A Debunking Argument Against Speciesism

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This is a penultimate draft.
Please cite the published version that can be found here.

Abstract: Many people believe that human interests matter much more than the like interests of non-human animals, and this "speciesist belief" plays a crucial role in the philosophical debate over the moral status of animals. In this paper, I develop a debunking argument against it. My contention is that this belief is unjustified because it is largely due to an off-track process: our attempt to reduce the cognitive dissonance generated by the "meat paradox". Most meat-eaters believe that it is wrong to harm animals unnecessarily, yet they routinely and deliberately behave in ways that cause great unnecessary suffering to animals. As recent research suggests, this practical inconsistency puts them in an unpleasant state of dissonance, which they try to escape by resolving the paradox. And they do so in part by adopting the speciesist belief—if animal suffering matters much less than human suffering, then harming animals cannot be so wrong after all. In other words, people form the speciesist belief because it is psychologically convenient. Since this belief-forming process does not track moral truth, I conclude that we are not justified in believing that human interests matter more than the similar interests of non-humans.

Four decades ago, Peter Singer published *Animal Liberation* (1976). In what soon became an international best seller, he objected to discrimination on the basis of species membership—which he named "speciesism", by analogy with other types of discrimination such as racism and sexism. It is a banal observation that we refuse to treat human beings in all sorts of ways in which we routinely treat animals, Singer remarked. To mention just a few, virtually everyone agrees that it would be wrong to raise and slaughter human beings in order to produce (even humane) human meat, to run painful experiments on human beings without their consent in the name of science or to confine human beings in zoos or coerce them into performing circus acts for the sake of our entertainment. Clearly, we grant far more consideration to the interests of human beings than to the similar interests of non-human animals. On Singer's view, this form of favouritism is no more justifiable than granting more consideration to the well-being of white people than to the well-being of black people, or to the suffering of men than to the suffering of women. No difference between humans and other animals could possibly justify discrimination based on species, just as no difference between white and black people, or between men and women, could possibly justify discrimination based on race or sex.

Besides its notable impact on the general public, this uncompromising critique of our current attitudes to animals initiated a whole new field in moral philosophy,

animal ethics, in which speciesism remains a hot topic over forty years later. Still, as was perhaps unavoidable after such a period of time, the more recent contributions to this debate are largely replies to objections to previous replies to previous objections. In response to Singer's challenge, defenders of the status quo first pointed at allegedly morally relevant differences between humans and non-humans, such as rationality and self-consciousness; antispeciesists then replied that these differences are actually irrelevant, and that they do not separate *all* humans from *all* non-humans anyways; defenders of speciesism consequently had to refine their positions; but their opponents then refined their objections in turn; etc. At the end of the day, no clear consensus has emerged—or, at best, this one: no rejoinder to Singer's attack on speciesism has convinced many besides its author, and the challenge remains.

In this paper, I propose a novel perspective on this issue by developing a debunking argument against speciesism. The piece is structured as follows. In Section 1, I briefly describe the method that is generally used in moral philosophy and how this method has been applied to animal ethics since *Animal Liberation*. Next, in Section 2, I introduce the notion of debunking arguments—a kind of reasoning that has recently made a noticeable appearance in other areas of ethics and constitutes an important addition to the methodology previously discussed—and I sketch the broad structure of my debunking argument against speciesism. Since this argument is based on the phenomenon of cognitive dissonance, I then devote Section 3 to discussing cognitive dissonance theory, especially in relation to what psychologists call the "meat paradox". In Section 4, I defend an empirical claim about the relation between this phenomenon and speciesism, which I then harness in Section 5, where I spell out my debunking argument in more detail. Finally, Sections 6, 7, and 8 rebut three objections that could be raised against this argument.

1. The Methods of Ethics and the Debate Over Speciesism

One can hardly overstate the role intuitions play in ethics: there is a growing consensus among philosophers according to which they are and should be the building blocks of our moral thinking. Metaethical intuitionists acknowledge this point very explicitly when they contend that intuitions are to ethical beliefs and truths what perceptions are to perceptual beliefs and truths, the appearances on which we cannot but rely in forming our beliefs and our privileged access to the corresponding truths (Huemer 2005). But even philosophers who dismiss intuitionism regularly appeal to their intuitions in their moral thinking. Whether we like it or not, we take our moral intuitions into account.

In fact, the chief approach philosophers generally resort to when they address moral issues is the method known as "reflective equilibrium". Basically, we first gather our moral intuitions on a specific subject matter (our intuitions both about particular cases and about more or less general principles). Then we realize that these intuitions are mutually inconsistent, which unfortunately happens most of the time, as our intuitive judgments on particular cases rarely fit the general principles we accept initially. And finally we revise our beliefs until we get a coherent and otherwise satisfactory set of "considered moral judgments" or, in other words, until we achieve a reflective equilibrium (Rawls 1971). In this process, the least intuitive judgments are discarded. And this is just how it should be.

The debate over the existence of so-called “victimless crimes” nicely illustrates the nuts and bolts of this methodology. On the one hand, most people have the liberal intuition that an action can be wrong only if it affects someone negatively: insofar as an act of yours does not harm anyone, it seems to be no one else’s business. Yet, on the other hand, the very same people often intuitively judge that incest is wrong even when it does not harm anyone (Haidt 2001). But this pair of beliefs is plainly inconsistent: if harmless incest is wrong too, then not all wrong actions are harmful. Hence, in the process of achieving a reflective equilibrium, we should revise our initial set of moral judgments and dispense either with the belief that an action can be wrong only if it is harmful or with the belief that incest is invariably wrong. Alas, we cannot do justice to all our moral intuitions; the best that we can reasonably hope for is a reflective equilibrium.

