

# Rejecting Empathy for Animal Ethics

T. J. Kasperbauer

Accepted: 18 December 2014 / Published online: 28 December 2014  
© Springer Science+Business Media Dordrecht 2014

**Abstract** Ethicists have become increasingly skeptical about the importance of empathy in producing moral concern for others. One of the main claims made by empathy skeptics is a psychological thesis: empathy is not the primary psychological process responsible for producing moral concern. Some of the best evidence that could confirm or disconfirm this thesis comes from research on empathizing with animals. However, this evidence has not been discussed in any of the prominent critiques of empathy. In this paper, I investigate six different empirical claims commonly made about empathy toward animals. I find all six claims to be problematic, though some are more plausible than others, and argue that empathy is indeed not psychologically central to producing moral concern for animals. I also review evidence indicating that other moral emotions, particularly anger, are more strongly engaged with producing moral concern for animals, and are thus more capable of achieving various normative aims in animal ethics. The conclusion of my argument is that empathy should lose its currently privileged place.

**Keywords** Empathy · Moral psychology · Animal ethics · Emotions · Anger

## 1 Introduction

A source of frustration for animal ethicists (as well as many animal advocates) is persisting apathy in the face of obvious moral harms done to animals. The remedy often recommended for this problem is to emphasize and promote *empathy* in human moral psychology.<sup>1</sup> For instance, we might think apathy results from a failure to understand what it feels like to be an animal under blighted conditions. Maybe dogs kept in kennels all day, pigs whipped and prodded on their way to slaughter, immobilized chickens in battery cages, monkeys forced to

---

<sup>1</sup>The role of empathy in moral judgment and action has seen something of a revival in recent years, among both philosophers and psychologists (e.g., Coplan and Goldie 2011; Held 2006; Howe 2013; Oxley 2011; Slote 2007, 2010; Stueber 2006, 2012). This has been the case in animal ethics as well. Notably, the increased emphasis on empathy in animal ethics has been quite rigorously tied to new empirical studies in cognitive science. Lori Gruen (2009, 2012) and Elisa Aaltola (2012), for instance, both draw heavily from the latest research in cognitive science to advance their own theories of how empathy improves moral treatment of animals. This stands in contrast to earlier writings on empathy and animal ethics (e.g., Donovan 1996; Luke 1995; Shapiro 1994).

T. J. Kasperbauer (✉)  
Department of Food and Resource Economics, University of Copenhagen, Rolighedsvej 25,  
1958 Frederiksberg, Denmark  
e-mail: tjk@ifro.ku.dk

perform tricks for movie producers, and predatory animals confined to small glass-encased rooms for zoo audiences could all be avoided if people just understood what it felt like to be in such circumstances. Perhaps empathy can provide this sort of insight.

My argument here will be that empathy should not have a privileged role in our theorizing about animals. My argument is based on the rejection of the idea that empathy is *central* to moral concern. The centrality thesis, as I will call it, is a psychological claim: empathy is the main psychological process responsible for producing moral concern for animals. Moral concern, as I understand it, consists of being attentive to another's positive well-being. This can be expressed in action or attitude. For instance, worrying that feral cats in my neighborhood are not having their basic needs met is an expression of moral concern, as is actively providing these cats with food and water. The basic claim of the centrality thesis is that empathy motivates the formation of positive attitudes and protective behaviors toward animals better than any other emotion or psychological process. Ultimately I deny that that this is true; I reject the centrality thesis. I argue that other moral emotions, particularly moral anger, are more strongly engaged with producing moral concern for animals, and are thus more helpful than empathy in achieving various normative aims in animal ethics.<sup>2</sup>

To make my case against the centrality of empathy, I investigate six different empirical claims commonly made about empathy toward animals: (1) empathy predicts moral concern for animals (Aaltola 2012; Donovan 1996; Gruen 2009; Luke 1995; Sevillano, Aragonés, and Schultz 2007; Shapiro 1994), (2) high levels of moral concern for animals are caused by high levels of empathy (Gruen 2004; Signal and Taylor 2007), (3) empathy toward animals causes empathy toward human beings (Ascione 1992, 2008; Munro 2005), (4) cruelty toward animals is caused by a lack of empathy (Aaltola 2012; Ascione 1999; Fox and McLean 2008), (5) empathy expands our moral concern to outgroups (Gruen 2009, 2012; Solomon 1999), and (6) empathy motivates us to act on our moral duties to animals (Aaltola 2012; Berenguer 2007). If the empirical evidence fails to support these claims, then it is not clear how empathy could be central to showing moral concern for animals. I find all six claims to be problematic, though some are more plausible than others.

First, however, I will attempt to get clear on what empathy means and which features of empathy are most relevant to showing moral concern for animals. The first section will take on this task. After laying out what I take empathy to be and how it functions with respect to animals, I will address each of the six empirical claims in turn.

