**Science and Speciesism**

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**Abstract**

This chapter introduces topical issues in the ethical debate on speciesism. It does so against a background of the history of the debate and with an emphasis on concerns that arise at the intersection of speciesism and science. The term speciesism was coined in the 1970s by Richard Rider and popularized by Peter Singer, who defined speciesism as “a prejudice or attitude of bias in favor of the interests of members of one’s own species and against those of members of other species.” Critiques of speciesism are undergirded by the principle that comparable interests should be given equal consideration, regardless of species-membership. To what extent the interests of humans and non-humans are comparable, however, has been a matter of contention and is partly beholden to empirical findings. Diverging opinions on this matter have given rise to a variety of more and less species-egalitarian views, often paired with rivalling accounts of “moral status”. A minority of ethicists have explicitly defended speciesism or some version thereof, including Bernard Williams and, more recently, Shelly Kagan. Apart from the back-and-forths between critics and defenders, the speciesism debate has transformed over the last decade, in three respects. First, discourse on animal ethics has witnessed a “political turn”, moving away from analyses of moral status and towards discussions of human-animal relations in interspecies societies. Secondly, apart from anthropocentric speciesism, i.e., privileging humans over non-humans, there has been an increasing interest in non-anthropocentric speciesism, i.e., privileging some non-human species over others. Thirdly, speciesism has been endorsed as a prominent topic in the new, activist-leaning research field of Critical Animal Studies, and has recently garnered substantial attention from psychologists. As these disciplinary changes and conceptual refinements suggest, half a century after its coinage, speciesism continues to be an important scholarly and ethical concept whose history is still in the making.

**Keywords**

speciesism; ethics; Singer; equal consideration; moral status; conservation ethics; biophilia; non-anthropocentric speciesism; psychology

1. **Origins of the Term**

The term speciesism was coined in 1970 by the English scholar Richard D. Ryder, who, at the time, was working as a clinical psychologist at the Warneford Hospital in Oxford. The revolutions of the 1960s had alleviated the plight of women and fostered racial and class struggles, but remained silent on the animal cause. Ryder felt that this was a moral blind spot that needed to be rectified: a parallel should be drawn between the prejudices towards members of our own species and prejudices towards others. As Ryder (2010, p.1) recounts “one day in 1970, lying in my bath at the old Sunningwell Manor, near Oxford, it suddenly came to me: SPECIESISM!” Ryder wrote a 400-word leaflet which he circulated around Oxford and distributed among colleagues. He used the term again in a 1971 academic essay, stating his position as follows:

“In as much as both ‘race’ and ‘species’ are vague terms used in the classification of living creatures according, largely, to physical appearance, an analogy can be made between them. Discrimination on grounds of race, although most universally condoned two centuries ago, is now widely condemned. Similarly, it may come to pass that enlightened minds may one day abhor "speciesism" as much as they now detest ‘racism.’ The illogicality in both forms of prejudice is of an identical sort. If it is accepted as morally wrong to deliberately inflict suffering upon innocent human creatures, then it is only logical to also regard it as wrong to inflict suffering on innocent individuals of other species.” (Ryder 1971, p.81)

A few months after he had published his leaflet, an Australian philosophy graduate student in Oxford, Peter Singer, got in touch with Ryder. Singer was inspired by the work of Ryder, in which he saw a call for the foundation of an animal liberation movement (Singer 1973). In 1975 Singer authored the book *Animal Liberation*, in which drew on the concept of speciesism, attributing the term to Ryder (Singer had invited Ryder to co-author the book; Ryder declined). Singer framed his critique on speciesism in utilitarian terms, referring, specifically, to Jeremy Bentham’s idea that “each [is] to count for one and none for more than one” and to Henry Sidgwick’s notion that “the good of any one individual is of no more importance, from the point of view (if I may say so) of the Universe than the good of any other.” He defined speciesism as “a prejudice or attitude of bias in favour of the interests of members of one’s own species and against those of members of other species.” (Singer 1975, p.6) *Animal liberation* became a founding text among animal activists and was widely read among academics. Together with the American animal rights activist Tom Regan, over the next decades Singer went on to become a leading figure in the emerging research field of animal ethics.