The method of reflective equilibrium is widely used in animal ethics as well. To understand how, consider those biological differences that are completely unrelated to people’s interests, to their mental capacities and, more generally, to their psychologies—think, for instance, of differences in skin colour or sex differences. Most people have a strong intuition that such differences lack moral relevance. From the moral point of view, the fact that my skin is white rather than dark, for instance, does not mean that my well-being matters more than the well-being of a black person. Likewise the fact that I am a male rather than a female does not mean that my suffering matters more than the suffering of a woman. Merely biological differences are morally irrelevant, or so it appears to most of us. Let us call this the “egalitarian belief”. [1]

On the other hand, many people intuitively judge that human beings have a special moral status, that their interests, their well-being and their suffering are much more important than the comparable interests, well-being and suffering of other animals. So much so, in fact, that we find it morally admissible to raise and slaughter farm animals in order to produce meat and to run painful experiments on lab animals for the purpose of advancing scientific knowledge, while we would obviously object to inflicting the same treatments on human beings for similar reasons. Call the belief that there is a morally relevant difference between humans and other animals the “speciesist belief”.

Interestingly, the speciesist belief is inconsistent with the egalitarian belief. The only difference between all human beings and all non-human animals is membership in the human species. Certainly, humans and non-humans often differ in their psychological make-up—we are on average more rational and self-conscious than other animals. But a number of human beings are psychologically on a par with some non-human animals, or even inferior to them in those capacities—compare severely mentally disabled people with adult apes, for instance. So, these psychological differences do not separate *all* humans from *all*

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[1] This is not to say that all biological differences are morally irrelevant. Some biological properties do matter from the moral point of view, such as possession of a central nervous system complex enough to allow sentience. But these properties are not *merely* biological. They are morally relevant indirectly, because they ground morally relevant psychological properties, such as sentience. Only biological properties that do not ground psychological properties in this sense are considered irrelevant by the egalitarian belief.

non-humans. Now, the species difference is merely biological. It says nothing about the respective interests and cognitive capacities of humans and other animals, as testified by the existence of these non-paradigmatic humans. Membership in the human species is as merely biological a property as membership in the male or white-skin categories. Consequently, if the speciesist belief is true and there is a morally relevant difference between humans and other animals, then at least one merely biological difference is morally relevant, which is incompatible with the egalitarian belief. So, both beliefs cannot be true, and some revision is called for: we should either reject the egalitarian belief and concede that merely biological differences do sometimes matter ethically or give up the speciesist belief and concede that the interests of non-human animals matter just as much as our similar interests. In animal ethics as elsewhere, we cannot do justice to all our moral intuitions; the best that we can reasonably hope for is a reflective equilibrium.

In a nutshell, then, we must weigh the egalitarian belief and the speciesist belief against each other and choose that which gets more support from our intuitions and thereby wins on balance. Unfortunately, not everyone agrees on the outcome of this process. Defenders of speciesism concede that merely biological differences are generally irrelevant from the ethical point of view, but they are prepared to make an exception for membership in the human species: in their opinion, *Homo sapiens* deserve special consideration and treatment (Williams 2008; Cohen 1986; Kagan 2016). By contrast, opponents of speciesism hang on to the egalitarian belief and urge us to reject the speciesist belief (Singer 2016; McMahan 2016; De Grazia 2016).

2. Wide Reflective Equilibrium and Debunking Arguments

In moral methodology, an important distinction is sometimes drawn between narrow and wide reflective equilibriums (Daniels 1979; Sandberg & Juth 2011, p. 222; Tersman 2008, p. 397). A reflective equilibrium is narrow in the relevant sense if it includes only moral beliefs. In order to achieve such a state, one dismisses only those moral beliefs that clash with other, more intuitive moral beliefs. Thus, in the debate over the existence of victimless crimes, assuming that our intuition that even harmless incest is wrong is firmer than our intuition that an action can be wrong only if it is harmful, we must conclude that some harmless actions are wrong. A wide equilibrium, by contrast, will incorporate both moral and non-moral beliefs. And among the latter will figure beliefs about the causal origin of our moral intuitions, beliefs which will sometimes undermine these intuitions.

Imagine you discovered that you owe your belief that Napoleon lost Waterloo to the fact that you ingested a "Napoleon-lost-Waterloo" pill, a pill such that those who ingest it form the judgment that Napoleon lost Waterloo. This discovery should certainly affect your confidence that Napoleon lost Waterloo. Absent independent reasons to believe that he did, you should now suspend your judgment on that matter (Joyce 2007, p. 179). The lesson we can draw from this thought experiment is that, when we discover that we owe a belief to a process that does not "track truth" on the relevant matter, we thereby find out that this belief is unjustified (or it thereby becomes unjustified, depending on which side one stands on in the epistemological debate between internalists and externalists).

