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Avoiding unnecessary suffering: Towards a moral minimum standard for humans' responsibility for animal welfare

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Abstract

Animals are an important part of our social, economic and corporate world. Their wellbeing is significantly affected by the ways in which humans treat them. However, animals have long remained (and, indeed, continue to remain) effectively invisible in the business ethics and corporate responsibility discourse. This article argues in favor of the moral necessity of according animal welfare a higher priority in business. In line with most streams in both recent and traditional animal ethics, this article derives the *avoidance of unnecessary animal suffering* as the moral minimum standard for responsible management in the livestock industry. Based on a broad range of different interpretations of what animal suffering may be *necessary*, the article discusses three distinct ways in which humans working in the animal industry could meet their moral responsibility to avoid *unnecessary* suffering, and, with this, increase animal welfare: by ameliorating circumstances for animals, by aiming at a two-pronged transformation, or by transforming into a "zero-suffering" business. Considering animal welfare as a legitimate ethical value in and of itself is a first step towards overcoming the anthropocentric bias in today's sustainability and corporate responsibility debate.

KEYWORDS
animal ethics, animal suffering, animal welfare, anthropocentrism, livestock industry, zoocentrism

1 | INTRODUCTION

> We have waged war, or rather let a war be waged, against all of the animals we eat. This war is new and has a name: factory farming. [...] Globally, roughly 50 billion land animals are now factory farmed every year. [...] So although there are important exceptions, to speak about eating animals today is to speak about factory farming. (Safran Foer, 2009, p. 33)

Factory farming (or mass husbandry)—which comprises approximately 99% of the animal industry in the USA (Reese, 2019) and also by far the largest percentage of the equivalent European industry (Jäggi, 2021)—does not, for the most part, prioritize animal welfare. Within the debate on corporate responsibility, animal welfare is principally discussed from an anthropocentric standpoint, which emphasizes the negative impact factory farming has on the climate and global warming (Gerber et al., 2013), on the spread and mutation of pathogens and zoonotic pandemics (Brozek & Falkenberg, 2021), on food quality and related human health issues, or, more generally, on

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the interconnectedness of humans' wellbeing and the wellbeing of natural ecosystems (Shrivastava & Zsolnai, 2022). In the light of this interconnectedness, in which animals are a crucial part of the natural ecosystem, Lever and Evans (2017, p. 216) consider animal welfare as "a systematic risk that is not properly understood in terms of the threats it poses to the achievement of sustainable development—and wider threats to animal, human and environmental health." However, morally justifying humans' responsibility for increased animal welfare, for the sake of animals' wellbeing and the absence of pain in itself, seems to be something of an exception to this debate. Linking the moral value of human behavior solely to its impact on, or relationship with, other humans—regardless of whether those humans have already been born or not—might also be interpreted as "speciesism": that is, "the unjustified disadvantageous consideration or treatment of those who are not classified as belonging to a certain species" (Horta, 2010, p. 1). Although animals can be considered dependent stakeholders (Janssens, 2022), or "defenseless Others" (Hatami & Firoozi, 2019), with legitimate claims to living well, it would appear that in the debate on animal welfare, human welfare is accorded considerably more weight, and it is the human species that is seen as deserving of greater attention when assessing the moral value of "responsible" human behavior towards animals (Browning, 2023; Labatut et al., 2016; Mellahi & Wood, 2005; Sayers et al., 2019, 2021; Tallberg et al., 2021; Tallberg & Hamilton, 2022; Thomas, 2022b).

Given this context, this article proposes the avoidance of unnecessary animal suffering as the moral minimum standard in terms of human use of animals for their consumptive purposes. What suffering might be necessary, and what might not be, remains, of course, highly controversial, and the responses to this differ, depending on the moral perspective taken. This article demonstrates that this approach is in line with most major streams in animal ethics,[1] and allows for the integration of a broad range of moral claims, including even the most radical of claims for animal liberation. This article aims to enrich the discourse on animal welfare by taking the largely anthropocentric standpoint in the debate on "responsible", or even "sustainable" ways of utilizing animals for human purposes, and adding a more zoocentric perspective, which allows for the attachment of moral legitimacy to animal welfare as a moral dimension in and of itself. In terms of the business ethics discourse, a second aim of this article is to make animals more visible in this discourse in general, and to ethically reflect upon their role in businesses and organizations. As a third aim, the authors hope that the article may provide managers, and other persons in charge in the animal industry, with diverse options, in terms of what taking responsibility for animal welfare could entail. As this article focuses on farm animals, it is the fourth aim of this article to ignite a debate on what might constitute a moral minimum standard for human's responsibility for animal welfare in other areas too. It remains an important question for future research to discuss to what extent the standard proposed in this article might also be applied to animals in the context of other human-animal relationships in which animals serve human purposes, including, for example, working animals (such as search, rescue, and assistance dogs), animals kept in zoos, animals used in the tourist industry, or animals used for experiments.