The concept of speciesism has been subject to a gradually increasing number of publications in the half-a-century since its coinage.[[1]](#footnote-1) It acquired its own dictionary entries form the 1980s onwards and has been central to the self-acclaimed mission of animal activism organizations such as PETA.[[2]](#footnote-2) Arguably, it has served as an important conceptual affordance in the struggle for a “moral revolution” in human-animal relations (Hopster et al. 2022). Nowadays, speciesism is well entrenched in many idioms and frequently referred to in academic and activist contexts, which typically underwrite the connotations expressed by Ryder and Singer. This consensus notwithstanding, the concept has also been subject to refinements as well as moral disputes, some of which last to this day.

In this chapter I present an historical overview of the speciesism-debate, foregrounding recent developments and concerns at the intersection of ethics and science. While there is an emerging historiographical interest in animals in intellectual history, including the history of the field of animal ethics (Adamson & Edwards 2018) and the more recent field of Critical Animal Studies (Weitzenfeld and Joy 2014), the history of the speciesism debate is still in the making. This chapter introduces topical issues in the ethics of speciesism, against a background of the history of the debate.

1. **A Short Pre-History**

The term was coined in the 1970s, but the phenomenon of speciesism is, of course, much older. In the Western tradition, the assumption that humans have a morally superior status to animals, whether in virtue of human reasoning capacities, language, our moral self-understanding, or otherwise, runs like a thread through intellectual history. This is not to deny notorious examples of thinkers who *did* give animals pride of place. For instance, Plutarch thought that in killing an animal you might be killing an reincarnated human, and Hume held that similar behaviors in humans and animals must spring from similar internal causes. Even Descartes, notoriously criticized for viewing animals as automata, might be given a more charitable reading: in doing so he was not just diminishing animals, but above all sought to express his high expectations about the capabilities of machines (Adamson and Edwards 2018).

Nonetheless, it is fair to say that the unique place of humans among – and above – animals was rarely seriously questioned up until the 20th century. The concept of a great chain of being or *scala naturae*, a hierarchical structure of all matter and life reaching upwards from minerals, vegetative life, non-human animals, humanity, and angelic beings up to God, had its roots in Aristotle’s biology and was firmly entrenched in Christian scholasticism. Much of this outlook lived on in scientific classifications of human’s place in nature: the threefold division between the sub-human kingdoms of minerals, plants, and animals, for instance, was echoed by Carl Linnaeus’ *Systema Naturae.* Charles Darwin’s 19th century account of evolution by natural selection constituted a momentous breach with this tradition and fostered an appreciation of nature’s changeability and contingency, but still retained clear traces of progressivist thinking, as Darwin’s routine distinction between ‘higher’ and ‘lower’ animals exemplifies. Some popularizers of Darwin’s work, such as Ernst Haeckel in Germany, left it no doubt that the natural place for humanity was at the very top of the evolutionary tree.

Should historical attitudes towards human superiority, so firmly engrained in the intellectual tradition of the West, be typified as speciesist? Probably so. It is worth bearing in mind, however, that apart from the term ‘speciesism’, we might also use its cognate ‘anthropocentrism’ to describe an attitude that elevates human concerns over those of other animals. The extensions of these terms overlap, but their connotations are slightly different, and depending on which moral outlook one wants to typify, one term may be more fitting than the other.

Following Singer’s definition, speciesism is the self-serving attitude of unjustly favoring the interests of members of one’s own species. The term primarily serves as an instrument of criticism, born out of abhorrence at practices of factory-farming as well as animal experimentation, which had become widespread by the 1970s. A striking fact about such practices was the apparent human insensitivity to the plight of animals, in the face of animal suffering in laboratories and industrial farming. The concept of speciesism served as a tool to radically oppose these practices, by turning the tables and challenging the notion that there is a morally relevant difference between the interests of humans and other animals.

Moral anthropocentrism may be defined as the view that humans and human interests are the only direct source of moral considerability, or moral status (cf. Horta 2014). To the extent that non-human beings and things are morally considerable at all, they are so only in virtue of humans and human interests. Hence, non-human beings do not have direct moral status, but only derivatively so, if at all. Like speciesism, the term is often invoked with a critical connotation, but simultaneously helps to identify a common pattern of moral justification. Much of the intellectual tradition in the West has been firmly anthropocentric – and rightly so, its proponents might have argued. Exceptions notwithstanding, the proposition that non-human interests merit independent consideration was not a topic that was given much sustained reflection in Western philosophy.

