

## Animal rights/Plant rights

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**ABSTRACT:** This article sketches the rise of the concept of animal rights, especially in the late 20th century, mainly due to the work of Peter Singer. Considering the increase in evidence of plant intelligence, the question is discussed of whether plants might also be entitled to the same rights as animals. This question is answered in the affirmative. This would mean that humans would no longer be allowed to eat their fellow creatures. It is demonstrated that the concept of rights for non-human entities is a fundamental negation of rights as something exclusively human. Humans, like all other organisms cannot do anything else than obey the natural law of eating and being eaten. The position of plants and animals in farming is discussed from the perspective of domestication of plants and animals, and the responsibilities that this situation imposes on humans. Although a certain reduction of consumption of animal products is desirable, this has nothing to do with animal rights, but with ecological necessities only. Some recommendation for food service practice are given.

**KEYWORDS:** animal rights, food service, plant rights, speciesism, vegan, vegetarian

Increasingly, attention is being paid, including in the hospitality industry, to corporate responsibility. This includes ethical considerations concerning labour conditions, the environment, animal well-being and many other aspects.

For the hospitality industry, the methods of food production are particularly significant. Not only the environmental impact of agriculture, husbandry, fisheries and hunting/collecting is considered, but also animal well-being. In this context, the concept of animal rights plays an important role. Many reasons are advanced in favour of vegetarianism and even for veganism. Should these modes of nutrition become dominant, the consequences for the food service industry would be considerable in terms of purchasing, storing and preparation. This article discusses those consequences.

Until fairly recently, the idea that animals had been created for the sole use and profit of man was dominant. "The only purpose of animals was to minister to man, for whose sake all the creatures were made that are made" (Thomas Wilcox, ca 1600, cited by Thomas, 1983, p. 19). However, since antiquity, philosophers and theologians have presented opposite views: that animals have a purpose of their own, or, from a Christian perspective, the purpose to demonstrate to humanity the greatness of the creator. During the 17th and 18th centuries, the idea increasingly gained acceptance that animals and plants could suffer, and that it was morally wrong to inflict unnecessary pain upon animals. This thinking goes so far as to propose the possibility of animal rights acknowledged by the state. Thomas (1983) gives an extensive treatment of the development of these lines of thought.

During the same period, ideas arose that plants might have comparable powers of perception, a form of intelligence and powers to avoid suffering. One characteristic quotation is: "a

kind of perception in [plants] tending themselves to that which nourishes and preserves them, and eschewing and voiding that which injures them" (Worldidge, *Systema Horticulturae*, 1677, p. 283, quoted by Thomas, 1983, p. 179). However, this line of thinking could not stand against the mechanistic view of plants that became dominant during much of the 18th and 19th centuries. The idea of plant rights never gained acceptance during this period.

Since the 1970s, the line of thinking about animal rights, not about plant rights, has been invigorated by the work of Peter Singer (1975; 2000). Briefly, he states that any form of exploitation of non-human animals is unacceptable because animals are able to suffer. No being that can feel and suffer should be subjected to cruel treatment, including being slaughtered and eaten. Singer derives this idea from many philosophers of the 17th to 19th centuries, who were concerned about animal well-being, particularly from utilitarians like Jeremy Bentham. But he adds a new idea: domination and exploitation of animals is to be compared with suppression within the human species by the dominant classes: women suppressed by men (sexism) or black by white people (racism). In the same vein, he characterises the exploitation of non-human animals as *speciesism* and he expects that it will be rejected in future along the same lines as sexism and racism are now. His thinking has stimulated the rise of animal rights, even as an academic discipline in faculties of law.

The idea that animals can suffer is fairly obvious in animals that resemble us more or less (mammals, birds): when you inflict pain or stress upon these animals they react in ways that can seemingly be understood by humans. From an anatomical perspective, this can be understood from the great similarity in brain structure between humans and the higher mammals. But the question is: how far down does the power of suffering

go? Does it stop on the level of fish? Of snails and mussels? The idea is advanced that a certain level of complexity in the central nervous system determines the power of suffering. But where should the line be drawn? At the cuttlefish with its complex brain? The snail, that has at least a ring of nervous tissue around the oesophagus, sending axons all through the body? The sea anemone with a diffuse network of neurons all over the body, with a slightly higher concentration around the mouth? Or should we follow the vegan that I once heard: "I do not eat an animal, even when it has just one neuron"? In other words, the right not to be eaten depends on possessing at least one neuron.