The next section first discusses the concept of animal welfare in greater detail, before outlining the various ethical perspectives on animal welfare. In doing so, we respond to the call to better link the field of business ethics with the "more general debates in moral theory" (Berkey, 2022, p. 86f), which, in terms of reflecting upon moral issues in the animal industry, implies building on the discourse on animal ethics (Thomas, 2022a). Subsequently, it is shown that *avoiding unnecessary animal suffering* is a suitable moral minimum standard for the animal industry, compatible with most streams in animal ethics. Three methods (or stages) of reducing animal suffering in the animal industry are then derived, with each method/stage reflecting a different degree of reduction in animal suffering, and with it, a different moral understanding about what kind of animal suffering counts as *unnecessary*. The article concludes with a brief discussion of the implications of accepting the avoidance of unnecessary animal suffering as a moral minimum standard.

2 | (FARM) ANIMAL WELFARE

Over the past few decades, stakeholders such as animal protection NGOs have attempted to increase the consideration humanity affords animals, only to see a marked growth in the quantity of animal products from factory farms (Lever & Evans, 2017). With a worldwide increase in the quantity of animal products consumed by humans, the quantity of animal suffering likewise continues to increase (Ritchie & Roser, 2017). Many of the conditions in which farmed animals are obliged to live cause considerable suffering and harm to these beings. Pigs in factory farms, for example, are often kept crowded together in dark barns with uncomfortable and unhygienic slatted concrete floors; environments in which these naturally clean and intelligent beings cannot occupy themselves with any meaningful activity. Many countries still allow mother sows to be put in gestation crates during pregnancy. In these metal enclosures, the animals can barely move and cannot turn around. The sows will spend months to years in such crates (Rollin, 1995). Given how pigs are treated in the animal industry, it can be illuminating to remember that pigs are more intelligent than dogs, outperforming all other domestic animals when it comes to cognitive capacities (Marino & Colvin, 2015).

When considering the suffering of cattle in the animal industry, many will recall grieving dairy cows, who often call for days for their lost calves, taken from them immediately after birth (Weary et al., 2008). The calves are then slaughtered for veal or sold off, often to be transported considerable distances internationally. Such transports have been heavily criticized, since the calves still require milk, which is not provided (Four Paws International, 2023). The cows themselves will be impregnated every year, repeatedly witnessing the loss of their offspring, before being sent to the slaughterhouse once their milk yield decreases.

Grabolle (2012) provides the example of broiler chickens in Germany, which are often constrained within such crowded conditions that, towards the end of their short lives (3 to 4 weeks), 16 to 26 chickens are forced to share one square meter of space. This agonizing method of keeping chickens is appropriately termed "squeeze husbandry" (Grabolle, 2012). The suffering of the beings involved in the egg industry is intense. Animal charity *Compassion in World Farming* reports that "60 percent of the world's eggs are produced in industrial systems, mostly using barren battery cages" (Compassion in World Farming, 2023). In the USA, guidelines for cage housing of egg-laying hens by *United Egg Producers* state that each bird must have at least 67–86 square inches of space: smaller than a sheet of paper (The Humane League, 2020). In the egg industry, "all male chicks are typically ground up or gassed while fully conscious" (Animal Equality, 2021). Numerous further examples of the ways in which humans produce, keep, transport, and slaughter farmed animals, that cause those animals to suffer could be added here. Attempting to avoid or to reduce their suffering means caring about animal welfare.

Animal welfare can be defined as "the physical and mental well-being of an animal" (Fernández-Mateo & Franco-Barrera, 2020, p. 4). One contribution which has been highly influential in the animal welfare debate is the idea of the "Five Freedoms" proposed by the British Farm Animal Welfare Council in 1993 (FAWC, 2010). The rationale behind these freedoms is that "any animal kept [...], must at least, be protected from unnecessary suffering" (ibid.). These freedoms are a "memorable set of signposts to right action" (Webster, 2016, p. 1). However, they "define ideal states rather than standards for acceptable welfare" (McCulloch, 2013, p. 961). As it is not possible to keep farmed animals entirely free from harm, for deriving recommendations for farm animal welfare, the "freedom[s] from" should be understood as "as free as possible from" (Mellor, 2016), whereby any kind of amelioration is already an acceptance of responsibility for animal welfare. The five freedoms are: "1. Freedom from hunger and thirst—by ready access to fresh water and a diet to maintain full health and vigour; 2. Freedom from discomfort—by providing an appropriate environment including shelter and a comfortable resting area; 3. Freedom from pain, injury or disease—by prevention or rapid diagnosis and treatment; 4. Freedom to express normal behaviour—by providing sufficient space, proper facilities and company of the animal's own kind; and 5. Freedom from fear and distress—by ensuring conditions and treatment which avoid mental suffering" (FAWC, 2010).