At a conceptual level, then, one could say that in order to oppose speciesism, moral anthropocentrism had to be discredited first. Only when the self-evidence of an anthropocentric outlook had gotten cracks, and the assumption that human interests were the *only* source of moral value was no longer taken for granted, the more radical criticism that human and animal interests mattered *equally* could gain traction.

Among animal welfare defenders who predate the coinage of the term ‘speciesism’, the English social reformer Jeremy Bentham is frequently celebrated by Singer and his followers. In a footnote, Bentham made a statement often cited approvingly:

“The day may come, when the rest of the animal creation may acquire those rights which never could have been withholden from them but by the hand of tyranny. The French have already discovered that the blackness of the skin is no reason why a human being should be abandoned without redress to the caprice of a tormentor. It may come one day to be recognized, that the number of the legs, the villosity of the skin, or the termination of the os sacrum, are reasons equally insufficient for abandoning a sensitive being to the same fate. What else is it that should trace the insuperable line? Is it the faculty of reason, or, perhaps, the faculty of discourse? But a full-grown horse or dog is beyond comparison a more rational, as well as a more conversable animal, than an infant of a day, or a week, or even a month, old. But suppose the case were otherwise, what would it avail? The question is not, Can they reason? Nor, Can they talk? But, Can they suffer?” (Bentham 1789/1970, pp. 282-283)

However, while Bentham was an outspoken critic of wanton animal cruelty, his moral views were more in the grips of an anthropocentric outlook than typically assumed. As Johannes Kniess (2019) has recounted, Bentham did not oppose to the killing and using of animals if it benefitted humans. Furthermore, his support for laws against animal mistreatment was justified primarily in terms of benefits to human welfare. Bentham’s stance towards animals was progressive, but not extraordinary for his day and age: the mistreatment of animals was commonly regarded as an object of moral concern in mid-18th century England. A key difference between the Benthamites and 20th-century critics of speciesism was their assessment of the mental capacities of animals. Bentham did not seriously entertain the possibility that some animals might possess higher mental capacities; absent such capacities, he (implausibly) assumed, their suffering might also be diminished, for instance because animals lacked a fear of death.

This goes to show that views on how we should relate to animals are not determined by ethical considerations alone. Empirical scrutiny of animal capacities and the nature of animal experience, too, have been key determinants in historical assessments of how humans should relate to their fellow creatures.

1. **Equal Consideration of Interests**

In *Animal Liberation* Singer made it clear that equal consideration of interests should not be equated with equal treatment. Plainly, it would be absurd to insist that dogs are given a right to vote; this is a right they cannot exercise. The point, instead, is to give the interests of dogs and members of our own species *equal consideration*. If human and animal interests are sufficiently alike, then there is no good reason for acknowledging the former, while neglecting the latter.

The core ethical principle underlying Singer’s argumentation – we must give equal moral consideration to like interests – fuels a process of consistency reasoning. If interests entitle humans to a given kind of treatment, then, by consistency, non-humans with like interests are similarly entitled. Plausible candidates for interests that are similar across species include those that pertain to basic rights and needs, such as an interest in nourishment, bodily integrity, self-determination, or protection from unnecessary harm, suffering, and killing. For all such basic interests, extant practices that exploit animals, only to promote trivial interests of members of our own species, are evidently unjust.

The majority of people are speciesists, Singer surmised. Humans routinely engage in animal exploitation and special pleading on behalf of their own species. But humans do not deserve any special consideration, or have an elevated moral status, simply by virtue of their species membership. Furthermore, other distinguishing hallmarks of the human intellect that have been hailed throughout history – human rationality, language, morality, and so on – do nothing to diminish core interests of other species, which humans clearly violate. As Singer made the point in later work:

“Jeremy Bentham, the founding father of the English school of Utilitarianism, wrote, ‘‘The question is not, ‘Can they reason?’ nor, ‘Can they talk?’ but, ‘Can they suffer?’’’ That is indeed a crucial question to ask whenever we are talking about beings who are capable of suffering and one that is clearly relevant to how we should treat both humans and nonhuman animals. Can they suffer? Can they enjoy life? If so, they have interests that we should take into account, and we should give those interests equal weight with the interests of all other beings with similar interests. We should not discount their interests in not suffering because they cannot talk or because they are incapable of reasoning; and we should not discount their interests in enjoying life, in having things that are fulfilling and rewarding for them, either. The principle of equal consideration of interests should apply to both humans and animals. That’s the sense in which I want to elevate animals to the moral status of humans.” (Singer 2009, p.575)

