



Opinion

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## The Ethics of Rearing Animals for Meat: Can Sentience Provide a Meaningful Threshold for Moral Concern? A Defence of Compassionate Speciesism



#### Neil Craven\*

University of Kent, Canterbury, United Kingdom

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\*Corresponding author: Neil Craven, University of Kent, Canterbury, United Kingdom

### Abstract

Rearing and killing animals for meat poses a number of ethical questions. Sentientism holds that a being has moral status if and only if it is sentient. The philosopher Peter Singer considers that the suffering of a sentient being should count equally with the like suffering of any other being and thus prioritising human interests over those of non-human animals amounts to an unjustifiable speciesism. I argue that sentientism is false and that suffering and sentience are separate considerations. Prioritising human interests may be justifiable on the basis of species relativism but, a fortiori, I argue that we have ample reasons for endorsing and embracing speciesism. I present the case for conscientious omnivorism and compassionate speciesism.

Keywords: Ethics; Sentience; Sentientism; Speciesism; Conscientious Omnivorism; Singer; Utilitarianism; Repugnant Conclusion

### Introduction

Man is by nature an omnivore, a claim supported by dentition, archaeological evidence, and current dietary preferences. However, man is not an obligate omnivore and can survive perfectly well on diets which eschew animal products entirely ('vegan' diets). The rearing and killing of animals for meat is thus prudentially motivated by our pleasure in eating meat but is challenged by our moral concerns for our fellow creatures and a commonly-held intuition that it is somehow wrong. Is it wrong to rear animals for meat because they suffer and/or because they are killed? Is a longer life better than a shorter one and is it better for an animal to have such a life anyway than never to have been born? How does the vast number of animals farmed and killed for their meat each year matter in our utilitarian calculus of the overall good? I explore these questions and assess critically the main ethical arguments, positions and answers that have been put forward. In considering these positions, I present a challenge to 'the dogma of sentientism', which holds that a being has moral status if and only if it is sentient, and I further argue that, whereas prioritising concerns for human life and suffering may be justified on a basis of species relativism, there are compelling, morally-relevant reasons for endorsing speciesism.

I lay out my arguments in the following structure:

In the first section, I set out my view of morality as a purely

human concept and consider how our thoughts on the moral status of animals have evolved and the role that compassion plays.

In Section 2, I present my challenge to 'the dogma of sentientism' and explain why sentience, pain awareness and suffering are different things. I argue that sentience can provide only a lower limit for our possible moral consideration and not a threshold for our moral concern, which should rather be based on the capacity of species to suffer.

In Section 3, I present statistics on the global scale of meat production and consumption and consider how individual animal size and numbers fit into our utilitarian calculus. I present a dilemma for the utilitarian sentientist and consider how animal health and welfare may be assessed using quality of life measurements. I propose one approach and illustrate its practicability in determining whether the killing of a broiler chicken at five weeks of age is 'better' or 'worse' for it than allowing it to live out its natural life span.

In Section 4, I explore how we may consider the value of life and death to farmed animals. I present and support the arguments for 'conscientious omnivorism' and accept the replaceability argument which it entails. I agree with Epicurus that death is nothing to the being that dies and challenge McMahan's 'timerelative interest account' of the misfortune of death. I support the

'Epicurean Reconciliation Strategy' which sees good in the coming into existence of beings and will accept that it entails replaceability of all beings, including rational ones. I agree with Parfit in his total utilitarianism, where the best outcome is the one in which there is the greatest quantity of good and accept that this leads to 'The Repugnant Conclusion.' I consider the implications of its extension to farm animal lives.

In Section 5, I present my arguments for prioritising concerns for human life and suffering and question whether they should be considered as supporting species relativism or speciesism. I argue in favour of endorsing speciesism where 'compassion with reason' guides our moral interactions with other animals.

# The moral status of animals and the role of compassion

If a tree falls in a forest when there is no-one there to hear, does it make a sound? The answer to this hoary old question is, somewhat counterintuitively, "no" – the explanation being that it needs an ear to be present in order to interpret the vibrations carried in the air as a sound. It does not need to be a human ear, but it requires the presence of a 'hearing agent.'

If an animal is attacked by another and dies in great pain when there is no-one there to witness it, is there a moral concern? I find this answer more uncomfortable but would nevertheless have to answer "no." A moral agent has to witness or be aware of an event in order for this to be assessed and judged to be of moral concern. And humans (persons) are the only moral agents. Moral realists may disagree, but I hold that, absent humans and deities (and as an atheist I will take the latter as given), there is no right or wrong, good or evil, as these are purely human concepts and judgements. A living world without humans would be amoral. But there would still be suffering, and it is this fact that makes me uncomfortable since I am a person and extend my compassion to my fellow creatures. Compassion may provide reasons to act (or not to act) in particular circumstances and the decision on action is then a moral one but it is my action or my judgement of another person's action (or inaction) that matters morally. The lion is not morally blameworthy for inflicting pain on the gazelle nor the cat for tormenting the mouse.

That humans and non-human animals exist in different moral realms because the former is rational and the others not, has been the predominant western view since Aristotle first argued the claim. Aristotle held that it is the ability to reason that sets humans apart and above non-human animals on the scala naturae, thereby denying animals rationality and moral equality. The lack of moral standing of non-human animals is also reflected in the doctrines of the monotheist Abrahamic religions, whose followers believe that God created man in his own image and gave him dominion over other animals.

The status of animals as human property is both founded on

and further compounds their lower moral standing. John Locke, the originator of common-law property theory, did not consider that animals had either a property interest in their own bodies or could themselves possess property through conjoining their labour with objects in the state of nature. Developing social institutions of animals as property thus supported the human ownership of flocks and herds and of the food they produced [1]. Locke, echoing Thomas Aquinas before him, nevertheless reflected on the importance of treating animals humanely but only to ensure that cruel habits do not carry over into our treatment of other human beings. The humane treatment of animals for their own sake is a more recent philosophical consideration.

Jeremy Bentham argues that inflicting suffering on sentient non-human animals cannot be justified any more than inflicting suffering on humans. When it comes to suffering Bentham considers that both rationality and language are not relevant. "The question is not, can they reason? Nor can they talk? But can they suffer?" [2]. What matters to Bentham is whether an individual can suffer and the difference in species is irrelevant here. He makes a comparison with treating people differently on the basis of skin colour; prejudice in favour of the human species (speciesism) is for Bentham no better than racism. Thus, Bentham's utilitarianism broke the paradigm of classical and Christian moral tradition that held that reason had paramount moral value and thereby nonrational animals were excluded from the moral community. I consider it notable that it was human compassion for suffering of sentient beings, whether human or non-human, that underpinned this major shift in philosophical thinking.