Researchers and engineers have been developing technological innovations which may have some potential to alleviate animal suffering in the animal industry. An example of one such innovation is precision livestock farming, in which sensors are used to monitor farm animals, including their growth and outputs (such as milk and eggs), as well as possible diseases, their behavior, and their physical environment (Wathes et al., 2008). Another more theoretical, though nevertheless controversial and much-discussed, thematic stream in the debate on animal welfare surrounds animal disenhancement. Animal disenhancement refers to "a set of technological possibilities [...] for relieving distress that animals experience in certain food commodity production environments by means of technological alteration of animals' ability to experience distress" (Thompson, 2008, pp. 305–306). These technologies include genetic engineering, or any other biotechnological and nanotechnological modification. Another technological innovation, with the disruptive potential to radically alter the way in which humans produce animal products in future, concerns cultivated animal products, which are animal products produced outside of an animal, by multiplying cells in a nutrient solution (Edelman et al., 2005; Post et al., 2020; Stephens et al., 2018), or by precision fermentation (Te Puna Whakaaronui, 2022, p. 37; Waltz, 2022).

Developments leading to greater animal welfare can be initiated by diverse forces. Two of the most salient forces, which have so far manifested changes in this regard, are legislation and animal welfare labels (Sandøe et al., 2020). Producing animal products under conditions of increased animal welfare, and labeling those products as such, can not only make a difference to farmed animals, but may also open up new markets, allow higher prices to be charged, and attract increased investor capital (Cornish et al., 2020; Höhnke & Homölle, 2021; Sullivan et al., 2017). This "market-driven animal welfare" (Sandøe et al., 2020, p. 2) has seen a boost in recent times, and many companies in the food industry in Western countries have increasingly started seeing animal welfare "as a source of competitive advantage" (Lever & Evans, 2017, p. 216). However, there are also numerous ethical perspectives that bespeak taking animal welfare more seriously. Most of the contemporary (and indeed, most of the more traditional) moral philosophical perspectives provide ways of arguing for more animal welfare, albeit from different angles and with different ethical "urgencies". However, what they all have in common—as shown below—is that they would all concur with the moral minimum standard of "avoiding unnecessary animal suffering" which also provides the rationale of the five freedoms outlined above. This "minimum standard" means that most (if not all) ethical perspectives would ascribe a higher moral value to an action (or an actor) that (who) avoids unnecessary suffering, than they would to one that (who) does not. In a case where, conceptually, this would be a choice between two options only, avoidance would be the morally (more) praiseworthy (or "good") option. In this regard, it would not matter whether the moral perspectives in question were prescriptive ones—which prescribe to humans how they *ought* to behave, in order to be or to behave morally *good* (such as utilitarian or deontological moralities do)—or whether the moral perspectives are more descriptive (such as, for example, a Schopenhauerian (1841) moral perspective).

3 | ANIMAL ETHICS: MORAL PERSPECTIVES ON ANIMAL WELFARE

Although many of the classical (and even ancient) moral philosophers considered questions regarding animals in their works, none of them made them their primary concern. By the end of the 1970s, however,

building on various established moral philosophical streams, an increasing number of thinkers had made animals the key concern of their ethical considerations. Just as the whole field of applied business ethics primarily draws upon the major ethical streams, likewise the "three main approaches in animal ethics coincide with the main approaches in business ethics, which are consequential, deontological and virtue ethics" (Janssens & Kaptein, 2016, p. 44).

Two of the most well-known consequentialists arguing on behalf of animals are utilitarians Jeremy Bentham and Peter Singer. Emanating from the utilitarian notion that "the morally right action is the action that produces the most good" (Driver, 2014), it is Bentham's famous dictum that "The question is not, 'can they reason?' Nor, 'can they talk?' But, 'can they suffer?'" (Bentham (1789, p. 309 [cccix]), which opens up the utilitarian calculus for animal suffering and animal welfare. Building on Bentham's calculus, Singer (1994, p. 39) introduces the "principle of equal consideration of interests", arguing against killing animals in order to eat their bodies. According to Singer, when calculating what means of nutrition is best, morally speaking, the human interest in eating meat is ceteris paribus (in industrialized societies) clearly outweighed by the animals' interest in surviving. This is the case since humans (in the Western world) can live healthily, and relatively easily, on a diet that does not include meat, or any animal products whatsoever (see, e.g., de Boer & Aiking, 2021).