The same principle should hold *mutatis mutandis* with respect to moral beliefs. Imagine you realized that you owe your belief that incest is wrong to the fact that you ingested an "incest-is-wrong pill", a pill such that those who ingest it form the judgment that incest is wrong. This discovery should certainly make you question whether incest is wrong. Absent independent reasons to believe that incest is wrong, you should now suspend your judgment on that matter. Of course, this is only a toy example, but some philosophers have objected to our belief that incest is wrong along similar, although more realistic lines, arguing that this belief is due to another off-track process: evolution by natural selection (de Lazari-Radek & Singer 2012; Greene 2014). Because incestuous intercourse tended to increase the birth rate of malformed offspring in our evolutionary past, the belief that incest is always wrong (or, more plausibly, a strong negative attitude towards all incestuous relations, which later resulted in this belief) helped our ancestors to survive and spread their genes, and it was selected for as a result. But this belief (or the corresponding negative attitude) helped our ancestors in this way regardless of the wrongness of incest, meaning that it resulted from a process that doesn't track the ethical truth about incest. Accordingly, we should not take this belief too seriously in our moral thinking. More generally, when we discover that we owe a moral belief to a process that does not track ethical truths, we thereby find out that this belief is unjustified (or it thereby becomes unjustified).

In the philosophical literature, such arguments, which purport to discredit moral beliefs on the ground, not that they clash with other, more intuitive moral beliefs, but that their causal history shows them to be unjustified, are called "debunking arguments". They invariably have the following structure (Kahane 2011, p. 106):

(1) Our belief that P is explained by X.
(2) X is an off-track process.
(3) Therefore, our belief that P is unjustified.

As an illustration, consider again the debate over the existence of victimless crimes. In this debate, the debunking argument goes as follows:

(4) Our belief that incest is always wrong is explained by natural selection.
(5) Natural selection is an off-track process.
(6) Therefore, our belief that incest is always wrong is unjustified.

Assume that this belief is indeed produced by an off-track process, in line with premises (4) and (5), and that this means that it is unjustified, in line with conclusion (6). Insofar as the beliefs in (4), (5), and (6) are not moral beliefs, they would be excluded from a narrow reflective equilibrium. They would nonetheless figure in a wide equilibrium, in which the belief that incest is always wrong would then be granted much less weight.

Moral epistemologists usually agree that we should seek a wide reflective equilibrium rather than a narrow one. "Not all intuitions are created equal", as Michael Huemer puts it (2008, p. 391); some are perfectly trustworthy, whereas others are less so and should therefore be discounted in the process of achieving a reflective equilibrium. This seemingly innocuous notion must not be

underestimated, for it can unlock philosophical debates that started to look like dead-ends. As Guy Kahane remarks, “It is notoriously hard to resolve […] differences in intuition. And […] a belief’s aetiology makes most difference for justification precisely in such cases […]. Debunking arguments thus offer one powerful way of moving such disagreements forward” (2011, p. 108).

Surprisingly enough, this methodological consensus has not had much impact in animal ethics, where philosophers keep more or less assuming that a moral intuition is a moral intuition is a moral intuition, as if all appearances were equally trustworthy. What is true elsewhere, however, is likely to be true here as well: one can suspect that some of the most intuitive beliefs in the debate over speciesism are unjustified, and this may well constitute the key to unlocking this controversy. Building on that idea, I will now put forward a debunking argument against our speciesist belief, the belief that there is a morally relevant difference between humans and other animals. In other words, I will identify a process X such that the following argument holds:

(7) Our speciesist belief is explained by X.
(8) X is an off-track process.
(9) Therefore, our speciesist belief is unjustified.

If there is such a process, then we should take that fact into account in our attempt to achieve a wide reflective equilibrium in animal ethics, and consequently discount our speciesist belief.

3. Cognitive Dissonance and the Meat Paradox

Since the process I am thinking about has to do with the cognitive dissonance resulting from the meat paradox, I will now explain what cognitive dissonance and the meat paradox consist in.

Cognitive dissonance is the mental state that we experience when our behaviour conflicts with our beliefs.[2] Because this state is a source of psychological discomfort that interferes with effective behaviour, we generally do what we can to avoid it (Harmon-Jones & Harmon-Jones 2002). The possibilities are not unlimited, though. In order to escape cognitive dissonance, we must resolve the conflict that caused it, by making our beliefs and behaviour consistent, at least in appearance. Basically, we have to choose between two options: we must either change our behaviour so that it matches with our beliefs or change our beliefs so that they match with our behaviour. Only then can we go back to our ordinary occupations with a clear conscience.

Unsurprisingly given the limitations of human rationality, the behaviours that give rise to cognitive dissonance are widespread. Smoking is a well-known example. Most smokers have conflicting beliefs and behaviours: they believe that smoking is harmful and yet they smoke. This practical paradox puts them in a disagreeable state of cognitive dissonance, which they naturally try to eliminate. In order to do so, some smokers align their behaviour with their belief that smoking is harmful—they stop smoking. Others opt for the second alternative and rather

[2] Cognitive dissonance also arises when we hold mutually inconsistent beliefs. But I will not be concerned with such cases.

align their beliefs with their behaviour—they adopt new, comforting beliefs that don't conflict with smoking. For instance, they come to believe that smoking helps them to socialize, that there is no compelling evidence that smoking is harmful, or that dying of a lung cancer is actually not that bad, since everyone has to die of something anyway (Fotuhi et al. 2013). These are surely awkward beliefs, but if they were true smoking would not be bad for smokers all things considered. By adopting them, smokers have their paradox vanish, and with it the cognitive dissonance that it generates.