According to Arthur Schopenhauer, it is compassion, or fellow-feeling, that is the basis of morality [3]. Some, following Kant, may argue that we should rather be motivated by rational concerns than an empathetic sharing of suffering. Hume, in contrast, sees the origin of our moral sentiments in human nature and in particular to sympathy, but for Hume sympathy is more a capacity to acknowledge rather than to share the sentiments and passions of others and is thus not itself fully constitutive of compassion [4]. I take Schopenhauer's unrestricted view. It seems to me that in compassion we do somehow share in the suffering of the other and are thus motivated to alleviate the pain since in doing so we will then, to some extent, be alleviating our own pain. In this way, through compassion, self-interest becomes aligned with, and a component of, our moral motivation; the moral agent is in part also the moral patient.

Bentham's hedonistic utilitarianism considers pleasure as the only intrinsic good and pain the only thing that is intrinsically bad. To maximize happiness is the same thing as to maximize pleasure for Bentham and thus, he advocates that we should pursue 'The greatest happiness of the greatest number.' It is likely that Bentham had in mind human beings with this slogan but in more recent times other utilitarians have extended its scope to include other sentient beings, asserting that such animals have equal

claims with human beings.

Bentham would likely have averred here and, correctly in my view, would reject the idea that animals have 'rights' because he considered the concept of natural rights which could not be overridden as "nonsense upon stilts" – real rights can only be conferred by positive legal acts by humans not through any 'natural' entitlement. Humans have responsibilities towards animals, but animals have no claims on humans. Extensive arguments around the existence of, or case for and against, animal rights continue today. Their focus is more directed towards legal positions and justice although obviously deriving from moral views. Since these are tangential to the questions I address here, I will not discuss animal rights per se further.

While Bentham considered it wrong to inflict suffering on non-human animals, he had no concern with killing them for food as "we are the better for it, and they are never the worse" [2]. An objection to Bentham here might be to consider that depriving animals of their life deprives them of future pleasures which might outweigh our pleasure from eating them, a point I develop further in Section 4.

More recent philosophers concerned with the moral status of animals have elaborated positions building on Bentham's rejection of human pre-eminence in moral standing and extension of our concern for suffering equally regardless of species. Influential among these is Peter Singer who bases his version of utilitarianism not on hedonism but on promoting actions that fulfil the interests (preferences) of sentient animals and he asserts that these should be given equal weighting in our moral calculus, regardless of species. For a preference utilitarian, what is good and right depends on individual subjective preferences and even non-rational animals can have preferences. According to Singer, prioritizing human interests qua human interests over those of non-human animals amounts to speciesism, a form of bigotry which, like Bentham, he compares with racism:

"If a being suffers there can be no moral justification for refusing to take that suffering into consideration. No matter what the nature of the being, the principle of equality requires that its suffering be counted equally with the like's suffering – as far as rough comparisons can be made – of any other being. If a being is not capable of suffering, there is nothing to be taken into account. This is why the limit of sentience (using the term as a convenient if not strictly accurate shorthand for the capacity to suffer or experience enjoyment or happiness) is the only defensible boundary of concern for the interests of others. To mark this boundary by some other characteristic like intelligence or rationality would be to mark it in an arbitrary way. Why not choose some other characteristic like skin colour? [5]."

Is speciesism wrong? Kagan [6] asks "suppose the speciesist holds that it is legitimate to count human pain more than animal pain simply by virtue of the fact that the pain is had by a human.

What exactly is the argument that establishes that this is mere prejudice rather than moral insight?." Singer [7] responds that we would then need a plausible account of how we can accept speciesism while rejecting racism. Kagan offered an explanation that racism is prejudice as racists hold unjustified false empirical beliefs of differences between races. Thus, his argument should continue, speciesism is not prejudice if there were facts of the matter to justify why human suffering is of greater moral concern than that of animals arising from pains of equal duration and severity. This point has not so far been made convincingly. Nevertheless, Schopenhauer [3] contends that intelligence increases human capacity for suffering thereby justifying a stronger claim for our compassion than the suffering of other animals.

If our moral sentiments arise from compassion then reason is still needed in determining moral actions. As Hume points out, a hazard exists in using sympathy alone to motivate moral actions; we are predisposed to sympathise with those nearest to us or with people who most resemble ourselves, which may result in unequal treatment [4]. When considering the suffering not just of people but of all sentient beings, doesn't this also apply? Are we equally concerned about the equal suffering of say a snake or a squid as we are for a dog - or a child? Is our concern modulated by genuine species differences in the experiencing of suffering or perhaps by an unconscious bias, reflecting our particular affections or aversions for certain species (including, but importantly not restricted to, our own)? I consider that a broader speciesism may insidiously find grounding if uncritical compassion alone were to guide our moral concerns. Compassion motivates us and focuses our attention on the suffering of others, but I believe reason must also be brought to bear to ensure fair consideration.

That there are differences in sentience and the capacity to suffer between species cannot be disputed, as I shall argue in the next section. This fact-based species relativism should however not be confused with speciesism. If science could provide a factual basis to explain why human suffering arising from pain of equal duration and severity is greater than in non-human animals, then prioritizing human interests in avoiding or relieving that pain is justified and would then not be speciesism. Singer himself seems to acknowledge this point in that he has no problem in placing a higher value on the life of rational beings, capable of understanding that they exist over time; killing them would infringe upon their unique preferences relating to the future [8]. Singer might reply that in taking a life, the relative value of that life may be measured by the weight of such preferences; however, all animals would have an equal preference to avoid or relieve pain of equal duration or severity.

### Sentience, self-awareness, suffering (and pleasure) on the scala naturae

"How can we feel sure that an old dog with an excellent memory and some power of imagination, as shown by his dreams, never reflects on his past pleasures and pains in the chase? And this would be a form of self-consciousness" [9].

Singer contends, in his remarks quoted in the previous section, that "the limit of sentience (using the term as a convenient if not strictly accurate shorthand for the capacity to suffer or experience enjoyment) is the only defensible boundary of concern for the interests of others." - a view widely reflected and repeated by philosophers, animal welfarists and legislators today. However, the use of the term 'sentience,' as Singer concedes, is imprecise as to what exactly it means. Since the limit of sentience is proposed as the threshold of moral concern, and sentience (undefined) is already enshrined in animal welfare legislation, I consider that we need to pursue a clearer understanding of the concept and a tighter definition. The dogma of sentientism is ripe for challenge.

Sentience in its narrow definition is simply the ability of an organism to sense things. In this broadest meaning, even a simple single-celled animal such as an amoeba could be considered as sentient since it can detect and move to avoid noxious stimuli and can move positively to find food. It would be absurd to consider this as meaningful sentience though, as we might then have to consider each one of our many millions of phagocytic white blood cells as being independent sentient creatures since they similarly detect and move along concentration gradients of specific chemoattractants to track down and engulf invading bacteria [10]. Detection and response to stimuli falls short of actually perceiving sensation as perception implies an internal awareness of the sensation in addition to its mere detection.