In terms of deontological ethics, Kant's notion of human dignity has been highly influential, up to the present day, especially through its application in the Universal Declaration of Human Rights (Sensen, 2011), with its preamble beginning: "Whereas recognition of the inherent dignity and the equal and inalienable rights of all members of the human family is the foundation of freedom, justice and peace in the world, [...]." (United Nations, 2023). Although Kant attaches an inherent dignity, and, with it, an inherent value, to humans only, he recognizes that animals share with humans the capacity to suffer. For Kant, "a human being can … have no duty to any beings other than human beings" (Kant, 1886, p. 259); nevertheless, he derives indirect duties to animals, due to the passibility of the latter: "With regard to the animate but nonrational part of creation, violent and cruel treatment of animals is far more intimately opposed to a human being's duty to himself, and he has a duty to refrain from this; for it dulls his shared feeling of their suffering and so weakens and gradually uproots a natural predisposition that is very serviceable to morality in one's relations with other people" (Kant, 1886, p. 260). The indirect duty of humankind to not tolerate animal suffering, or cause animals to suffer unnecessarily, is, therefore, due to the risk that humans may otherwise weaken their capacity to act with compassion towards other humans. For Kagan, just as for Kant, humans stand hierarchically above animals. According to Kagan, however, although "animals count for less than people [...] they still count sufficiently that there is no justification whatsoever for anything close to current practices" (p. 5). Korsgaard objects to Kant's view, arguing that things can be bad or good not merely for humans, but also for animals; humans, therefore, as rational beings, "are committed to regarding all animals as ends in themselves" (Korsgaard, 2018, p. 145), and not only all humans. Tom Regan, the most visible contemporary Neo-Kantian deontological animal ethicist, would, for the most part, probably agree with Korsgaard for many (or most) animals. He argues that alongside human lives, the lives of many animals are also inherently valuable. He has postulated the "subject-of-a-life" criterion, according to which, subjects-of-a-life have existences that are inherently valuable and should be granted a right to life (Regan, 2006). According to Regan, all birds and mammals are subjects-of-a-life, as well as certain fishes, and, as we continue to learn more about animals, the circle of beings who are subjects-of-a-life might have to be expanded (Regan, 2014). Another scholar who has shaped this "animal rights debate" is Francione (2000), who advocates from an abolitionist position. He argues for the discontinuation of all human use of animals, concentrating his critique on the (in his view) morally untenable status of animals as humans' property. While many contemporary animal ethicists agree that human exploitation of animals should end, Francione's proposal that, after the abolition, farmed animal species should be allowed to go extinct is considerably more controversial.

Most contemporary virtue ethical perspectives on animals and human-animal relations build on Aristotle. Although Aristotle denied animals reason (*logos*), and, with it, belief (*doxa*), he saw a continuity between animals and humans, comparable to the continuity between children and adults (Aristotle, 1910, pp. 588–599). Nevertheless, Aristotle (1999, p. 13) assumed that "animals exist for the sake of man, the tame for use and food, the wild, if not all, at least the greater part of them, for food, and for the provision of clothing and various instruments". However, his virtue ethics remain somewhat ambiguous, with regard to exactly how "virtuous" human conduct towards animals might manifest itself. Without precisely claiming that this is what Aristotle would have said, were he to have been asked, this is the starting point for Rosalind Hursthouse's (2000, 2011) Neo-Aristotelian virtue ethics. Hursthouse (2011) interprets Singer's utilitarianism and Regan's deontological approach as implicitly relying on two virtues: namely, compassion and respectful love. However, the range of virtues necessary to ethically navigate our world needs to be much wider, including, for instance prudence, parsimony, or courage. Hursthouse detaches the idea of ideal virtuous human conduct towards animals from the debate about the moral status of animals. Practically virtuous actions always require a choice between actions, e.g., eating animal products or not, and are therefore not based on general rigid principles, but are highly situational and context-specific (Hursthouse, 2011). Against this backdrop, the principle of avoiding unnecessary animal suffering might be sufficiently flexible as to allow such situational interpretations. Unnecessarily suffering is closely related to unnecessary unhappiness, but when is a specific animal "happy"? Martha Nussbaum, another Neo-Aristotelean virtue-ethicist, links an animal's happiness with the ability to actualize specific and individual capabilities (Nussbaum, 2006), which is close to Rollin's view that "satisfaction of *telos* results in happiness for an animal" (Rollin, 2006, p. 99), exemplified by the line of a song from the musical *Show Boat*: "Fish

gotta swim; birds gotta fly" (Rollin, 2011, p. 51). Hursthouse's appeal to virtues such as compassion and respectful love could be perceived as an example of the stereotypically "feminine" qualities that the feminist tradition in animal ethics emphasizes (cf. Bossert, 2018, p. 122). Feminist animal ethicists such as Carol Adams (2010), Lori Gruen (Adams & Gruen, 2014), Josephine Donovan (2006), and Lisa Kemmerer (2016) point out that the focus on rationality when it comes to arguments in animal ethics is indicative of the patriarchal powers at play, even within this academic field (Bossert, 2018, p. 117). They advocate rectifying this imbalance by emphasizing the moral importance of emotions, relationships, and individual contexts in interactions between humans and animals.