Another behaviour that is often associated with cognitive dissonance is meat consumption (Loughnan, Bastian, & Haslam 2014). Just like smokers, meat-eaters often have conflicting beliefs and behaviours. At some level, most meat-eaters believe that eating meat harms animals, that we do not need to eat meat (or as much meat as we currently do), and that harming animals is morally wrong unless it is necessary (Allen et al. 2002; Plous 1993)—three beliefs from which it is reasonably easy to draw the conclusion that eating meat is wrong. Yet, they also eat meat. This "meat paradox" (Bratanova, Loughnan & Bastian 2011) puts meat-eaters in a state of cognitive dissonance, which they naturally try to escape. In order to do so, some align their behaviour with their belief that eating meat is wrong—they stop eating meat. Most meat-eaters, however, opt for the other alternative and rather make their beliefs consistent with their behaviour—they adopt new, comforting beliefs that do not conflict with eating meat.

A number of studies thus indicate that meat-eaters embrace two different strategies in order to appease their dissonance when they face the meat paradox. First, they deny mental capacities to animals. In particular, they attribute them much fewer aptitudes: after eating beef than after eating nuts (Loughnan, Haslam & Bastian 2010); when they expect to eat meat than when they expect to eat fruits (Bastian et al. 2012); when they think of the origin of meat than when they don't (Bastian et al. 2012); and when they imagine being confronted with an ethical vegetarian than when they imagine being confronted with someone who is simply allergic to meat (Rothgerber 2014). The explanation is straightforward: if animals could not feel pain, entertain thoughts or remember their past, then it would arguably be impossible to harm them. Meat consumption would remain unnecessary but it wouldn't be wrong, because it would not harm animals. By adopting these beliefs, meat-eaters make their meat paradox disappear, and with it the cognitive dissonance that it generates.

The second strategy is to form the belief that eating meat is necessary after all. In particular, meat-eaters believe more in the necessity of eating meat when they imagine being confronted with an ethical vegetarian than when they imagine being confronted with someone who is allergic to meat (Rothgerber 2014). Here again, the explanation is straightforward: although eating meat harms animals, it wouldn't be wrong if it were necessary. By adopting the belief that it is, meat-eaters get rid of their dissonance.

4. Cognitive Dissonance and the Speciesist Belief

The psychologists who ran the studies mentioned in Section 3 focused on two specific effects of the dissonance resulting from the meat paradox. Unfortunately, in and of itself, the fact that meat-eaters resolve the paradox by dementalizing animals and by judging that eating meat is necessary for human health isn't

directly relevant to animal ethics—it says nothing about how they think we should weigh animal interests in comparison to *similar* human interests. Another possible effect would be more clearly interesting, though: one can imagine that people make more speciesist judgments when they face the meat paradox, because they experience cognitive dissonance.

Florian Cova and I tested this hypothesis in three empirical studies, all constructed on the same basic model. In each study, participants were recruited online and randomly assigned to one of two experimental conditions (a "control" condition and a "manipulation" condition). Each participant then filled an online questionnaire divided into three sections: questions about their meat-eating habits, where they were asked whether they ate meat and, if so, how often; a short vignette, followed by two comprehension questions; and 9 questions probing their speciesist belief[3] by asking them to rate their agreement with a target statement (e.g. "We should always elevate human interests over the interests of animals," "When human interests conflict with animal interests, human interests should always be given priority," or "Animals shouldn't be granted the same rights as humans with comparable mental capacities") on a scale ranging from 1 (= Strongly disagree) to 6 (= Strongly agree).

The first questionnaire, about our participants' meat consumption, had two functions. First, it allowed us to exclude vegetarians. Second, it led our participants to think about their behaviour, making it mentally salient and preparing the forthcoming induction of cognitive dissonance. Dissonance was then induced through a short vignette in the second step. In all studies, the participants in the manipulation group were presented with a vignette that highlighted *ethical* reasons not to eat meat, with a particular emphasis on the harm done to animals. Presenting the participants with ethical reasons not to eat meat just after having them think about their meat consumption was supposed to induce cognitive dissonance. In contrast, the control participants were presented with a vignette containing no reference to ethical reasons to avoid meat, in order not to induce dissonance. Thus, in Study 3, our participants in the manipulation group were presented with the following vignette:

> According to some people, we should stop eating meat for ethical reasons. Their main argument is quite straightforward. First, it is wrong to harm and kill animals without necessity. Animals should not be made to suffer or slaughtered unnecessarily. This is basic common sense. Second, eating meat involves harming and killing animals. Indeed, livestock animals suffer as a result of overbreeding, from dreadful conditions on farms, during transportation and in the slaughterhouse. And of course they are eventually killed. Finally, eating meat isn't necessary for us, as we can live perfectly healthy lives without ever ingesting animal proteins. As stated in the American Dietetic Association's official position on vegetarian diets, when appropriately planned, such diets are perfectly adequate from a nutritional viewpoint. In short, since eating meat

[3] Among a series of 15 questions presented in a randomized order. The other 6 questions probed their beliefs about animals' ability to feel pain and the necessity to eat meat.

involves harming and killing animals and is unnecessary, it is unethical. We should all go vegetarian.