In a sentient being, we assume that noxious stimulation is experienced as the sensation of pain. In its narrow sense, the term 'suffering' is simply equated to the perception of physical pain. However, more often, and I consider more appropriately, 'suffering' is used to refer to a broader psychological processing of the experience of pain which happens through conscious minds and involves emotional aspects. There are a few steps here then to tease apart. The initial detection and neural recognition of tissue damage (actual or impending) is nociception. The subjective experience is pain. Although nociceptive stimulation usually leads to pain, pharmacological and brain lesion research, including in humans, has shown that these are dissociable at the level of brain activity and one can exist without the other.

Phantom limb pain in amputees is an example of when pain is felt in the absence of pain receptors, suggesting that pain is ultimately a construct of the brain. Experimental research has further documented convincingly the power of the mind in changing the autonomic pain response [11]. On this basis, the subjective experience of pain will likely differ between species depending on the sophistication of the brain (or simpler neuroanatomy) in processing the sensory input. Thus, nociception is one thing, physical pain awareness is another and suffering, which I define here as a higher-level psychological processing, reflecting the significance of the pain to the being in its individual phenomenal experience, is yet another. Masochists might agree,

since their experience of pain brings pleasure not suffering! Sentience, pain awareness and suffering are not synonymous.

Some consider sentience as the capacity to feel emotions as well as sensations and draw differing distinctions between consciousness and sentience. Damasio [12] believes that emotions underlie consciousness and describes three stages of processing along a continuum; a state of emotion, a state of feeling (that is non-conscious), and a state of 'feeling made conscious' (that is known to the organism). Philosophers of mind refer to 'qualia' - the quale of an experience is 'what it feels like to have' that particular experience. Qualia are the raw feelings that make up any one conscious experience. Consciousness is thus the ability of a being to have qualia. Sentience for some simply equates to this phenomenal consciousness whereas others view sentience more narrowly as affective consciousness - the capacity to feel the specific qualia of pain and pleasure. However, Godfrey-Smith [13] argues that sentience comes before consciousness and sees consciousness as just one form of subjective experience but not the only form. I consider that however we define sentience, it remains insufficient to ground considerations of suffering.

Both Bentham and Singer refer to the capacity to 'suffer' in a way which does not distinguish suffering from the quale of pain. I argue that this is a significant error. Suffering may arise from the endurance of pain, but it may equally arise from mental states such as fear, the anticipation of pain, grief, anxiety about the future, restrictions of autonomy and the stress of enduring unpleasant environmental conditions. The extent to which different sentient (affectively conscious) beings may experience suffering unrelated to pain will thus vary according to the relative development of diverse mental faculties, thereby lending some support to Schopenhauer's contention that intelligence (however defined) increases human capacity for suffering.

Consciousness itself is notoriously difficult to define. Moreover, whatever consciousness is, it may also be more limited than we generally believe. Many of our daily activities are performed below the level of active thought and consciousness [14]. Perhaps central to our paradigmatic human characteristic of being conscious, rational, autonomous free agents is our ability to determine actions by our free will. However, Libet and colleagues [15] reported evidence of brain activity as occurring prior to the conscious feeling of willing an action, thereby seemingly preempting the conscious decision. Nevertheless, even if my feeling of having willed an action did not actually cause it, it was still my brain that took the action, just not my conscious mind as it had seemed to me to be.

In non-human animals, many complex and seemingly conscious behaviours are in fact instinctive as Darwin noted [16]. Consciousness as explicit self-conscious awareness, however, is a higher intellectual capacity and is a characteristic almost exclusively of humans but has been recognised to a lesser extent in some primates and in dolphins. Self-awareness is tied to notions of

individual personal identity and thus to memory and to an ability to contemplate the future, including notions of connectedness to one's future self. Heidegger in his seminal work "Being and Time" [17] explored the phenomenon of human existence. For him, personal identity and ability to contemplate the future encompass an awareness of our own mortality and that we exist temporarily between birth and death; we are not confined in the present but rather are always also projecting our attention towards the future and the horizon of our own death. It is highly questionable as to whether any other sentient animals have such profound self-awareness and associated notions of their future self and their mortality.

Animals vary not only in their absolute sentience or non-sentience as defined above, but sentient animals also vary among themselves in their conscious behaviours, their self-awareness and, importantly, in their capacities to suffer. Plants, fungi and some multicellular lower forms of animals such as sponges, lack pain receptors and innervation and are thus, we conclude, unable to feel pain. Other lower animals can detect painful stimuli, but their nervous anatomy is not of sufficient sophistication for us to conclude that they experience pain (or pleasure) qualia. Scientists infer that many non-human animals are sentient and can experience pain, based on observations of behaviours in response to painful stimuli, neurochemical (including presence of opioid receptors) and neuroanatomical similarities, and knowledge arising from human experience.

In considering whether there can be a meaningful threshold to delineate those species of animals with a capacity to suffer (in the psychological sense) and hence to qualify for our moral concern, we need to be confident in our inferences from human experience to those of other animals - but it is impossible for us to know what it is like to be those animals, to comprehend their subjective experience. As Nagel [18] observed, it must be "like something" to be a bat but clearly the phenomenological leap from human to chiropteral existence makes any inferences drawn extremely tenuous and inevitably anthropomorphic. And so much the more so if we are to try similarly to consider the phenomenal experiences of invertebrates.

Sentientism holds that a being has moral status if and only if it is sentient. However, sentience alone, as defined by affective consciousness as above, cannot provide a meaningful threshold for our moral concern if our moral concern depends on the degree to which different sentient beings have a capacity to suffer. Both Bentham and Singer must concede this point. Singer asserts that "the principle of equality requires that ... suffering be counted equally with the like suffering ...of any other being. If a being is not capable of suffering, there is nothing to be taken into account." Singer then conflates 'sentience' with the capacity to suffer and argues, wrongly, that the limit of sentience is the only defensible boundary of concern for the interests of others. However, by this he clearly has in mind the limit of suffering and concedes that there is indeed variation in the capacity to suffer in

that (only) "like suffering must be counted equally."

The distinction between sentience and suffering is an important one. Singer's "not strictly accurate shorthand" equating the two simply will not do. Sentience is not a reliable surrogate for capacity to suffer. An internal 'awareness' of pain may fall short of experiencing suffering. Nevertheless, this sentientistic thinking is taking root in animal welfare legislation. The UK Animal (Sentience) Act 2022 now extends the legal recognition as 'sentient beings' from all vertebrates to further include decapod crustaceans (lobsters, crabs, prawns, shrimps) and cephalopod molluscs (octopus, squid). Some also now consider that at least some insects such as bees are sentient and can feel both pleasure and pain [19]. Godfrey-Smith [13] would likely agree; in exploring how animals became aware of themselves and through evolution developed "other minds", he asks "Does damage feel like anything to a squid? Does it feel bad to them?" He considers that asking whether they are conscious is "asking too much of the squid" but if it 'feels like something' to be a squid then they are sentient beings. Godfrey-Smith does not say that it does feel like something to be a squid - unless you are a squid it is impossible to know!

