war against nonhuman animals.

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ⁱ For a detailed exploration of their experiences see PETA *21 Things the Egg Industry Doesn't Want You to See*; see also Compassion in World Farming n.d., *The Life of Laying Hens*.

ⁱⁱ See the Animal Kill Clock. Last accessed 15th March 2024.

ⁱⁱⁱ For additional accounts of the intensification of dairy farming and its impact on the physical and mental wellbeing of dairy cows see Clay, Garnett & Lorimer, 2020; Compassion in World Farming, n.d.; Humane League, 2021; PETA, n.d.; Shahbandeh, 2022.