Another group of animal ethics approaches is a more political one. Robert Garner (2008), for example, takes into account the non-ideal state of the world for animal rights, and proposes a more pragmatic, less utopian, approach, which attaches a moral value to "any measures that lead to the protection of animal interests, whether they be labeled animal welfare or animal rights" (Francione & Garner, 2010, p. 104). An animal's key interest is to be treated by humans in a way that does not let that animal suffer. Garner translates this interest into an animal's right to welfare, which makes treating animals well a matter of justice for humans (Garner, 2013). His approach is an ethics for the "non-ideal world" in which we live. Although Garner sees the abolition of human exploitation and use of animals as a final goal and ideal state, he takes a more pragmatic stance, stressing the importance and relevance of small steps in improving animal welfare (Petrus, 2018b, p. 334). Garner openly states that he is partially driven by the desire for "popularity and credibility within the animal protection movement" (Garner, 2006, p. 161), which remains a permanent political motivator and exerts pressure on his writing. For many abolitionists, Garner's approach does not go far enough in terms of bridging the human-animal divide, trying to abolish the property status of animals, and morally claiming rights for animals that equal human rights (Petrus, 2018a, p. 88), especially for those whose ultimate and only goal is to accomplish total animal liberation. Against this backdrop, Francione (1995) coined the term "new welfarism", for these "softer" approaches to animal ethics, which, in his opinion, do not serve this ultimate goal. Labelling an approach in animal ethics as "new welfarism" places this approach within a welfarism/abolitionism dichotomy, in which Francione (and other abolitionists) view the latter as being morally superior. This article, therefore, continues to see Garner's pragmatic approach as being welfarist—as it is an increase in animal welfare which is its primary concern—but disassociates its meaning from the negative connotations attached to it in the abolitionist discourse. As will be shown, Garner's (2013) "right to welfare," implies the key principle that unnecessary animal suffering should be avoided (cf. Petrus, 2015), which is particularly suitable as a moral minimum standard for a responsible way of humans treating (farm) animals. Most traditional and contemporary approaches in animal ethics can link to this standard with, of course, different interpretations of what counts as necessary: even those approaches that have as their ultimate goal the total liberation of all animals.

4 | AVOIDANCE OF UNNECESSARY SUFFERING AS THE MORAL MINIMUM STANDARD IN THE ANIMAL INDUSTRY

Given the variety of diverse moral philosophical standpoints taken in both contemporary and classical animal ethics, it is nigh on impossible to derive one single moral imperative that could serve as a morally binding anchor point for every case of human-animal interaction in business. Rather, there exist a variety of anchor points, depending on the perspective the individual finds most convincing; from these, a broad range of different implications can be derived, in terms of how managers can, or should, assume responsibility for animals. There is, however, one minimum moral principle regarding the treatment of animals, upon which most perspectives in animal ethics would agree: unnecessary animal suffering should be avoided.

The principle that unnecessary suffering should be avoided can be framed in a utilitarian way, balancing the pain caused by an action with the pleasure derived (for other animals or humans) from said action (e.g., Singer, 1977). What counts as unnecessary would then depend on the specific calculus applied. However, every animal's pain and every animal's death, which is not outweighed by a corresponding pleasure, would be *unnecessary* suffering. Schopenhauer's alleged hyperbole for illustrating the magnitude of human egoism—namely that "many a human being would be ready to strike another [human] dead simply to smear his boots with the other's fat" (Schopenhauer, 1841, p. 192)—may easily lead us to question the necessity of much animal suffering and death, when compared to the quality and quantity of pleasure, we derive from it. From a deontological point of view, avoiding unnecessary suffering towards animals can be in line with respecting their rights (e.g., Regan, 1983), or with carrying out a human's duty to him- or herself of not brutalizing and losing the ability to feel compassion (Kant, 1886). Avoidance may also be in accordance with the general moral desirability of caring about animal wellbeing (e.g., Donovan, 2006) and understanding this conduct as being virtuous (Hursthouse, 2000).

Contemporary approaches to animal ethics clearly morally favor the avoidance of unnecessary suffering over a state where animal welfare is not a question of morally responsible human behavior at all. However, abolitionist perspectives, in particular, criticize the general speciesist hierarchy, which they perceive as inherent in welfare-oriented approaches, and which positions the value of the human species above that of animal species. Although it is neither a necessary precondition nor a consequence of welfare-oriented approaches that a higher value be attached to human welfare than to animal welfare, many contemporary abolitionist approaches see the leveling of the categorical difference between humans and animals as a necessary precondition for their goal of animal liberation (Cavalieri, 2019; Francione, 2000). However, a closer look at various societies around the globe suggests that the granting of rights to

animals, and the achievement of animal liberation, is unlikely to occur within the foreseeable future (e.g., Cooke, 2017; Porcher, 2017); in fact, whether this could be achieved at any point in time is an open empirical question (Garner, 2008). In those societies in which certain animals at least obtain a status that approaches that of humans, a rights-like freedom is primarily based on religious rules or principles, such as *ahimsa*, the principle of nonviolence (against all living beings), or *karuṇā*, the principle of compassion, which is related to the wish that all sentient beings should be free of any suffering and of any causes of suffering (Haris, 2022). For some forms of Buddhism, Hinduism, and Jainism, adherence to these principles is a way to attain favorable rebirth, and this adherence involves granting rights-like freedom to animals (e.g., Phelps, 2004; Tshewang et al., 2021). There is, furthermore, some legislation, under which it is not possible to farm, slaughter and eat animals defined as pets, which exemplifies another rights-like protection of certain species (Grier, 2020).

Given this context, recommendations are derived as to how to take animal welfare more seriously, building on the moral minimum standard of avoiding unnecessary animal suffering. Below, it is shown that this avoidance can have consequences as far-reaching for the animal industry as the consequences potentially demanded by abolitionist and animal rights perspectives. In terms of protecting animals from human violence, exploitation and arbitrariness, a welfare-oriented approach is much more compatible with the rationale of the profit-oriented animal industry, and has the potential to render philosophical, theological or scientific disagreements over the personhood and moral status of animals less significant.