By contrast, the participants in the control group were invited to read the following vignette:

> According to some people, we should eat much less meat for health reasons. As stated by the American Dietetic Association, "appropriately planned vegetarian diets, including total vegetarian or vegan diets, are healthful, nutritionally adequate, and may provide health benefits in the prevention and treatment of certain diseases […] The results of an evidence-based review showed that a vegetarian diet is associated with a lower risk of death from ischemic heart disease. Vegetarians also appear to have lower low-density lipoprotein cholesterol levels, lower blood pressure, and lower rates of hypertension and type-2 diabetes than non-vegetarians. Furthermore, vegetarians tend to have a lower body mass index and lower overall cancer rates. Features of a vegetarian diet that may reduce risk of chronic disease include lower intakes of saturated fat and cholesterol and higher intakes of fruits, vegetables, whole grains, nuts, soy products, fiber, and phytochemicals."

In Study 1, we used a very similar design, with the exception that arguments for ethical or health-based vegetarianism were presented indirectly through the description of an imaginary character, vegetarian for either ethical or health-related reasons. Study 2 took a slightly different approach by contrasting a description of livestock living conditions and suffering with a description of grain cultivation.[4]

In all three studies, our hypothesis was that inducing cognitive dissonance would lead the participants in the manipulation condition to endorse speciesist statements more than the participants in the control condition.[5] Our results for all three studies (Figure 1) can be seen to confirm this hypothesis: meat-eaters endorsed speciesist beliefs more strongly when they were confronted with the ethical implications of meat consumption. As in the previous experiments, the reason is straightforward: if the interests of animals did not matter, or mattered much less than the like interests of human beings do, then harming animals would be morally tolerable even though it is not necessary. Meat consumption would remain harmful and unnecessary, but it would not be wrong after all. By adopting speciesist beliefs, meat-eaters thus make their meat paradox disappear, and with it the cognitive dissonance that it generates.

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[4] All materials and data are publicly available at https://osf.io/kv7b6/?view_only=63d40ee8e578412a95bdfd7a9967eda8

[5] For Studies 2 and 3, our hypotheses were pre-registered on the Open Science Framework (see link above).

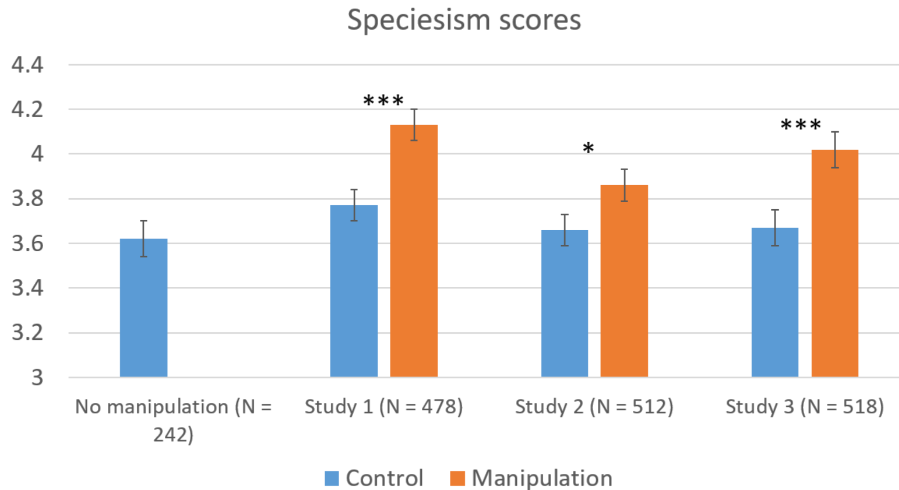

Figure 1. Participants' speciesist scores in all three studies, depending on condition (control vs. manipulation). The scores were computed by averaging participants' agreement with 9 statements (some reverse-coded) and can theoretically range from 0 to 6. For each study, we compared participants' scores in both conditions using Welch t-tests (*$p < .05$, ***$p < .001$). The "No Manipulation" bar on the far left indicates speciesist scores for participants who were simply presented directly with speciesist statements, without the meat consumption questionnaire or the vignette.

5. Back to the Armchair

What can we do with these empirical data in terms of philosophical argument? Now that we know what cognitive dissonance is and what effects it has on our moral beliefs, one possibility is to substitute "our attempt to reduce cognitive dissonance" for the variable X in our debunking argument against speciesism:

(10) The speciesist belief is explained by our attempt to reduce cognitive dissonance.
(11) Our attempt to reduce cognitive dissonance is an off-track process.
(12) Therefore, the speciesist belief is unjustified.

This argument is quite compelling. Its first premise is supported by the three studies reported in the previous section: as we saw there, meat-eaters hold speciesist beliefs more strongly when they face the meat paradox and experience cognitive dissonance as a consequence, which is just another way of saying that their attempt to reduce dissonance explains their speciesist judgments.[6] The second premise is extremely plausible too. Cognitive dissonance reduction is manifestly not a process that tracks the truth about how we should treat animals. To put it bluntly, a moral judgment that is caused by such a phenomenon is very much like a moral judgment that is caused by the ingestion of a belief pill; it is due to a distorting influence, a factor that is unrelated to its truth.

The speciesist belief should consequently be suspended in the process of reaching a wide reflective equilibrium in animal ethics, because the belief that we

[6] Not quite so, as we shall see shortly. I nonetheless assume that it is, for the sake of presentation.

owe it to an off-track process would figure in such an equilibrium. This is especially true since one can reasonably expect meat-eaters to experience cognitive dissonance when they do animal ethics. Indeed, animal ethics is a context in which the legitimacy of meat consumption is constantly questioned, and the meat paradox especially salient. When they do animal ethics, meat-eaters are repeatedly confronted with ethical vegetarians (like our subjects in the first study), with reminders of the way in which animals are treated in the meat-production process (like our subjects in the second study), and with ethical arguments for vegetarianism (like our subjects in the third study). It is therefore very plausible that their speciesist beliefs stem largely from their cognitive dissonance.