But do the ‘higher faculties’ of humans not play a role in modulating the interests of members of our species? In fact they do – and in this respect, Singer’s view is less radical than some have taken it to be. Singer submits that by virtue of human self-awareness and the temporal extension of human interests, these interests tend to be quite different from those of other animals. Even interests that might appear to be rather similar at first face – such as an interest in not dying – may be transformed by our self-awareness, Singer maintains:

“pain and suffering are equally bad – and pleasure and happiness equally good – whether the being experiencing them is human or non-human, rational or non-rational, capable of discourse or not. On the other hand, death is a greater or lesser loss depending on factors like the extent to which the being was aware of his or her existence over time, and of course the quality of life the being was likely to have, had it continued to live. (Singer 2009, p. 576)

Various other animal ethicists have adopted a similar line of thought, opposing the speciesist attitude of discounting core animal interests, but acknowledging that the social and psychological capacities of humans can play a distinct role in transforming these interests, such that human and non-human interests are not quite alike. For instance, the American philosopher Jeff McMahan argues that

“the greater psychological depth, complexity, and unity in most human beings make it possible for them to have lives that contain more, and arguably more important, dimensions of the good (such as significant accomplishment, personal relations based on deep mutual understanding, and so on) and are therefore more worth living than those of animals. In most cases, therefore, the psychological damage caused by suffering is worse in human beings because the life that is damaged matters more.” (McMahan 2015, p. 281)

It bears pointing out, once more, that assessments of the psychological depth, complexity and unity of human and non-human interests is beholden to empirical assessments – assessments of both human psychology, as well as studies of the lives and minds of other animals. The scientific trend of the last decades has been to elevate the mental capacities of non-humans, while simultaneously casting some doubt on human cleverness and ingenuity (de Waal 2016). Depending on future findings from fields such as ethology and animal cognition, as well as human psychology, arguments about the (in)comparability of human and non-human interests may gain or lose in force.

1. **Criticism and Debate**

The influence of Ryder and Singer’s account of speciesism in shaping the ensuing animal ethics debate is evident and has garnished critical acclaim. But there have also been detractors of the concept, as well as ethicists who have made additional distinctions to further the debate. With no aspiration of providing an exhaustive treatment, let’s succinctly consider some of the arguments that have emerged as the dialectic unfolded.

Tom Regan (1983), who – alongside Singer – is generally considered a founding father of modern animal ethics, opposed to Singer’s utilitarian view that the lives of the few might be sacrificed and exploited for the benefit of the many. Instead, moral agents have a duty to respect the integrity of subjects-of-a-life, Regan argued. But importantly, while Regan’s rights-based account clearly diverged from Singer’s utilitarianism, Regan also incorporated the term speciesism in his work, thereby illustrating that a critique of speciesism need not be formulated in utilitarian terms. It can be advanced from any view committed to denying a legitimate role for appeals to species membership in moral justifications.

Other ethicists did criticize Singer’s account of speciesism, as it seemed to entail an unrealistic species egalitarianism and to deny morally relevant differences that obviously existed between species. Carl Cohen (1986) asserted that the analogy between speciesism and racism was a category mistake, as different species – and their associated moral standing – obviously diverge, whereas races do not. Furthermore, there was good reason to be a speciesist:

“Speciesism is not merely plausible; it is essential for right conduct, because those who will not make the morally relevant distinctions among species are almost certain, in consequence, to misapprehend their true obligations.” (Cohen 1986, p. 867)

Cohen, however, mistakenly inferred that Singer’s account left no room for arguing that there are morally relevant differences between members of different species. Singer is better understood as implying that *if only and if* interests are very similar, they should be given equal consideration, while leaving room for the possibility that as a matter of fact, interests across species are not very similar. Furthermore, Cohen’s skepticism about the close relation between racism and speciesism is in tension with a historical assessment, which suggests that the two were indeed inextricably connected. (LaFolllette and Shanks 1996)

While Cohen maintained that Singer’s speciesist critique went too far, others maintained that it did not go far enough. The animal rights activist Joan Dunayer, in her book *Speciesism* (2004),argued that taking the principle of equal consideration to its natural conclusion, implied that bestowing rights on animals also meant that animals should be given similar legal protection as humans, and that violations of animal rights, such as a right to bodily integrity and self-determination, should be similarly penalized. Dunayer makes a tripartite distinction between old speciesists, who favor granting basic rights only to humans, new speciesists, who additionally espouse rights for animals that are very similar to humans, and non-speciesists, who advocate basic rights for all sentient creatures. On Dunayer’s classification, Singer and Regan are categorized as new speciesists, as they give particular weight to the interests of humans and humanlike creatures.