A limit of sentience then is an inevitably imprecise attempt to divide animal species into those that can feel pain (and perhaps pleasure) as a subjective experience (affective consciousness) from those that cannot. Such a limit seems to cut progressively ever lower on the tree of life. But our moral concerns are not simply about sentience but rather suffering and the capacity to suffer; here sentient animals differ among themselves in their capacity to suffer from causes distinct from the physical 'bad' of pain and thus probably also differ in their suffering arising from pain itself. Although we have evidence of the former, it is impossible for us to determine the latter. Furthermore, there is no clear cut off point to serve as a threshold of concern since the capacity for suffering may be scalar but is intimately linked with the relative development of diverse higher mental capacities.

We may conclude that sentience, however determined, provides a minimum limit for possible moral consideration but does not by itself provide a meaningful threshold for our moral concern, which should rather be based on the capacity of sentient beings to suffer. I examine the role of suffering in the ethics of farming animals for meat in the next section.

# Statistics, suffering, and sentientism in the rearing of animals for meat

As the human population of the world in 2023 surpasses eight billion, it is projected that it will continue to grow, reaching 10.4 billion by the end of the century. World food production is also expected to continue to rise, defying Malthusian predictions. Projections of changes in global demand and consumption of meat products foresee a continuing modest increase in the global average per capita demand resulting mainly from population growth in lower income countries [20].

From the OECD/FAO figures [20] we may calculate that the annual global consumption of domesticated mammalian meats will be around 340 Mt (Million tons) on a liveweight basis by 2032. To put this in some perspective, all of humanity currently weighs in at a total of about 390 Mt 'liveweight' [21]. The biomass of the human species is second only to that of cattle (at 420 Mt). Domesticated pigs account for about 40 Mt liveweight and a similar figure may be calculated for sheep. Domestic dogs and cats are also fed on largely meat-based pet foods. It is estimated that dogs living today have a total mass of 20 Mt and cats 2 Mt.

This contrasts starkly with an estimated total biomass of just 20 Mt for all species of terrestrial wild mammals living today [21]! The total global terrestrial mammalian biomass is thus profoundly and overwhelmingly dominated by humans (390 Mt) and their domesticated livestock (630 Mt), and this is predominantly shaped by human appetite for meat. Human consumption of poultry will add a further 157 Mt of annual meat consumption. Currently 65 billion chickens are reared and eaten every year. The impact of humans and their meat-rich diet quite literally weighs heavily on the natural world. The consumption of meat can usefully be expressed in terms of biomass rather than numbers of individuals of different species as this reflects the global demand. The 'liveweight' figures for the major meatproducing mammalian species above reflect the global situation at any point in time whereas the meat consumption figures are annualised. These liveweight figures then do not correlate directly with the total numbers of individual animals of each species killed annually for their meat as this depends not only on the size (mass) of the individuals but also on the reproductive rate, life span and hence number of generations born and raised for meat each year.

Does size matter from an ethical viewpoint? We could obtain the same biomass of meat from killing a few large animals or many more smaller ones. I consider that this raises a dilemma for the utilitarian sentientist. I shall call it the 'surf and turf' problem. A sentientist holds that the threshold for our moral concern is whether a particular species is sentient and, to avoid speciesism, that we should have equal regard for like experiences of pain, independent of the species involved. Consider then a cow, humanely raised and humanely slaughtered to provide beef, with minimal pain experienced over its life. After slaughter there is enough meat to provide one thousand meals. Consider another sentient species, a shrimp or small prawn which experienced pain in its final moments as it was not humanely killed but had otherwise had an average shrimp life.

To provide a single human meal in the form of a prawn cocktail some thirty individual shrimps have to perish. To provide one thousand meals, thirty thousand shrimps must lose their lives. The sentientist must accept that the pain experienced by one shrimp in its dying moments is of greater moral concern than the painless humane killing of one cow. The utilitarian calculus to the pure sentientist should also take into account that thirty thousand sentient beings experienced the 'bad' of similar pain. If, however,

it was possible to kill shrimps humanely, then even if just one of the thirty thousand shrimps had experienced pain in its lifetime, the killing of the cow would still be of less moral concern. If the cow had experienced pain briefly in its final moments arguably this would be a 'like' pain, equal to that of the non-humanely killed shrimps. Again, the killing of the one cow would be of overall less moral concern than the like pain experienced by two shrimps. On this basis, the utilitarian sentientist should conclude that eating a steak presents, with high probability, a far lesser moral concern than a prawn cocktail. But this simply does not feel right.

Here we might also note that numbers only matter in particular (utilitarian) normative frameworks. Those who favour deontological ethics would consider that our focus should be on each individual's suffering and thus our moral concern should be equal for each individual regardless of numbers and species. Nevertheless, I hold that the utilitarian approach is justified; the vast numbers of animals raised for meat and their potential for suffering in intensive systems of production warrant a normative ethical approach which seeks to ensure "the greatest happiness (good) for the greatest number," and which also takes into account the human good of eating meat. The difficulties arise in making cross species comparisons of happiness and suffering and in their relative quantification.

Each sentient creature has the potential for happiness peculiar to its own species [22]. John Stuart Mill [23], expanding on Bentham's utilitarianism and its inclusion of animals in the moral realm, contends that the types of pleasure that would satisfy a pig would not suffice for a human and that "it is better to be a human being dissatisfied than a pig satisfied", a claim made entirely from the human perspective. Might this then be an example of an 'epistemic injustice' in our anthropocentric failure to "listen to the animals" as Meijer [24] suggests? I think not. Neither Mill nor any other human can comprehend how a pig experiences happiness. How then can we compare the pleasure or suffering of a shrimp and a cow?

Does shrimp (crustacean) pain really matter as much as the pain of a cow? Monso [25] considers that insect sentience (she assumes it exists) might not matter very much and suggests that insect pain may somehow 'feel less painful' than it does to other animals such as mammals; certainly, despite obvious pain reactions to severe damage to limbs they remain able to continue activities such as feeding and mating and we may reasonably infer, therefore, that the pain insects feel is far less incapacitating in their phenomenal experience than that arising from similar injuries to mammals. In this I side with Monso and against Singer. Since the internal experience of pain (and pleasure) across sentient species is incommensurable, it cannot be meaningful to talk of 'like suffering.' The surf and turf dilemma above is thus based on a false premise that the suffering arising from pain experienced by shrimp and cow is equivalent and therefore the conclusion is false.