During the 19th and 20th centuries, the research on perception by plants and on plant intelligence was certainly not a mainstream branch of botanical science. Research was dominated by a mechanistic view of growth and movement of plants. Notable exceptions were Charles Darwin and his son Francis (1880; 1888), who performed a wide range of experiments on movement in plants. Invariably, these movements have a clear aim in the survival of the plant and can be interpreted as intelligent actions, not less than the chewing of grass by a cow or the running away from a lion by an antelope. In the early 21st century, we see an upsurge in the interest in plant intelligence (Mancuso & Viola, 2013; Peeters, 2016; Wohlleben, 2016). They all go back to the work of the Darwins. Especially Mancuso and Viola (2013) use new concepts that are partly derived from the intelligent behaviour of swarms of animals – intelligence that transcends the intelligence of each separate individual. Another valuable comparison is the working of self-learning computer systems. They treat the intelligent behaviour of the root system as such a form of intelligence. Yet humans are not easily inclined to recognise plant intelligence. One cause is the "slowness" of plants. People who are not in daily close contact with plants do not perceive their movements although they may be able to see the effects after days or weeks. When the movements of plants are accelerated by photographic techniques, humans can see how flowers open, the stalks of beans wrap themselves around their poles, et cetera. They can see it, and yet they do not believe it. Every biology educator most likely shares my experience that it is extremely hard to arouse children's interest in plants, simply because of their slowness. The most effective way to create at least some interest is growing garden cress that will germinate within 24 hours and be ready to eat after a week. Only when children grow up with adults that live with plants themselves and stimulate the children's interest in them will they to a certain extent also develop an understanding for plants.

Mancuso and Viola (2013; 2017; 2018) conclude that plants breathe without lungs or gills, feed themselves without digestive organs, perceive stimuli and react accordingly using the water transport system, instead of possessing a specialised nervous system. Plants possess intelligence not less than animals. They pose the question of whether a brain in itself, a brain without a body, is still intelligent. Their answer is that a brain in itself is not more intelligent than an isolated stomach. In animals, a certain coherent complex of neurons branching throughout the body is necessary to coordinate all the bodily functions. In plants it is different:

...the brain functions are not separated from the body functions, but together and simultaneously present in each individual cell. This is a beautiful live example of what Artificial Intelligence researchers call embodied agent: an intelligent virtual figure that by an autonomous

physical body interacts with the world (Mancuso & Viola, 2017, p. 138)

All organisms strive for maximum reproductive success, plants no less than animals. For this goal, they must eat and avoid being eaten. They prey in different ways and they defend themselves in different ways, but these are all directed to maximal reproductive success. For "preying", only a limited number of plant species actively catch animals to digest them (Darwin & Darwin, 1888). Most plants leave the digestion to moulds and other organisms that break down dead organic matter. Most animals actively go after the prey they want to eat; a considerable minority live as filter feeders; and a wide variety of animals use poisons to paralyse their prey. Animals defend themselves actively with weapons (teeth, claws, horns, stings), eventually complemented by aggressive behaviour. Or they use passive forms of protection, notably camouflage. Plants defend themselves from being eaten by being tough, with thorns and stings, by a horrible taste or by poisons. Additionally, many plants can suffer big losses of their bodies without dying. Grasses and trees are notable examples of this capacity. Summarising this: eating and being eaten is the basic law of living nature.