5 | THREE STAGES OF AVOIDING UNNECESSARY SUFFERING IN THE ANIMAL INDUSTRY

The authors' recommendations for treating farmed animals in a more responsible way, and for achieving higher farm animal welfare, are structured along a three-stage continuum, whereby operation on one stage/level does not necessarily mean that there must be a striving to reach the next stage.

The first category of recommendations, "ameliorating the circumstances," is directed at those actors or managers in the animal agricultural industry who desire to continue farming animals, but who wish to do so in such a way as to guarantee a high degree of animal welfare, and cause as little animal suffering as possible. Some animal farmers might wish to enter this stage as an intermediate stage, before beginning to experiment with alternative ways of diversifying their business. The second category of recommendations, called "two-pronged transformation," is directed at those players in the animal industry who are seeking complementary or alternative ways of doing business. In order to maintain solvency, maintaining the business in which one has accrued expertise can be crucial at this stage. However, establishing additional business activities that cause significantly less (or no) animal suffering, and which are complementary to, or compatible with, the original business can help to increase overall animal welfare, as well as diversifying business risks. For some animal farmers, this stage might also be an intermediate stage towards focusing exclusively on activities that no longer involve any animal suffering. The third set of recommendations presented is, therefore, named "zero-suffering business". Below, each stage is discussed in detail.

5.1 | Ameliorating the circumstances

In the debate around reducing the stress and suffering that farmed animals experience, Temple Grandin is an influential voice. Although her work has also received criticism (Lamey, 2019; Muller & McNeill, 2021), she fuels both the academic and practical discourse with a broad range of concrete suggestions and recommendations for more "humane" handling of animals, e.g., regarding their transport, the avoidance of noise, sound regulation, and the design of slaughter facilities (Grandin, 2019, 2020). As faster slaughter lines cause considerably more mistakes, e.g., with regard to stunning before killing, a speed reduction can also contribute to less suffering (Wadiwel, 2015). These are only a few examples, and often those who keep, transport, slaughter, or, more generally, work with animals are already aware of the many potential ways to ameliorate circumstances for those animals, and, alongside this, promote farm animal welfare. The crucial point is that those individuals must be willing to do so, and that the circumstances under which they operate do not impede their business.

Often, farmers do not have much financial leeway. According to a study by the National Contract Poultry Growers Association and the U.S. Department of Agriculture, 70% of chicken farmers in the US, who rely on their chicken business for income, live below the poverty line (cited in McMullen, 2022; The Pew Environment Group, 2013). Farmers must often decide between "adopting the latest inhuman production techniques" or "leaving the industry entirely" (McMullen, 2022, p. 12). As higher animal welfare can mean higher production costs, the existence of a market for these goods, with consumers who are willing to pay more for welfare-friendly products, does facilitate the transition. Farmers could seek collaborations with distributors who specialize in marketing higher-welfare animal products, to ensure they will be able to sell their products at a price that enables them to produce in this fashion. Firms could also tackle information issues on the consumer side (McMullen, 2022). In their marketing, they could compare and contrast their higher-welfare products with the standard industry means of producing such products, thereby enabling consumers to make well-informed choices. This market is, fortunately, consistently growing in most Western countries (Peng, 2019).

However, entering the higher animal welfare market could come with accompanying risks, as this would entail a potential change in the customer base, and a potential loss of price-sensitive customers. For those who have begun transforming their business in the direction of higher farm animal welfare, and especially for those who possess a certain political power, it could be an adequate

accompanying measure to lobby in diverse political arenas for national or supernational legislation, in terms of regulating higher animal welfare legal standards. Regulations could thus set ground rules which remedy the "race to the bottom" when it comes to animal welfare (McMullen, 2022). Such regulations need to be kept as geographically broad as possible. Producers might otherwise be incentivized to move production to states or nations without comparably strict regulations (McMullen, 2022). Lobbying efforts could include stricter regulation of live transport, the legitimacy of killing animals on farm premises instead of this being undertaken in distant slaughterhouses, lower speeds on slaughter lines, higher prices for animal products in general, higher standards for the living conditions of farmed animals, and bans or tariffs on imports of lower animal welfare products. Such tariffs could counteract the danger that countries with relatively high animal welfare standards would import a considerable amount of cheaper, low-welfare products, or that animal businesses would produce higher-welfare products only for the home market, whilst continuing to export lower-welfare products (cf. Sandøe et al., 2020).