The philosopher who most famously endorsed the badge of speciesism and wore it with pride was the British ethicist Bernard Williams. In his essay ‘The Human Prejudice’ Williams bit the bullet, arguing that ethics is unavoidably a human project reliant on human concepts. We cannot escape from regarding ‘being a human’ as a morally relevant property: a prejudice in favor of human beings is defensible, even if it is a prejudice. As Singer (2016) pointed out in reply, this line of defense has contentious implications: sexism and racism could be defended in analogous ways. Williams does not seem to assail the worries that made speciesism such a stark allegation in the first place.

More recently, the American ethicist Shelly Kagan (2016, 2019) has offered a more intricate line of argument that takes issue with the charge of speciesism. In his book *How to Count Animals* (2019)Kagan develops a hierarchical view of moral status, according to which the badness of pain depends on the creature that feels it, and, more generally, the moral weight of a creature’s interests depends on the nature of the interest-bearer. One advantage of this view, Kagan argues, is that it can dodge an objection that might be levelled against the idea that the moral standing of all beings counts equally. If that were the case, then assuming plausible principles of distributive justice, humans would be required to focus almost all their resources to improving the position of other animals, who tend to be worst-off in our interspecies society. Yet this implication seems unacceptable, as it makes an overdemanding claim on human beings, Kagan submits. Adopting the speciesist view that the moral status of some creatures carries more weight than the moral status of others, serves to avoid the worry of being overdemanding.

An objection that any defense of speciesism faces is the so-called ‘argument from marginal cases’ (Miller 2002), also known as the ‘argument from species overlap’ (Horta 2014). This is the challenge to vindicate the claim that some morally relevant capacities that are alleged to be unique to humans (self-awareness, psychological unity, temporal unity, or other traits associated with ‘moral personhood’) are truly unique, and furthermore shared by all humans. Critics who submit that this is not the case push the following counterargument:

* Any property P that *only* human beings have is a property that some human beings, such as young infants or impaired humans, lack (the marginal cases)
* Any property P that *all* human beings have is a property that many animals have as well (the species overlap)

Kagan answers these counterarguments by advancing a position he calls *modal personism*, according to which a modal potentialfor achieving moral personhood is what grants humans full moral status. All and only human beings have this modal potential. This species-specific ideal-type justifies our special moral status.

As Kagan’s recent contribution – as well as the critical responses it has invited (Singer 2016; DeGrazia 2016; McMahan 2016) – goes to show, after half a century the speciesism debate still does not lie dormant. But the debate has also matured, and the level at which current discussions play out has become more conceptually refined. Rather than the binary opposition between speciesism and non-speciesism, the contributions of the last two decades suggest that there is a more scattered landscape of possible positions (Hopster 2019), which leaves room for gradualist as well as hierarchical conceptions of ‘moral status’ (DeGrazia 2008).

Another impulse to the debate has been the recent emergence of the interdisciplinary field of Critical Animal Studies. The ambitions of this field are less philosophical than traditional animal ethics, and more activist leaning: its scholarship analyses the political and structural exploitation and oppression of animals in relation to the oppression and exploitation of humans, with the aim of revolutionizing politics and society (Westerlaken 2018). In the discourse of Critical Animal Studies, the concept of ‘speciesism’ is explicitly normatively laden. This concords with the usage of some ethicists, who argue that speciesism should be understood as an inherently normative concept and is wrong by definition (Horta 2010; Albersmeier 2021). This, however, is a matter of current contention: other philosophers and psychologists have argued that the concept itself may be taken to be descriptive (Jaquet 2019) and that the wrongness of speciesism should be a matter of substantive ethical debate.