Now, exactly what implications does this have for the debate over speciesism? As Victor Kumar and Joshua May observe, "if there is a tension among a set of beliefs and we find out that one subset is unjustified, then that lends support to the other subset" (2018, p. 28). We are precisely in such a situation. Remember that two general beliefs are in conflict in this debate: the egalitarian belief (according to which merely biological differences are ethically irrelevant) and the speciesist belief (according to which there is a morally relevant difference between humans and other animals). And these beliefs are mutually inconsistent, for the only difference between all humans and all non-humans—viz., membership in the human species—is merely biological. So far, the debate was stuck in an impasse, as proponents and opponents of speciesism simply weighed these judgments differently. But we now have reasons to believe that the speciesist belief is unjustified, meaning that it shouldn't weigh in the balance. As a result, the egalitarian belief is the only remaining contestant, and it prevails by forfeit. If all this is correct, then we can legitimately conclude that the interests, the well-being and the suffering of non-human animals matter no less than the comparable interests, well-being and suffering of human beings. Discrimination on the basis of species membership is in the end just as wrong as racism and sexism.

In the remaining sections, I will discuss three objections that could be raised against this argument. The first objection is addressed at premise (10), which it accuses of assuming more than the empirical data actually support. The second charge targets premise (11), contending that our attempt to reduce cognitive dissonance might actually track moral truth in this specific case. Finally, the third objection grants both premises of the debunking argument but resists its conclusion, insisting that our speciesist belief could still receive independent support. In case such support could be provided, our debunking argument would prove powerless against speciesism.

6. Strong Premise, Weak Data

A first worry that the debunking argument could trigger is that the three studies mentioned above do not suffice to establish its first premise. To be sure, our results show that the speciesist belief is *somewhat influenced* by cognitive dissonance. Still, they don't demonstrate that it is *mainly explained* by cognitive dissonance. One might even argue that they prove the contrary: as a matter of fact, our control subjects gave speciesist answers too, although their answers were less speciesist than those of our manipulation subjects. Yet, they were not supposed to experience dissonance—wasn't this the whole point of the manipulation? If people who do not experience dissonance still make speciesist judgments, then the

speciesist belief cannot be mainly explained by an attempt to reduce dissonance. Worse: maybe it is initially formed via a truth-tracking process.[7]

It must be acknowledged that cognitive dissonance is not the only cause of our speciesist belief—this should come as no surprise, since no belief's origin can be traced to a single cause. The question, really, is how much dissonance can explain. That being said, this objection invites two rejoinders. First, one might concede that the data support only a claim much weaker than premise (10)—or indeed that they are inconsistent with this premise. One would then insist that the weaker claim, according to which our speciesist belief is somewhat influenced by dissonance, is nonetheless strong enough to lessen this belief's justification. On this line of argument, provided that a belief is shaped by a factor that is unconnected to its truth, this belief is epistemically weakened, whether or not it is primarily explained by this factor (Kumar & May 2018, p. 32). Accordingly, the findings reported in Section 5 reduce the speciesist belief's justification even though they don't show this belief to be unjustified.

More ambitiously, the second rejoinder consists in saying that cognitive dissonance is the main cause of the speciesist belief. The objector draws the opposite conclusion because they assume that our participants in the control condition didn't experience dissonance. But this assumption is questionable. All the participants whose answers are discussed above are meat-eaters. Those in the control condition therefore face the meat paradox too: just like their counterparts in the manipulation condition, they eat meat even though they believe that eating meat unnecessarily harms animals and that harming animals is wrong unless necessary. As a consequence, they must experience dissonance too. What we did via the manipulation wasn't to *create* dissonance in our participants by confronting them to the meat paradox; we merely *increased* a dissonance that was already there by rendering the paradox more salient. But then, their dissonance probably had an effect on their speciesist beliefs too, since we know (from the experiment) that cognitive dissonance increases speciesist beliefs.

On top of these intuitive considerations, there is cumulative evidence that meat-eaters experience cognitive dissonance constantly. Psychologists have for example found that the more people eat meat, the more they deny that animals feel pain the way we do and that animals suffer in the slaughterhouse (Rothgerber 2013). It was also observed that people attribute fewer mental abilities to the animals whose flesh they eat (Bastian et al. 2012). In the same vein, a more in-depth analysis of the studies discussed in Section 4 revealed that the more participants ate meat, the more they dementalized animals, believed that eating meat is necessary and agreed with speciesist statements.[8]

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[7] Kumar and May raise analogous objections against Walter Sinnott-Armstrong's debunking argument targeting moral intuitions that are sensitive to framing effects (2018, pp. 32-33) and against Daniel Kelly's debunking argument targeting moral beliefs that are caused by disgust (2018, pp. 33-34).