Bentham, in introducing the moral concern about animal

suffering, had in mind the wrongness of humans inflicting deliberate suffering on animals. Contemporary morality and animal welfare legislation proscribe the infliction of 'unnecessary' suffering on animals; the unspoken inference then being that some necessary suffering may exist and be acceptable in our interactions with animals, consistent with their status as human property. Here though 'necessity' reflects a judgement of moral necessity rather than causal necessity and thus potentially leaves it open to rationalise expedient painful practices as being necessary (such as castration of young lambs without pain relief) in our treatment of animals as means to human ends. In theory it also holds that suffering should be deemed unnecessary if animal suffering outweighs the benefits likely to be gained by humans. The extent of such benefits is disputed between vegans and meat eaters.

In rearing animals for meat, economic pressures drive producers to practices which are more cost efficient and these have led to ever more intensive farming, particularly of pigs and poultry and to a lesser extent cattle, but not sheep. This intensification and its focus on profitability serves to reduce the status of these animals to mere economic units where health and welfare is important only to the extent that it is linked to productivity and profit. Veterinary care for farm animals has to be cost effective and thus farm animal veterinarians are working in a quite different medical and moral framework from veterinarians treating companion animals, which is more aligned with human health care with its focus on quality of life. In attempting to ensure humane treatment and in order to prevent unnecessary suffering of farm animals, animal welfare legislation (in the UK) sets various minimum standards, for example for cage sizes for laying hens, use of farrowing crates for pigs and veal calf rearing systems and proscribes certain 'cruel' production practices. Nevertheless, the underlying (human) purpose of the lives of the farmed animals is to produce human food economically and their well-being and quality of life considerations are secondary to productivity.

Concepts of health, welfare, well-being and quality of life as applied to humans have been explored in various theories in the philosophy of medicine. Nordenfelt [26] compared how such concepts apply in humans and in animals. He noted a great difference with regard to the philosophical analysis of the notion of 'health' (and the related concepts of disease and illness). Boorse [27] introduced his influential biostatistical theory that (human) health is defined as the absence of disease and thereby prompted a wider philosophical debate of the goals of medicine beyond health, in terms of quality of life and individual autonomy and agency. In contrast, in veterinary medicine discussions, the concept of health seems tacitly presupposed in terms of "natural function" and is rarely analysed further. Biological theories dealing with coping and 'natural' behaviour are elements occurring only in animal concepts of welfare, as are theories which relate health to production. Nordenfelt notes that some animal welfare theorists consider that assessments of welfare based on the hedonistic approach of measuring suffering often differ from assessments based on preferences; he considers that this is because the animal in its preference often may not know what is best for it [26]. Also, different time scales are involved; preference-satisfaction generally only considers a short period whereas the measure of suffering is often over a longer term.

Perhaps we could apply some of these human concepts such as quality of life and the impact of time scale to our considerations of farm animal welfare? Human health economists have introduced the concept of a 'quality-adjusted life year' (QALY) which is used to assess the value of medical interventions. It is a measure of disease burden and takes into account both the quality and quantity of life lived. Two inputs are thus required to calculate a QALY: the 'utility value' associated with a given state of health and the years lived in that state. One QALY represents one year in perfect health (with a utility value of 100%). Death has a utility value of zero (0%) and less than perfect health is assigned a particular utility percentage of less than 100%. Some even consider that health states, 'worse than being dead' and assign negative utility values. QALYs are then used in a quasi-utilitarian calculus.

Let us consider that it is possible to make similar quality of life calculations for animals reared for meat, based on observation of behavioural indicators of 'suffering' (including ill health) or 'wellness' (contentment/natural behaviour) and the duration of such behaviours in relative proportion (utility value) over the span of the animals' lives (time). Let us call these quality-of-life units 'hedons.' Such calculations might then be used to compare different systems of production (e.g., 'organic' v. 'intensive') or housing or the suitability of different breeds of animals in the same production system.

We might also use this approach to determine whether a longer life is 'better' than a shorter one. If the score of the longer life is higher (has more hedons) than the shorter one, then on simple view, the longer life provides a greater amount of 'good' than the shorter one. However, it may be that the hedons are not distributed evenly over life and that later life is not as pleasant as earlier life, although still worth living. Consider the life of a broiler chicken (a chicken reared for meat); these are genetically very fast growing and reach their marketable weight as early as five weeks after hatching. If they are fed and housed with sufficient space and remain free from disease and injury, they will have an overall positive hedon count at five weeks and will have had a life worth living. If they are not killed at five weeks but are given an extended life they will continue to grow and their weight will soon exceed the capacity of their legs to support them, leading to leg injuries including bone fractures and consequently enduring pain and disability. At this point it will be appropriate to assign negative utility values as this part of their extended life would rate as 'worse than being dead' until they finally succumb to their injuries and die. The total hedon count of the extended life for a broiler chicken would then be less than for its typical five-week life, reflecting that, in this case, the shorter life is of positive value and 'better,' in the sense of total accumulated good, than a longer one.

The interplay between quality and duration of life takes us a step away from purely utilitarian ethics and towards value theory and axiology. Here we address the prudential value to an individual animal when we consider what makes an animal's life good or it is death bad (or simply neutral) for this particular animal. In the next section, I explore the value of life and death for an animal raised for meat and consider whether its existence is better or worse for it than if it had never existed.

## The value of life and of death to farmed animals - and does it matter morally?

Domesticated species reared for meat are typically killed quite early in their lives. Pigs can live for more than ten years but, depending on whether destined for pork or bacon production, they are killed between four and eight months old. Beef cattle which could potentially live for twenty or more years are typically slaughtered at eighteen months to two years of age. Sheep can live for several years but are killed for lamb at between six months and one year of age. Chickens of certain breeds can live for several years but modern hybrid strains used for meat production are killed at just five to six weeks of age. Economic factors including cost of production and market demand for particular meat products largely determine the age at which they are killed.

If we accept that animals are killed humanely then it seems that in ending their lives at an early stage, we are less concerned about depriving them of the rest of their natural lives than we are about their suffering during their short lives. As McMahan puts it "the assumption seems to be that although their suffering matters, their lives matter much less, and perhaps not at all" [28]. The example of the broiler chicken in the previous section, where it was concluded that the shorter life was 'better' than allowing them to live out their 'natural' lives, highlights two important contextual points: the genetic makeup of the animals and the concept of a natural life. These species of food animals have been domesticated and selectively-bred over long periods of time for certain characteristics such as size, carcase composition, growth rate, feed conversion efficiency, reproductive performance and also behavioural traits such as docility. In many cases they are so far removed from their wild ancestors that they could rightly be regarded as different subspecies. Their ability to survive in a wild state is compromised but, on the farm, they are protected from natural predators and the daily need to search for food and shelter. Considerations of the value of their life must be considered in this genetically-determined and human-dependent context. Nevertheless, different systems of farming may provide different opportunities for the animals to exercise their inherent faculties. Non-intensive and 'free-range' systems may thus allow animals to lead more satisfying lives, and provided that they are killed humanely, eating the meat so produced may find a broader moral acceptance.