Briefly, both plants and animals are organisms that strive for maximal reproductive success in an intelligent way. Both plants and animals can suffer. Any gardener or horticulturist can recognise suffering in plants when circumstances are adverse: a shortage of water or essential minerals, lack of or excess sunlight or temperature and attacks by predators (overgrazing, being completely stripped of leaves by insects, being attacked by fungi, et cetera). Using Singer's criteria, they qualify for protection by humans, they deserve not to be eaten and not to be exploited. Still, the staunchest defender of animal right will eat plants without flinching. Why? Hopefully, the previous part of this article has given sufficient argument that plants are entitled to the same rights as animals. In other words, humankind should stop eating fellow creatures altogether, be they animal, plant or fungus. In other words, applying the principles of Singer would mean the abolition of humans. That is not reasonable. After all, humans are organisms, not pure spirit. Humans have rights that are at least equal to other organisms. If hawks are entitled to eat pigeons, why aren't we? Why should all the nuts be for the squirrels and the wild boars and not for us? The ideas of Singer will lead us to a dead end, literally. Sparing the animals and just eating the plants is just as wrong as the reverse. Plant eaters may be free from "speciesism", but they commit the sin of "cerebrocentrism" or "neuronism": just because plants do not have brains or even interconnected single neurons like ours, their lives, in contrast with the lives of animals, can freely be taken for our sustenance. A better way is perhaps to obey the law of eating and being eaten, accepting that we can be eaten by other animals (for an extensive review, see Quammen, 2004). That is not something of the past: the number of victims of crocodiles alone worldwide is around 1 000 persons per year. And the number of victims of hippopotamuses, lions, leopards and tigers is not inconsiderable. Why, then, not eat animals?

However, many affluent, educated, urban Western people are toiling with feelings of guilt toward animals. They see the exploitation and consumption of animals almost as a sin. Where does this attitude come from?

In the first place, urban people keep pets. These animals purely serve the emotional needs of their owners. They are treated as members of the family; they belong indoors, not in

a kennel and they are never eaten. Thomas (1983) mentions several examples as early as the late Middle Ages. In 1634, the Dutch poet Joost van den Vondel composed a poem, mocking the Leiden head sheriff Willem de Bont, for the burial of his dog Tyter with extreme pomp and circumstance (Sterck et al., 1929, p. 408). This demonstrates that the treatment of pets as humans existed at that time in Holland, but that it was not yet generally accepted. These pet lovers require that farm animals are kept and taken care of in the same way as they do their pets. In this way, they ignore the different natures of the farm animals and the purposes for which they are kept. This, in turn goes back to a lack of familiarity with agriculture and husbandry (Korthals, 2002). The town dwellers have no idea about the needs of the farm animals as such and the need of the farmers to make a living from these animals.

Agriculture essentially is a refined preying technique: animals and plants are not only at human's disposition for being eaten, but also for being kept for services and products for which they need not be killed: eggs, wool, down, or drawing carts and ploughs; trees are kept alive for fruits, sometimes for thousands of years. All of this is an effect of the domestication of animals and the cultivation of plants.

Domestication of animals has been successful for only a limited number of species. Diamond (1997; 2000) states that out of 148 big wild herbivorous land animals – the potential candidates for domestication – only 14 species have more or less successfully been domesticated. Diamond specifies the requirements for successful domestication (herbivorous diet, growth rate, no problems with reproduction in captivity, not an aggressive character, not being prone to panicking, socially organised) (Diamond, 1997; 2000). Not only have these animals changed considerably under human domestication, humankind itself has changed as well: co-evolution of humans and domesticated animals. This situation has characteristics of a covenant between humans and domesticated animals, in spite of Hobbes' statement that there could be no obligations to animals because "to make covenants with brute beasts is impossible" (Hobbes, quoted by Thomas, 1983, p. 21). It is with this covenant-like connection that Korthals (2002; 2004) argues in favour of an ethical husbandry. The animals under domestication are better off than their wild kin. They are protected against predators and inclement weather; they are led to better grazing grounds; their owners will produce reserve feed in harsh times; and for their offspring the best care is taken. In this way, they have, numerically, become the dominant species among the larger mammals. Of course, they end up in the pot or on the spit, but most likely this is preferable to an end in the stomachs of a pack of wolves.