[8] Pooling participants of all three studies together—but excluding vegetarians, who might be artificially driving the correlations—we found a significant correlation between frequency of meat consumption and speciesism scores: $r(1508) = .17$, $p < .001$, dementalization of animals_$r(1508) = .17$, $p < .001$, and belief that eating meat is necessary: $r(1508) = .43$, $p < .001$. These correlations held even when

Some of the evidence that meat-eaters experience dissonance constantly directly supports the claim that dissonance is the primary cause of their speciesist beliefs. Thus, countless common-sense observations suggest that people do not hold speciesist beliefs in specific areas in which their behaviour doesn't harm animals. They are for instance vehemently opposed to cockfights, bullfighting, whaling, hunting safaris, and dog-meat festivals, unless they partake in these activities. Our studies corroborated this everyday observation: according to the data we collected, vegetarians do not hold the speciesist belief. Besides the subjects mentioned so far, 81 vegetarian participants took part in our experiments, and their scores on the speciesism scale were extremely low as compared to those of meat-eaters—their mean result corresponded to the answer "rather disagree" (with the speciesist statements). This suggests not only that our meat-eater participants experienced cognitive dissonance, but also that their speciesist beliefs were mainly caused by dissonance—indeed, the difference between our control subjects and our vegetarian participants is easily explained by the former's dissonance. All in all, it looks very much like meat-eaters form the speciesist belief because they experience dissonance.

Because this is only correlational evidence, however, one might object that the causal relation actually goes the other way round, that people behave as they do because of the beliefs they hold in the first place. On this interpretation, people don't eat dog meat or hunt whales but they eat pork *because* they believe that dogs and whales have a moral standing that pigs lack. They eat more or less meat *because* they ascribe more or fewer mental capacities to animals and believe more or less strongly that eating meat is necessary. And, more to the point, they eat (more or less) meat *because* they hold the speciesist belief (more or less strongly). So, we still lack a compelling demonstration that meat-eaters experience dissonance in their everyday lives, that our control participants did during the experiment, and a fortiori that meat-eaters would not hold the speciesist belief in the absence of dissonance. Premise (10) remains unsupported.

This alternative interpretation of the data would be appealing did it not fail to account for other well-documented phenomena. A noteworthy case is that of species used in multiple ways. People who enjoy the benefits of one use but not of another grant the animals in question different moral standings depending on context. For instance, whereas they tend to reject speciesist beliefs toward bulls and roosters when they contemplate bullfights and cockfights, they tend to condone the discrimination of calves and chickens when they think about meat. The moral status we ascribe to animals depends not as much on their objective properties as it does on our subjective motivations (Marcu, Lyons, & Hegarty, 2007). This is further evidenced by the observation that, while we treat the intelligence of animals as relevant to their moral status when their interests align with ours, we neglect it as soon as their interests conflict with ours. In a thought-provoking study (Piazza & Loughnan 2010), researchers manipulated the intelligence of pigs and tapirs. This piece of information influenced the participants' judgments of moral standing about tapirs but left their judgments about pigs unchanged. Not that these subjects took the intelligence of pigs to be

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keeping only control participants, who were not exposed to dissonance-inducing vignettes (r respectively: .19, .14, and .37).

morally irrelevant—in the abstract, they did believe that it mattered. But they did not adjust their moral beliefs after learning how smart these animals are.

These findings disprove the claim that our beliefs involving animals are formed independently of the behaviours they purport to justify. On the contrary, they support the idea that cognitive dissonance causes the dementalization of animals, the idea that eating meat is necessary and, in accordance with premise (10), the speciesist belief.

7. A Non-Debunking Interpretation

A second concern has to do with premise (11). Certainly, beliefs that are caused by an attempt to reduce cognitive dissonance directly—that is, without the mediation of a truth-tracking process—are unjustified. Cognitive dissonance might nonetheless happen to cause beliefs indirectly, e.g. via a process of rational thinking. In such cases, it would appear not to undermine the epistemic status of these beliefs.

By way of illustration, consider once again the case of smokers. As mentioned earlier, some smokers form the belief that smoking helps them to socialize as a result of their cognitive dissonance. The usual interpretation is that they form this belief simply because it makes their belief set consistent with their behaviour. One might, however, propose an alternative explanation: their dissonance urges them to question their behaviour and, after a moment's thought, they come to the realization that smoking improves their social skills. After all, this belief is not completely far-fetched: maybe it *is* easier to make friends with someone once you've asked them for a light (or have some charisma). Could it be that, in an analogous way, meat-eaters' dissonance urges them to question their behaviour and that, after a moment's thought, they rationally form the belief that animal suffering matters less than human suffering? Nothing I have said hitherto excludes this non-debunking hypothesis. An episode of cognitive dissonance might initiate a process of moral thinking, which would then result in the speciesist belief.

One reaction to this objection that will clearly not do the trick consists in denying that rational thinking could have led to the speciesist belief because, by contrast with the belief that smoking helps smokers to socialize, this belief is implausible. Such a move would plainly beg the question: that the speciesist belief is implausible is the upshot of the debunking argument; it cannot be assumed from the start. Nevertheless, two more promising answers are available. To begin with, one may acknowledge the possibility that the speciesist belief results from a deliberative process while emphasizing that this doesn't weaken the argument significantly. Until we can establish the non-debunking hypothesis empirically, it remains fairly plausible that meat-eaters form their speciesist belief as a direct result of their dissonance, simply because it makes their beliefs and behaviour consistent. And, as long as this debunking hypothesis is more than a mere possibility, we should not take our speciesist belief at face value.