Singer refers to 'conscientious omnivorism' for those who oppose intensive farming but would eat animal products from farms which treated their animals well over their lives and ended them painlessly [29]. He cites his discussion with the philosopher Roger Scruton who had his own farm on which he raised 'free range' pigs for his own family's consumption. Scruton had made the point that the pigs, which he considered to be enjoying their lives on his farm, would not have existed if no one ate meat. This argument is an example of the 'replaceability argument' which says that for an animal that lives a life with, on balance, more pleasure than pain and which would not have existed but for humans bringing it into existence, then it is morally acceptable to kill it and to replace it with another similar animal to lead a similar life

Singer, in his preference utilitarianism, rejects the replaceability argument only in those cases where the beings are self-aware; self-conscious beings can have a desire (preference) to live which would be denied by their being killed. In this case, death of a self-aware being is not balanced by the bringing into being of another similar one. The killing for food of animals that are not self-aware is then justifiable and is not speciesist, according to Singer, as not all beings possess the capacity to hold a desire to live. A counterargument might be that on this basis, the killing of imbeciles or of human babies prior to their becoming self-aware, and their replacement, might also appear justifiable in the absence of a proscribing speciesist defence.

A separate argument from Scruton (to Singer) is that an animal's life cut short is not tragic in the way that the early ending of a human life is. The human life cut short denies them the opportunity of further achievements whereas for non-human animals, were they to live longer, they would not achieve anything. Again, without a speciesist defence available, this argument could seemingly support the killing of human non-achievers!

Conscientious omnivorism, however argued, appears to presuppose that depriving animals of future good experiences by killing them does not matter morally, whereas causing them to suffer does. This perhaps reflects a moral asymmetry in a more generally-held belief that the reason not to cause or allow a being to suffer is somehow stronger than the counterbalancing reason to allow the being to experience a corresponding amount of pleasure. McMahan [28] refers to this as the claim that "Suffering is Worse" (worse than killing). Conscientious omnivores might allow that the painless killing of an animal is justified by the benefits and pleasure that people obtain from eating it. Some however hold that the painless killing of a humanely-reared animal requires no justification at all as to them it is morally neutral. For them, the pleasure that the animal has in its life counts for nothing at all, perhaps by considering that, like Mill's pig, these animal pleasures are too low to matter. If animals' suffering matters but their pleasure does not, then there should be a moral presumption against causing or allowing any animal to exist as any animal is at risk of suffering! I therefore side with Scruton on this in that the pleasure in the lives of his pigs clearly matters and lends support to the replacement theory. Singer [29] considered that Henry Sidgwick, a nineteenth- century utilitarian, would likely also have supported Scruton. Sidgwick considered it would be a good thing to bring more people into existence if they can be expected to lead happy lives and will not reduce the happiness of others – the same should hold for bringing happy animals into existence.

In the Epicurean view of death, which I share, death is nothing for the one who dies (neither good nor bad). For Epicureans pain is bad. Pain may be suffered prior to death but at the point of death or afterwards there is no pain, as there is no being there to experience it. A challenge to the Epicurean view is that death also deprives the individual of future pleasure and that in taking this good away, death is bad.

A common philosophical view is that death is a misfortune for an individual to the extent of the proportion of the good life it prevents the individual from experiencing. If this were true then the worst situation would be for an individual to die immediately after coming into existence. This would make death of a newlyfertilised human zygote a greater misfortune than the death of, say, a twenty-year old woman. McMahan considers that we also need to take into account the extent to which the individual at the time of her death would have been psychologically connected to her future self at the time when the good things would have occurred [28]. When we come into existence and in early life we are only weakly psychologically related to our future selves and have no future desires or intentions; there would be little difference to our dying at that point and never having come into existence. Death becomes a greater misfortune as we develop further and obtain a psychological capacity binding us more closely to our future self, while the amount of time in prospect for our future life diminishes. From this, McMahan derives a 'time-relative interest account' (TRIA) of the misfortune of death.

If TRIA is true then death is a lesser misfortune to animals than for persons because of their lesser psychological connectedness to their future selves. The extent to which different species of food animals are unconnected or connected to their future selves may matter to conscientious omnivores. McMahan opines that all the species commonly reared for meat are connected to their future selves to some degree: pigs more than cows and cows more than chickens, and further considers that psychological connection with its near future self will be greater than with its far future self. In this way, he argues, an interest of the animal in pleasure in the near future should be weighed against the pleasure that people would get from eating the meat if the animal is killed now [28].

The TRIA attempts to modulate the notion that death to an animal means nothing since they have no awareness of future good. However, it lacks empirical support and not all, including myself, would agree on the ability of these animals to hold a self-awareness sufficient for perceptions of the future and notions

of personal identity. Another criticism might be how we are to interpret 'interest' in TRIA; is it what is in the pig's interest or what the pig is interested in? I assume the latter since it is the pig's 'personal' future view but, per Nordenfelt above [26], what it is interested in might well turn out not to be in its interests. It might be wrong in its anticipation of future good. I therefore reject the TRIA on its assumptions and practical applicability.

An Epicurean 'purist' would also reject the very challenge that death can deprive a being of future good. On the Epicurean view, it cannot be comparatively better or worse for a being that they continue existing as opposed to ceasing to exist. Neither can it be good or bad, better or worse for a being to cease to exist rather than to continue existing. Some, however, consider that there is a (non-comparative) good or bad in coming into existence and in continuing to exist [30-32]. This non-comparative value supports axiological reasons for creating or not creating lives and extending or shortening them; this position has been described as the Epicurean Reconciliation Strategy (ERS). Southan [32] argues, compellingly in my view, to defend ERS as a coherent, personaffecting view but he acknowledges that it entails 'replaceability' of all beings, including rational ones. He therefore proposes a deontological 'fix' to complement ERS and thereby escape the entailed moral permissibility for human replacement. This is clearly an expedient move, arguably speciesist in its application and a mistake in my view. We should accept that ERS entails human replaceability however distasteful the conclusion.

The ERS argument that there is a good (or bad) in coming into existence chimes with the earlier mentioned view of Sidgwick, that it would be a good thing to bring more people into existence if they can be expected to lead happy lives and will not reduce the happiness of others. Where our decisions could impact on who will exist in the future, Parfit [30] argues that decisions that could involve the change in identities of the parties involved in compared scenarios make no difference to our moral evaluation and lend support to a total utilitarianism, where the best outcome is the one in which there would be the greatest quantity of good (where 'good' is whatever makes life worth living). A consequence is that any loss in the quality of lives in a population may be compensated for by a sufficient gain in quantity of the population. Parfit was thus drawn to conclude "for any possible population of at least ten billion people, all with a very high quality of life, there must be some much larger imaginable population whose existence, if other things are equal, would be better even though its members have lives that are barely worth living" [30].