The number of plant species that have been domesticated is also rather modest, certainly the number of species (wheat, soy, corn, rice, potato) that provide most of the calories for humans. Due to conscious or semi-conscious selection by humans, these species have lost characteristics that in their natural state would have been indispensable. Two examples of this can be shown from the field of seed dispersal: legumes like peas, beans and lentils have lost the power to shoot their seeds away when the dry pods open. Cereals have lost the characteristic that the ripe fruits will fall from the ear. These losses are harmful for the natural dispersion of the species, but extremely convenient for humans harvesting the peas or the corn. In spite of this loss, it could be argued that the plants are better off because humans

take care that every year big fields are sown with the seeds, thus making cereals and legumes the dominant species on earth.

For a justification of the eating of farm animals, I do not know a better plea than that of Korthals (2002, p. 137). I give it in my own translation from the original Dutch edition:

I, being a moderate but still convinced meat eater, see a different justification. We might consider the keeping of cattle, pigs and sheep for slaughter as a kind of contract between humans and farm animals: humans take care of the animals, and the animals give us their products like milk and wool and ultimately their lives. In exchange for good care, their feed and drink, the cows, pigs and sheep ultimately give us their lives and we slaughter them for their meat. The contract between humans and farm animals creates obligations. Humans must play their part: taking good care of the animals, not reducing them to biomachines, to milk and meat machines; then, the animals give their lives for our meat. Intensive husbandry is at variance with the contract, for we did not agree with the cows, sheep and pigs to give them a rotten life; they would get what they need. Catching and keeping animals does not mean keeping them in prison. In this, consumers have their own responsibility: they must be willing to pay a good price and to pay attention to quality.

Indeed, in the most brutal forms of intensive husbandry one sees the animals suffering: pigs on slippery grid floors without straw, without the possibility to lie down, or chickens in small cages. Meanwhile, better methods have been developed for keeping animals, even in a high-density environment. With plants, it is a different matter: you never see more satisfied tomato plants than in professional greenhouses; in comparison, growing tomatoes in the Dutch climate out of doors or with minimal shelter seems like suffering, both for the plants and the gardener.

Would animals indeed be better off if mankind stopped eating them? Many of the domesticated animals would die straight away, while a number would successfully go feral. But they would continue to be eaten. From a utilitarian perspective, the total suffering of animals would not decrease – or would most likely even increase. Compare the suffering of a pigeon falling dead from the air after a good shot by a hunter with that of the bird taken in flight by a hawk. It will be pierced by eight long and sharp nails, probably not dead but suffering and brought over a certain distance to the hawk's nest and then hacked and clawed apart by young hawks until it dies after a cruel hour or so.

A correct way of eating and exploiting animals, therefore, is not a problem from the perspective of animal well-being. Animals are no more entitled to "rights" than plants are. "Rights" can only function within the human species. Speciesism is not a sin but a fact, and even a necessity for the survival of mankind. When "rights" are awarded to non-human entities, the following happens: certain humans claim these rights and pretend to exercise them on behalf of the animals, plants, rivers or whatever they might invent. In this way, they grasp more power than they are entitled to and they curtail the rights of their fellow humans, ultimately denying them the right to live, i.e. when rights of animals and plants alike are vindicated.

Although the rights of animals are null and void, a certain limitation to the consumption of animals and animal products may be necessary from an ecological perspective, but that is not the challenge this article deals with.

Supposing that animal and plant rights alike were promoted, the food service industry would quickly disappear, together with the entire human species. Meanwhile, a not inconsiderable number of consumers ("vegans") refuse to eat any animal products. The only way for the food service industry to survive is to follow the demand. When a group of six persons enters your restaurant and one of them requires vegan food, it might be wise to have something attractive for them, otherwise you might lose the whole group. On the other hand, for most restaurants, going fully vegan would mean a form of business suicide. Mainly catering for omnivores and meeting on a certain level the needs of vegetarians and vegans, on a level as required, is probably the best strategy. From an ecological and health perspective, a stronger focus on vegetables and smaller portions of animal products might have positive effects, both ecologically and from a health perspective (Kooy, 2006; Schulp, Kooy & Cavagnaro, 2010). Here, the philosophy of eating the whole animal, not only the prime cuts, contributes to respect for the animal and the farmer. That is what an animal is entitled to: respect, not rights.

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