1. **Differential Treatment**

Most of the speciesism debate has focused on the privileged consideration that humans give to members of their own species, as opposed to non-human animals. There is, however, another way in which human attitudes towards animals might be biased: we might be giving special consideration to members of some non-human species rather than others. Hence, we can distinguish between two types of speciesism (cf. Caviola and Caparo 2020): anthropocentric speciesism (privileging humans over non-humans) and non-anthropocentric speciesism (privileging animal X over animal Y, or species X over species Y).

While non-anthropocentric speciesism has been less in the ethical limelight, it is certainly a prevalent phenomenon. We tend to treat domestic animals such as dogs and cats with love and care, while tolerating the miserable existence of factory-farmed animals such as pigs and chickens, or lab animals such as rats. Discrepancies also manifest themselves in conservation practices: charismatic megafauna such as pandas have been granted enormous financial resources to guarantee habitat preservation, whereas local populations of invasive species are routinely brought to extinction. Furthermore, we tend to feel a strong obligation to assist and intervene in the lives of domesticated animals, whereas we approach wild animals with a “laissez-faire intuition” (Palmer 2010).

Such differential treatment is related to the various different roles that animals fulfill in human practices: an animal may be a pest, a companion, a source of food, a source labor, a creature that instills wonder and admiration, and so on. Depending on which role or roles it fulfills, humans will tend to have a different moral evaluation of the animal. This is also borne out by the ‘sociozoological scale’ developed by Arluke and Sanders (1996), which suggests that there is a clear hierarchy in the place of different animals in human societies. Note that this hierarchy need not be determined by species-membership: the categories along which animals are classified and ranked are not biological, but social, and determined by the relations animals hold to humans. Nonetheless, insofar as differential treatment of animals is due to a preferential consideration of interests, such treatment may be liable to the same critique as practices of anthropocentric speciesism.

Again, however, the question emerges to what extent the interests of different species are sufficiently alike to warrant equal consideration. Furthermore, one might think that there are certain special obligations that emerge in virtue of the relation that humans hold to some animals, but not to others. Palmer (2013) has advanced this argument in regard to our relation to domesticated animals: by virtue of the history of domestication humans are responsible for the dependency of domesticated animals, which gives rise to an obligation to care for them, but not to assist wild animals. On this view, differential treatment of different animal species might well be justified, and need not be the result of mere bias.

The most well-known group-differentiated account of how humans should relate to different kinds of animals has been proposed by Donaldson and Kymlicka (2012). They advance a political theory of animal rights, according to which all animals should be protected by fundamental rights, but in addition there are also different rights for individuals belonging to different groups. Donaldson and Kylicka distinguish, for instance, between the following three groups of animals, defined in terms of their relation to humans:

* *Domestic animals* who are part of a mixed, interspecies society in which they are co-citizensof humans. Apart from basic rights (e.g. the right not be killed) these animals are embedded in a framework of duties and responsibilities. For instance, as citizens they have a positive right that the state facilitates mobility to give access to a range of options needed for a flourishing life, and a negative right against restrictions on mobility grounded in subordination.
* *Liminal* *animals* (e.g. pigeons, racoons, and rats) who rely on this mixed society, but do not take part in it. For instance, they share a territory, but do not engage in cooperative activities or form intimate friendships. Humans need to find a form of peaceful co-existence with them. They should be conceived of as denizens: permanent residents that have no interest in being part of our political community and lie outside our shared schemes of social cooperation. Accordingly, these animals do not have the same rights and duties regarding participation in communal life as co-citizens, although they still have rights of justice, especially concerning their physical integrity.
* *Wild animals* who mostly live outside of our interspecies society, and who are sovereign over their own territory. Humans should leave these creatures to themselves; intervention can only be legitimate if it simultaneously respects their sovereignty.

Note that the differential treatment propounded by Donaldson and Kymlicka is thoroughly non-speciesist, in the sense that it is the particular role of animals as members of an interspecies society, rather than their intrinsic moral status, that justifies bestowing different rights on them. Nevertheless, on their scheme there may still be a strong correlation between the biological species-membership of animals, and the treatment that should be accorded to them.