But we can go further than this modest reply. For we do actually have reasons to doubt that the speciesist belief results from a truth-tracking, rational process. Compare the case of smokers again. It is true that smokers who form the belief that smoking helps them to socialize could in theory form this belief on the basis of a rational process provoked by cognitive dissonance. Still, they could hardly reach the conclusion that smoking is harmless (as the subjects did in the studies

mentioned in Section 3) via such a process—they definitely cannot form this nonsensical belief by reasoning correctly. But then, assuming that their cognitive dissonance initiates an irrational, off-track process in the latter case, it probably does so in the former case as well. In light of how smokers come to believe in the lack of compelling evidence that smoking is harmful, it is unlikely that they form their belief that smoking helps them to socialize through an episode of rational thinking. This could happen in principle, but to insist that it does would be perfectly *ad hoc*.

The same considerations apply to the case of meat-eaters. In theory, one can of course imagine someone forming the belief that animal suffering matters less via a truth-tracking, rational process. Be that as it may, meat-eaters hardly arrive at the conclusions that animals do not feel pain and that eating meat is necessary (as the subjects did in the studies mentioned in Section 3) via such a process—they definitely do not form these dubious beliefs by gathering evidence and reasoning correctly. But then, assuming that their cognitive dissonance initiates an off-track process in the latter case, it probably does so in the former case as well. In light of how meat-eaters come to deny mental capacities to animals and to believe that meat is indispensable to human health, it is unlikely that they form their belief that animal suffering does not matter in an epistemically exemplary manner. This could happen in principle, but to insist that it does would be perfectly *ad hoc*.

Admittedly, these considerations constitute only defeasible support for the claim that cognitive dissonance causes our speciesist belief directly rather than via a rational process of moral deliberation. Some additional empirical work could well disprove this claim. But, in such empirical matters, defeasible support is all we can offer anyway. Absent evidence in favour of the non-debunking hypothesis, it is safe to presume that cognitive-dissonance reduction is an off-track process, in line with premise (11).

8. Independent Evidence

Debunking arguments often face the following objection: a judgment that has its source in an off-track process, though it is thereby shown to be unjustified, could still be supported by independent reasons. Thus, you may well believe that Napoleon lost Waterloo because you ingested a belief pill, an off-track process if ever there was one. For all that, you could find independent evidence for this belief and, if you did, then your belief would become justified. The same could be said about the speciesist belief. Meat-eaters may well believe that animal suffering matters less than human suffering because of their cognitive dissonance, an off-track process too. Still, this belief would become justified should they find independent grounds for it. In brief, the debunking argument establishes that the speciesist belief is unjustified only in the absence of independent evidence.

Let’s grant that debunking arguments against a belief work only insofar as the belief in question cannot be justified independently and that this applies in particular to the speciesist belief. This is worth stressing because, as a matter of fact, arguments have been developed in favour of this belief. Philosophers have for instance argued that humans deserve more consideration because they belong to *our* species (Williams 2008) or because they belong to a natural kind whose typical members are persons (Cohen 1986). What is startling about these arguments, however, is that we take their premises to be true—to the extent that

we do—because they support our speciesist intuitive belief. In and of itself, the principle according to which everyone should favour members of their own species isn't especially intuitive. Neither is the principle according to which the interests of those who belong to a natural kind whose typical members are persons matter more than the like interests of those who don't. It is true that some philosophers adhere to these principles *on reflection*, but they appear to do so only because these principles vindicate their intuition that the interests of humans matter more than the like interests of other animals.

In principle, there would be nothing wrong about such reasoning, which is just how the method of reflective equilibrium says it should be: some principles and theories are justified because they make sense of claims that we take to be true, claims that are deeply intuitive. Yet, provided that these principles and theories derive their strength from the intuitive appeal of the claims they support, they do not constitute *independent* evidence for these claims. If the claims in question are unjustified absent independent support, then so are these principles and theories. In sum, while there are arguments in favour of the speciesist belief, these arguments do not constitute independent support, and they are undermined as a side effect of the debunking argument. The speciesist belief consequently remains unjustified.

9. Conclusion

The debate over speciesism has long resembled an epic battle of intuitions. For a while now, defenders of speciesism have stuck to their intuition that humans deserve more respect than other animals, whilst their opponents hang on to the belief that merely biological differences do not matter from the moral point of view. Such battles being notoriously difficult to win, the state of the art in animal ethics looks more and more like a stalemate.

But this predicament is not inescapable. For some intuitions are less trustworthy than others, and we can establish which by investigating their respective causal histories. In the present case, we have some evidence that the speciesist belief is primarily explained by the cognitive dissonance that meat-eaters experience due to the meat paradox: at the bottom, meat-eaters judge that the interests of non-human animals matter less than those of human beings because this allows them to continue eating meat with their conscience clear. Since this is a questionable belief-forming process to say the least, I have argued that the speciesist belief is unjustified. This leaves us with the egalitarian belief, and its antispeciesist implication: ethically speaking, all animals are equal.

Acknowledgments Martin Gibert, Oscar Horta, Benjamin Matheson, Jussi Suikkanen, Alastair Wilson, and two anonymous reviewers gave me precious feedback based on previous drafts of this paper. A special thanks goes to Florian Cova for his invaluable help during all stages of revision. I am also grateful to audiences at the University of Birmingham's Department of Philosophy, at the Irish Philosophical Society Annual Conference 2017 and at the Society for Applied Philosophy Annual Conference 2018. Finally, I would like to thank the Swiss National Science Foundation and the Swiss Center for Affective Sciences, whose financial support made this work possible.

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