This, Parfit describes as The Repugnant Conclusion. Although it has been the subject of considerable philosophical debate since Parfit first established his argument, there has not yet been a convincing argument to reject the Repugnant Conclusion. Parfit proposed a "lexical view" as a way of avoiding the conclusion, proposing two levels of quality of life: "There is no limit to the positive value of quantity. It is always better if an extra life is lived

that is worth living. But no amount of Mediocre lives could have as much value as one Blissful life" [30]. I contend that such mere stipulation does not defeat the Repugnant Conclusion since it claims that although the less good Mediocre lives would have non-diminishing value, no amount could ever be as great as the value of the much better Blissful lives – which is mathematically incoherent. Another approach is to consider that for an individual's life to be in itself good, the quality of life must be more than just barely worth living but above some higher 'critical level.' The setting of critical levels does not however avoid the Repugnant Conclusion but does ensure that the most wretched lives are excluded from the calculus thereby making a perhaps somewhat less repugnant conclusion.

Although Parfit is principally concerned with human lives, he does briefly consider whether we might similarly compare human lives with the lives of animals. He argues "When they are not factory-farmed, the lives of pigs are probably worth living. But we can plausibly claim that, even if there is some value in the fact that these lives are lived, no amount of this value could be as good as the value in the life of Socrates" [30]. Thus, to avoid the Repugnant Conclusion, whereby the existence of a much larger number of pigs could outweigh the moral good in the world of human lives, Parfit resorts to speciesism.

The comparative moral value (value to the world) of the existence of a human being when compared with the existence of a non-human animal when utility levels are the same presents a problem to multi-species ethicists. Cato and Ishida [33] propose species-relative critical levels with species-lexical ordering; they conclude that although this can avoid the animal repugnant conclusion, because of the species-lexical ordering, it is inevitably speciesist.

If we consider the numbers of farmed animals alive today, these far exceed the human population. The quality of life of many of these is diminished compared with equivalent animals living in the optimum non-intensive farm conditions (there are no relevant 'state of nature' or equivalent wild animal comparisons to be made for the main food animal species as I have argued in Section 3). Nevertheless, because of the vast numbers, they represent a significant net positive utility. The possibility that the existence of such animals might contribute greater moral good to the world today than the human population seems both surreal and repugnant. But this is a human perspective.

# Whose morality is it? A defence of compassionate speciesism

In the first section I outlined my personal view of morality which is based on the belief that human beings (persons) are the only moral agents, and that morality is a purely human concept which is tied to practices which define what it is to live a human life. As humans, through our compassion, we have concern for the lives and suffering of our fellow creatures, the other animals, but this concern is not equal to our concern for the lives and suffering

of our fellow humans. We hold our fellow humans accountable for their moral behaviour, but we do not hold animals morally accountable for their actions nor have any expectation that they hold any notions of morality.

This asymmetry in moral agency and moral understanding is a constant in our relationship with other animals. Douglas MacLean [34], similarly noting that animals are generally held exempt from morality, suggests that morality only makes sense under human relations and that the further away one gets from it, the less it can be applied. He also challenges Singer's claim that speciesism explains our willingness to put a 'trivial' interest in eating meat over the interests of animals that are made to suffer on factory farms. MacLean responds, as I would, that "one does not have to reject speciesism to oppose cruelty to animals." Speciesism does not blunt our compassion and 'compassion with reason' can guide us in our treatment of other animals.

Singer's charge that speciesism is a prejudice akin to racism and sexism is regarded by Peter Staudenmaier [35] to be simplistic and he considers that the analogy trivialises both the civil rights movement and the women's movement. He says, "No civil rights activist or feminist ever argued "We're sentient beings too!" they argued, "We're fully human too!"". MacLean holds that being a human being is itself a moral concept [34]. Kagan similarly asks Singer what it is that makes speciesism, with regard to the prioritising of human pain, a prejudice rather than a moral insight [6]?

The charge of speciesism is that it reflects an unfounded prejudice in favour of the interests of one's own species. If a factual basis can be provided to explain a relevant difference for the preferential treatment, then the charge of speciesism is defeated and the particular difference between species is an example of species relativism. Schopenhauer's claim, that 'intelligence' increases human capacity for suffering over other animals, complements my argument that self-awareness and notions of future self in humans give unique value to human life. This lends support to the claim that prioritising concerns for human life and suffering is based on species relativism and not speciesism. Similarly, if humans (persons) are the only moral agents, if morality is a purely human concept which only makes sense under human relations, and if being a human being is itself a moral reason, then doesn't this also provide a sufficient and relevant difference to claim species relativism in regard to prioritising human moral interests? If not, is it really so wrong to be a speciesist?

We have seen in the previous section that the Epicurean Reconciliation Strategy requires a speciesist move in order to overcome the distasteful entailment of human replaceability. A similar speciesist defence was necessary to avoid the conclusion that killing human babies or imbeciles was justifiable in Singer's interpretation of the role of self-awareness and replaceability. The avoidance of the animal Repugnant Conclusion also depends on taking a speciesist position. Why should this be unacceptable?

Indeed, the repugnance assumed in the very term 'Repugnant Conclusion' is (only) human repugnance. These examples seem to me to provide highly morally-relevant reasons for humanity for endorsing speciesism.

### Conclusion

The inclusion of animals into the realm of moral consideration pioneered by Bentham was in recognition that the capacity of beings to suffer, whether human or animal, was of moral concern. Sentientism holds that a being has moral status if and only if it is sentient. It is a platitude that only sentient beings can suffer. However, sentience is a necessary but not sufficient condition of a capacity to suffer. As I have argued, sentience, pain awareness and suffering are different things. Sentience alone falls short of delineating those species that have a capacity to suffer and that are therefore of moral concern. Hence sentientism is false. I conclude that sentience provides a minimum threshold for possible moral consideration but does not by itself provide a meaningful threshold for our moral concern.

Does the painless killing of an animal matter to that animal? For the Epicurean, death is nothing for the being that dies. Killing a being deprives them of the possibility of future good. The being's anticipation of the good to come is thus thwarted by it is being killed and that may make its death a misfortune. Anticipation of future good depends on a being having notions of connectedness with its future self. It is improbable that any of the species used in meat production have the mental capacity for sufficient self-awareness to hold such notions. I conclude that for the individual animal, painlessly killing it does not matter.

Does the painless killing of an animal matter to the world? If, on balance, the animal's life has a net good then its killing reduces the total good in the world, but this is restored by its replacement with another animal living a similar life. Hence the killing of an animal and bringing another animal into existence to replace it does not matter to the world. Bringing more animals into existence whose lives are worth living adds to the total good in the world but if these lives are barely worth living, then the Repugnant Conclusion is entailed.