1. **Conservation Ethics**

While the ethical debate about speciesism partly revolves around abstract theoretical issues, such as the concept of moral status, it has several practical implications, for instance in conservation ethics. The current level of extinction rates on Earth is unprecedented (IPBES 2019) and global warming is likely to have a substantial impact on the lives of many animals over the next decades. This calls for human decision-making about how resources should be allocated for species preservation. In making these decisions a speciesist bias lures. Can an aesthetic human preference for preserving one species rather than another constitute a good reason to allocate more resources to a likeable species, than an unlikeable one? Can preferential allocation of resources to the conservation of certain ‘poster species’ be justified, if this preference is fueled by (non-anthropocentric) speciesist intuitions?

Additionally, there is the question of whether ‘species’, as a biological entity, should be given special consideration in the first place (Reydon 2019). It is not obvious why this should be the case. Conservation efforts may also be tailored to units at both higher and lower levels of biological hierarchy. Moreover, perhaps even more pressing than the risk of species-extinction is the sharp decline in abundance in wild populations. In terms of resource allocation, can efforts to maintain species diversity be legitimately prioritized over efforts to counteract the thinning of wild populations, which do not immediately go extinct?

Answering these questions brings out a tension between the fields of animal ethics and environmental ethics (Bovenkerk and Verweij 2016).While animal ethicists typically endorse the view that species-membership is merely a biological property, environmental ethicists typically regard species-diversity as a key determinant of the moral significance of wild populations. Similarly, conservation policy often rests, at least implicitly, on the assumption that species-membership is morally relevant. For instance, the IUCN Red List, which is the world’s leading inventory of global conservation status, focuses specifically on speciesat risk of extinction. Rationales for the allocation of resources in conservation policy tend to highlight species’ contributions towards a well-functioning ecosystem: prioritization is typically given to keystone species that fulfil important ecosystem services and are crucial to preserving functional diversity (Walker 1992). Additionally, species-diversity tends to be a key measure for biodiversity and for identifying biodiversity hotspots.

Speciesist critiques have a natural affinity to the field of animal ethics, whereas up until today, environmental ethicists have been decidedly less inclined to embrace the concept in scrutinizing conservation policies. This marks a genuine divergence between these ethical subfields, which may result in opposing policy advice on matters of conservation ethics. On the approach typically favored by animal ethicists, resource allocation on the basis of species-membership is likely to reflect speciesist prejudices. Moreover, species-centric conservation efforts may induce unnecessary suffering among individual animals. For instance, in order to save endemic species that are endangered, members of invasive species may have to be killed (Kahn 2018). While animal ethicist are likely to object to such killing, on the holistic approach favored by environmental ethicists it may be morally justified.

The role of speciesism in conservation ethics is a relatively recent topic, which has not yet received much attention in the scholarly literature. One reason why I have highlighted the topic here, and posed several of the questions it raises, is to illustrate that the ethical debate on speciesism is currently moving beyond practices factory farming and animal experimentation, which were the domains where critiques on speciesism originally emerged. Any domain that involves human-animal interactions is vulnerable to speciesist attitudes ­– though, especially in the realm of conservation ethics, it is a matter of debate whether the differential treatment of species might not be justified. This is an area where we are likely to see further progress in the debate on non-anthropocentric speciesism.

1. **Psychology of Speciesism**

Another recent dynamic of the discourse on speciesism has been the growing involvement of psychologists. Controlled psychological studies of human attitudes towards other species have taken off in earnest over the last decade or so, and the field is growing rapidly. Speciesism has been the focus of many of these experiments, which have overwhelmingly corroborated the widespread existence of speciesist tendencies. For instance, it has been found that humans feel greater discomfort at the thought of harming humans than the thought of harming chimps, dogs and frogs (Gray et al. 2007), that humans would rather have that the crash of an autonomous vehicle costs the live of a cat or dog than a human (Awad et al. 2018), and that humans experience greater inhibition to harming fellow humans than to harming non-human animals (Caviola et al. 2020). Also, while people tend to be reluctant to endorse harming a few humans in order to save a greater number of humans (i.e., humans tend to respond as deontologists), they are less reluctant to harm a few animals in order to save a greater number of animals, even if the few animals that are thereby scarified suffer greatly (Caviola et al. 2021).

Similarly, that humans tend to be non-anthropocentric speciesists is corroborated by various experiments. Researchers have found that harms inflicted upon animals for purposes of food production are typically regarded as permissible (Loughnan & Davies, 2020), that concern for farm animals like pigs and cows is less than concern for companion animals like dogs and cats (Leite et al., 2019), and that people are more concerned with the welfare of companion animals than that of wild animals (idem).