5.2 | Two-pronged transformation

A good example of a two-pronged transformation, and of the development of a second mainstay involving less (or no) animal suffering, is the transformation of the German family-owned meat and sausage manufacturer Rügenwalder Mühle. The company dates back to 1834 and has, since 2006, been the manufacturer with the highest sales of branded sausage (primarily liverwurst and meat paste) in Germany (Rauffus et al., 2009). Rügenwalder Mühle is currently also the largest manufacturer of vegetarian and vegan sausages and meat in the country. They introduced the first vegetarian meat substitutes in 2014, have steadily expanded their assortment with more and more vegan meat substitutes (instead of vegetarian ones, which had been criticized for containing egg-white), and, in 2019, held a share of 35% of the market for meat substitute products (market size: €225 Mio) (Schäfer, 2020). In 2020, their product line had more vegetarian and vegan products (35) than products with meat (28) and they were able to hire 140 new employees (Schäfer, 2020). The slogan for their new advertising campaign is "The new appetite for meat made of plants" (translated from German). The text from their TV advertisements points in a direction that might be indicative for the whole meat industry:

> We know our way around meat at Rügenwalder Mühle. After all, we've been making sausages out of it for over 180 years. Meat is a great source of protein and it was long believed that there was no alternative. Today we know that certain plants such as soy, wheat or peas also contain a lot of protein. And so, we're now producing more and more sausages and meat from plants. And the nice thing is: nobody has to go without anything. Neither a good schnitzel nor a beloved sausage sandwich. Everything is really delicious. And it's good for the climate, too. (Rügenwalder Mühle, 2020)

Transforming the business mission from being a producer of meat and sausages to being a producer of high-quality protein, and adapting labeling accordingly, might help to soften any perceived disruption of the business model, and help the business to remain compatible with the expectations and shifting value systems of customers, employees, and other stakeholders. Tyson Foods in the US is in the process of making a similar move in this regard, framing it as "This isn't an 'either or' scenario; it's a 'yes and' scenario" (Hayes, 2018). Having a second business mainstay of plant-based protein products, does, of course, place certain pressures on the meat supplier, and might cause some discontent. However, for suppliers, this also opens up an opportunity to consider changing their businesses, initiating a two-pronged transformation and entering a new, related business field.

A two-pronged approach can also be chosen by animal agricultural businesses whose focus is not primarily on meat production, but on milk products, eggs, or fur. Dairies and dairy farmers can, for example, focus on the alternative products that can replace milk on the various occasions it is used, opting to grow lupines, oats, or almonds, and/or processing these into drinks and other products. Egg producers could parallel their egg business with other products that contain the specific vitamins and trace minerals that eggs are rich in. Fisheries could transition into becoming farmers of algae, which are high in protein, cheap in production, and sustainable in terms of their climate impact. An example of such a business is Lofoten Seaweed, a "female-led business that creates opportunities for the local community, whilst taking care to minimize our environmental impact" in the small fishing village of Napp in Norway (Lofoten Seaweed, 2022). Operating in an area traditionally occupied by aquaculture, and factory farming of salmon, the two co-founders initially encountered a great deal of skepticism locally, but have succeeded in winning over many of the older fishermen, and garnering considerable support for their algae business (Mittsommer in Norwegen, 2022).

Avoiding unnecessary animal suffering as a moral minimum standard for responsible behavior would, in this stage, exceeds the considerations of the first stage. The focus in this second stage is on offering customers alternatives which are just as healthy (or even healthier), which provide a satisfying and enjoyable eating experience, and which are easily available, as well as more or less price-competitive.

For some businesses, having established one or more mainstays that do not harm animals in any way could also be an interim stage, prior to exiting the animal industry completely.

5.3 | Zero-suffering business

The "easiest" way to transform an animal business into a business that approaches a state of causing zero animal suffering would be to exit the animal business altogether, e.g., by focusing exclusively

on another mainstay or other mainstays, if these are available. Some exiting businesses might also be eligible for national exiting subsidies; these are granted in, for example, the Netherlands (in order to reduce the production of ammonia and to reduce nitrate pollution of the ground, in this case) (The Irish Times, 2019).

There are also ways of building a business around animals without causing suffering. An example of such a business on a small scale is Switzerland's Hof Narr, a small farm sanctuary that is home to various animals who were saved from hardship, or even the slaughterhouse. On the farm they are allowed to live a life which is appropriate to their species. The business model of the farm is to offer holiday camps or shorter events, especially for children and school classes, to enable them to get to know the animals living there, and, in so doing, deepen and enrich the children's self-perception, as well as their knowledge and awareness about farmed animals (Hof Narr, 2021). The owner of Hof Narr, Sarah Heiligtag, also consults farmers interested in what she calls a "trans*farm*ation". She visits their farms and devises a custom-made business plan for how they might "transfarm" their business into a sanctuary similar to Hof Narr, or into a plant-based business. Goats of Anarchy is a similar example of a social enterprise, this time in Hampton, New Jersey, USA, which undertakes similar work (Shrivastava & Zsolnai, 2022). The NGO Mercy for Animals runs a project also called Transfarmation, offering similar services in the USA (Transfarmation, 2021).