The charge of speciesism is that it reflects an unfounded prejudice in favour of the interests of one's own species. I have argued that the prioritising of concerns for human life and suffering can be founded on factual differences between human beings and other species, including self-awareness and notions of future self and mortality, which give unique value to human lives and should therefore be considered as species relativism rather than speciesism. Nevertheless, axiological considerations of the value (to the world) of lives of beings, when assessed in total utilitarian scenarios, lead to troubling conclusions. Conscientious omnivorism, which I support, entails replaceability, as does the 'bare' Epicurean Reconciliation Strategy. Human replaceability may also be justified in the animal Repugnant Conclusion. In

each of these, the distasteful conclusion can only be defeated by adopting a speciesist move. If, as I believe, morality is a purely human concept and, whether or not we accept that being a human being is itself a moral reason, it seems to me that we have abundant highly-relevant reasons for humanity for endorsing and embracing speciesism.

I believe, and have argued, that it is through our compassion that we have concern for the lives and suffering of other animals; this compassion is not blunted by speciesism. Although I personally support conscientious omnivorism as a moral position in the rearing of animals for their meat, I make no recommendations for others except to encourage them to consider these arguments when making their own decisions.

#### References

- Francione Gary L (1995) Animals, Property, and the Law. Temple University Press, Philadelphia, USA, pp: 37-40.
- Bentham Jeremy (1823) An Introduction to the Principles of Morals and Legislation, J H Burns, H LA Hart Edt's the Athlone Press, London, UK, 1970 pp: 282-283.
- 3. Schopenhauer Arthur (1860) The Basis of Morality, (tr.) A.B. Bullock, 1902. Amazon, Great Britain pp: 52-84.
- Hume David (1740) A Treatise of Human Nature In Hume The Essential Philosophical Works, Wordsworth Editions Limited, Ware, UK, 2011 Pp: 500-504.
- Singer Peter (1989) All animals are equal in T Regan and P Singer Edt's Animal Rights and Human Obligations, Prentice Hall, New Jersey, USA pp: 148-162.
- Kagan Shelly (2015) What's Wrong with Speciesism?. Journal of Applied Philosophy 33(1): 1-21.
- 7. Singer Peter (2015) Why Speciesism is wrong: A response to Kagan. Journal of Applied Philosophy 33(1): 31-35.
- 8. Singer Peter (1993), Practical Ethics. 2nd ed. Cambridge: Cambridge University Press pp. 386.
- Darwin Charles (1871) The descent of man and selection in relation to sex, Princeton University Press, Princeton, USA, 1981 pp: 84-85.
- Craven Neil (1986) Chemotactic Factors for Bovine Neutrophils in relation to mastitis. Comparative Immunology Microbiology and Infectious Diseases 9(1): 29-36.
- 11. Mischkowski Dominik, Palacios Barrios Esther E, Banker Lauren, Dildine Troy C & Atlas Lauren (2018) Pain or nociception? Subjective experience mediates the effects of acute noxious heat on autonomic responses. Pain 159(4): 699-711.
- 12. Damasio Antonio (2000) The Feeling of What Happens Vintage, London UK Pp: 37.
- 13. Godfrey Smith Peter (2017), Other minds: The octopus and the evolution of intelligent life, William Collins, London, UK Pp: 78-79.
- 14. Koch Christof (2017) Consciousness. Confessions of a Romantic Reductionist, MIT Press, Cambridge, USA pp: 78-82.
- 15. Libet B, Gleason CA, Wright EW & Pearl DK (1983) Time of conscious intention to act in relation to onset of cerebral activity (readiness potential). The unconscious initiation of a freely voluntary act. Brain 106: 623-642.

### **Archives of Animal & Poultry Sciences (AAPS)**

- 16. Cheney Dorothy L, Seyfarth Robert M (2007) Baboon metaphysics. The University of Chicago Press, Chicago USA Pp. 3.
- Heidegger Martin (1927) Being and time, J Stambaugh (Translator);
  D.J. Schmidt (Editor), State University of New York Press, Albany USA 2010.
- 18. Nagel Thomas (1974) What is it like to be a bat? The Philosophical Review 83(4): 435-450.
- Chittka Lars (2022) The Mind of a Bee. Princeton University Press, Princeton, USA.
- 20.0ECD/Food and Agriculture Organization of the United Nations (2023), 'Meat', in OECD-FAO Agricultural Outlook 2023-2032, OECD Publishing, Paris, France pp: 184-201.
- 21. Greenspoon Lior, Krieger Eyal, Sender Ron, Rosenberg Yuval, Bar On, et. al. (2023), The global biomass of wild animals, Proceedings of the National Academy of Science 120(10): e2204892120.
- 22. Aristotle (2009) The Nicomachean Ethics (tr.) D Ross L B Brown Edt's Oxford University Press, Oxford, UK Pp. 191.
- Mill, John Stuart (1861) On Liberty, Utilitarianism and other Essays, Mark Philp and Frederick Rosen Edt's Oxford University Press, Oxford, UK, 2015 Pp: 124.
- 24. Meijer Eva (2021) What do the animals think? Taking into account animal agency in animal rights, European Animal Rights Law Conference, 17-18 September 2021, Cambridge Centre for Animal Rights Law, Cambridge, UK.
- 25. Monso Susana (2018) Why insect sentience might not matter very

- much, in Svenja Springer and Herwig Grim Edt's Professionals in Food chains. Wageningen Academic Publishers, Wageningen, Netherlands Pp: 375-380.
- 26. Nordenfelt, Lennart (2006) Animal and human health and welfare: a comparative philosophical analysis, CABI, Wallingford UK.
- Boorse Christopher (1977) Health as a scientific concept, Philosophy of Science 44: 542-573.
- 28. McMahan Jeff (2016) The Comparative Badness for Animals of Suffering and Death, in Tatjana Visak and Robert Garnier Edt's The Ethics of Killing Animals, Oxford University Press, Oxford, UK Pp: 67-85
- Singer Peter (2023) Animal Liberation Now, The Bodley Head, London, UK Pp: 188-191.
- Parfit Derek (1984) Reasons and Persons, Oxford University Press, Oxford, UK, 1987 Pp. 388-414.
- 31. McMahan Jeff (1988) Death and the Value of Life. Ethics 99(1): 32-61.
- Southan, Rhys (2018), Life has value, but non-existence does not: in defense of the Epicurean Reconciliation Strategy, Thesis, University of Oxford, Oxford, UK.
- 33. Cato Susumu, Ishida Shu (2022) Multi-species population ethics with critical levels, Discussion Paper Series, Methodology of Social Sciences, University of Tokyo, Tokyo, Japan.
- 34. MacLean, Douglas (2010) Is "Human Being" a Moral Concept?
- Staudenmaier Peter (2003) Ambiguities of Animal Rights. Communalism, March 2003.



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