One caveat of these psychological findings, if presented as evidence for or against speciesism, is that differential treatment of animals need not be evidence of unwarranted bias. As we have seen, there can be plausible philosophical justifications for not giving all animals the same treatment. To label justified differential treatment as ‘speciesist’ can be misleading, all the more so since speciesism is frequently regarded as wrong by definition. Yet many psychologists differentiate between speciesism as a normative thesis and speciesism as a psychological attitude. This attitude is the construct that psychologists investigate. Hence, care is needed in interpreting psychological findings and their ethical implications.

A pressing question on which psychological research may shed further light is why speciesist attitudes are rampant in human societies. Plausibly, at least part of the answer is to be found in the evolved nature of human psychology, and the respective ease with which moral sentiments are extended to beings of different kinds. As the biologist E.O. Wilson (1984) famously argued, humans have a strong biophilia instinct: an innate love for life and nature. Yet our biophilic proclivities are not equally distributed: we are fond of some animals and fear others, and these preferences, while malleable to some extent, fuel our biases.

But other factors are likely to be at work as well. Caviola et al. (2019) have presented evidence that speciesism is a stable construct that correlates with a cluster of other forms of prejudice, such as racism, sexism, and homophobia, and suggest that similar mechanisms might underlie these forms of prejudice. Jaquet (2021) has argued that speciesist attitudes result from the cognitive dissonance of meat-eaters, a claim that gets support from further empirical studies. On the basis of this finding Jaquet advances a genealogical debunking argument, arguing that the cognitive origins speciesist attitudes detract from their moral justifiability. Note that although this is a normative argument, its success hinges on empirical matters, in particular, the claim that speciesist attitudes are borne out of cognitive dissonance. In this way psychological research can fuel the ethical debate.

1. **Conclusion**

Over the last half a century the speciesism debate has advanced and evolved. In the early days of the debate, the anthropocentric view that only humans are morally considerable, and all other creatures only have derivative moral status, was still commonplace. Nowadays, the moral considerability of different species is much more broadly acknowledged. Scientific findings as well as the discourse on speciesism have played a major role in this acknowledgement. The history of the debate suggests that the core notion guiding Ryder and Singer’s argument was along the right track: there is indeed a widespread attitude of bias favoring members of our own species over other animals. The empirical research that has taken place since the 1970s – both on human psychology and animal cognition – have cast some doubt on the presumption that humans have highly elevated cognitive abilities, unrivaled by other animals. Furthermore, the research of the last decades has revealed parallel reasoning in anthropocentric arguments and common forms of within-species discrimination (Figdor 2021), much like Ryder and Singer originally surmised.

As this chapter has brought out, ethical orientations are often intertwined with scientific findings. As new psychological findings continue to emerge, and as insights from ethology and animal cognitive science yield an ever better understanding of the lives of animals and their cognitive and social skills, the debate on speciesism will continue to advance. For instance, while there is a reasonable consensus among animal ethicists that all vertebrates qualify as sentient, work on invertebrates, especially insects,­ is faced with greater uncertainty. This is a topic on which not much work has yet been done, although serious ethical reflection on the treatment of insects is beginning to take footing (Mikhalevich and Powell 2020). Another topic, even more controversial, is whether non-animal species, such as plants, may be bearers of morally significant interests. How the speciesism debate will evolve will depend on ongoing empirical findings and phenomenological insights about these and other fellow creatures, including those of lesser-known and more distantly related varieties.

Empirical research, in turn, often relies on tacit conceptual and normative assumptions. Just like an awareness of sexist and racist biases has become an important focus in scientific practice, a further important question for scientists is to reflect on whether their own research might be speciesist, and whether this is a bias that can be corrected for. Plausibly, in furthering a “moral revolution” regarding human-animal relations, we are still at an early stage.

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1. Google NGram suggests a steady rise of book publications on speciesism, accelerating during the 1980s and around 2010: <https://books.google.com/ngrams/graph?content=speciesism&year_start=1950&year_end=2019&corpus=26&smoothing=3> [↑](#footnote-ref-1)
2. See the short mission statement of PETA, which explicitly refers to speciesism: <https://www.peta.org/about-peta/> [↑](#footnote-ref-2)