Alongside transforming an animal-based business into a plant-based business or a sanctuary, producing cultivated animal products offers a new and futuristic path to steer towards (Stephens et al., 2018). Although cultivated meat, as of today, is available only in Singapore, it may, in the future, be available in other parts of the world, paving the way for technological disruption of the animal industry (O'Neill et al., 2021). In 2022, the *US Food and Drug Administration* (FDA) approved a cultivated chicken meat product from the company *UPSIDE Foods* as safe to consume (Reuters, 2022). *Perfect Day*, another US company, has partnered with several precision fermentation companies and now offers a broad range of precision-fermented dairy products, including cream-cheese and ice-cream. Other start-ups in this sector include, for example, the Dutch *Fooditive Group*, the German *Formo Bio GmbH* or the Australian *Change Foods*, which produce or use precision-fermented casein for cheesemaking (Te Puna Whakaaronui, 2022, p. 38; Waltz, 2022).

However, whilst a transformation towards more cultivated and plant-based production of meat and other animal products might bring with it the creation of new jobs for higher-skilled employees in the food industry, there is a crucial "pressure point on animal farmers, who may be most affected in a fast transition scenario" (Morais-da-Silva et al., 2022). This is why the strongest resistance to, and most vociferous doubts about, both individual business transformations and overall transformation on the societal level may be expected to come from this side. It is, of course, no easy thing to transform an intensive animal-feeding operation into a zero-suffering farm. Therefore, it is important, for individual zero-suffering entrepreneurs, as well as society as a whole, to take such economic concerns seriously, and to offer support in opening up new business fields, which, later, may become the dominant, or even sole, business fields.

6 | CONCLUSION

This article has demonstrated that most moral philosophical perspectives lead to the conclusion that the avoidance of unnecessary suffering is (from a morally normative and prescriptive standpoint) an adequate moral minimum standard for the way in which humans ought to treat animals, which they use for their own purposes. More generally (and from a morally descriptive standpoint), this minimum standard allows for morally more praiseworthy behavior, if obliged to choose between alternative actions, where one (or some) were according to this standard, and one (or others) were not.

However, what might be considered "necessary" and "unnecessary" depends not only on the ethical perspective taken, but also on technological developments, and the development of our knowledge about animals. In future, for example, it may well be the case that plant-based or cultivated meat (and other simulated animal products) can be produced and made widely available, that do not differ at all from genuine animal products in terms of nutrition, taste, texture, quantity, and price. In this case, it will be hard for any moral perspective to morally legitimize any animal suffering that is involved in the production of animal products as being "necessary". On the other hand, as our knowledge about animal wellbeing and animal suffering develops, this may change our moral evaluation of what kind of animal suffering counts as, for example, unnecessarily cruel from a Kantian perspective (Kant, 2012), or what kind of suffering outweighs any potential human pleasure that comes along with it. Examples for such potential developments are the ongoing debates about the pain perception and the capacity for suffering of fishes (e.g., Chandroo et al., 2004; Sloman et al., 2019) or insects (Lambert et al., 2021). It appears that adopting a more *zoocentric* moral perspective, which centers around animal welfare for the sake of the animal, is possible, from most contemporary standpoints in animal ethics, but also from many traditional ones. However, even from a clearly *anthropocentric* perspective, such as that of Kant, who "is often cast as the villain [...] in the philosophical literature on this topic" (Korsgaard, 2011, p. 97), the avoidance of unnecessary animal suffering finds moral legitimacy.

A future direction for further developing the field of business ethics towards a greater degree of consideration of animal welfare could be to link the minimum standard of avoiding unnecessary suffering with the bioethical perspectives of American Principlism (Beauchamp & Childress, 2013) and European Principlism (e.g., Rendtorff, 2002). Broadening the still rather anthropocentric lenses of these perspectives, and continuing to extend them towards non-human sentient beings (Coghlan & Coghlan, 2018) might facilitate this minimum standard gaining broader acceptance and significance within the debate on business ethics and corporate responsibilities. From such a broader perspective, avoiding unnecessary suffering could, for example, correspond to the principle of non-maleficence

in the American model, and the principles of integrity and vulnerability in the European model. However, links to the other tenets of both principlisms are also conceivable.

The widespread, and primarily anthropocentric, concerns about climate change, viral zoonotic pandemics, and food quality and security put an additional ethical pressure on taking animal welfare more seriously, as well as avoiding any unnecessary animal suffering, even from those moral standpoints that exclusively center on human wellbeing. Organizations that operate within the animal industry can respond to the moral minimum standard of avoiding unnecessary animal suffering in the three stages proposed in this article: i.e., ameliorating the circumstances for animals, initiating a two-pronged transformation, or turning into a zero-suffering business. Consumers can respond to this standard by adjusting their dietary habits, and their related habits of consumption, depending on their ethical view about what kinds of suffering are unnecessary. In order to make advances towards more animal welfare, however, both the demand and the supply side in the food market need ideally to develop in the same direction, in response to each other.

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The authors have no conflicts of interest to declare.

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[1] In this article, we primarily focus on the major analytical moral philosophical perspectives on human-animal relationships. However, it should be noted that the field of animal ethics is considerably broader, also encompassing law, politics, and literature, amongst other disciplines. (e.g., Cochrane et al., 2018; Müller, 2022).

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