## 2 What is Empathy?

The most crucial element of empathy is emotion-sharing. The functional aim of empathizing is to share in the emotions of another, or what is sometimes called vicarious emotion, emotional transfer, or affective resonance. Though high-level cognition can influence this process in various ways, most psychologists and neuroscientists agree that empathy is largely automatic and unconscious. For instance, empathy is often described in terms of emotional contagion, or the rapid, unconscious sharing of emotions that results from observing another's emotional

<sup>2</sup> My analysis is similar in nature to Jesse Prinz's (2011a, 2011b) arguments against the *necessity* of empathy for moral concern (particularly with respect to human beings). For instance, he asks, without empathy, will we will judge animals negatively and deny their needs? Without empathy, can we meet our moral duties toward animals? These questions provide the background to my investigation. I more directly address the question of centrality, which is slightly different. Even if empathy is not necessary for morality, we still might think that it is much more important than any other moral emotion. For instance, perhaps it is empathy that primarily determines positive evaluations of animals, even if other routes to positive evaluations exist as well.

expressions (Hatfield et al. 2009; Klimecki and Singer 2013; Prinz 2011b). Typical examples of emotional contagion are instances where we see someone smile or frown and cannot help but feel happy or sad ourselves. To be clear, empathy is not *reducible* to emotional contagion but is best characterized by the automatic emotion-sharing that results from the contagion process.

It is also important to distinguish the *process* of empathy from the *results* of empathy. Emotion-sharing, as I have just described it, best characterizes the *process* of empathy. The intentional object of empathy is to share in the emotions of another, even if this fails to actually result in emotion-sharing. We can see this by looking at cases where people empathize with entities that do not plausibly even have emotions, like trees, ecosystems, and mountains (Schultz 2000). In such cases, people show increased concern for the entities in question and claim to feel a change in emotion (Tam 2013). There are no success conditions based on the accuracy of the results here; it is nonsensical to ask whether people are actually sharing in the emotions of these entities. Yet clearly people are engaging in the process of empathy. If brain images could be compared, for instance, of someone in the process of empathizing with a mountain and someone empathizing with another human being, and the images indicated identical emotion activation, it's not clear why we shouldn't call both processes true empathy.

The *results* of empathy are the emotions elicited by aiming to share the emotions of another. Again, these need not result from conscious activities. Emotional contagion, for instance, sometimes elicits emotional activation that is incongruent with the target's emotions (e.g., if I confuse tears of joy with tears of sadness), thus failing to result in true emotion-sharing. Similarly, if we turn our attention to animals' living conditions (e.g., a pig's farrowing crate), and our empathy system is engaged, we should experience, emotionally, what it would be like to live in those circumstances. The emotions we experience may bear no resemblance to what the pig is actually feeling, and thus do not constitute emotion-sharing, but we are nonetheless empathizing.

A traditional challenge in providing an account of empathy toward animals is determining whether we are truly sharing their emotions or instead projecting our emotions onto them (e.g., Holton and Langton 1999). Most accounts of empathy in the case of human beings address this problem by limiting legitimate empathy to *accurate* sharing of emotions, where this excludes self-projection (Coplan 2011; Darwall 1998; Goldman 1993). However, because it is difficult to provide success conditions for this process, empathizing with animals appears to be a deficient form of the real thing—certainly not something capable of providing moral insights.

My definition of empathy as emotion sharing, by contrast, takes into account a wide variety of emotional understandings that arise out of contemplating the lives of animals. I see empathy toward animals as legitimate empathy, worthy of the attention of ethicists, and want to include all evidence that might speak in favor of its centrality in producing moral concern. I see this as a benefit of my account of empathy: the more capacious my conception of empathy, the more interesting my rejection of the centrality thesis becomes. This makes my task more difficult, but if I am successful the implications are also thereby more significant.

The studies I will be examining primarily attempt to elicit what is called cognitive empathy, or empathy that comes about from actively imagining what another person is feeling. For example, the empathy prompt in much of Daniel Batson's classic work on empathy (which will be discussed in more detail below) is phrased, "try to imagine how [the target of empathy] feels about what has happened and how it has affected [the target's] life." This is not inconsistent with my definition of empathy as emotion sharing, because the ultimate aim is still to elicit emotion sharing. Researchers pursue different strategies in eliciting empathy, but all of the studies discussed below involve emotion sharing, and my goal is to explore whether this is the primary factor in producing moral concern for animals.

### 3 Empirical Claims of the Centrality Thesis

The six claims I will explore are meant to capture the most perspicuous empirical hypotheses about how empathy is related to producing moral concern toward animals. I will reject the idea that empathy is central to morality, but the argument will not come easily. There are indeed some convincing experimental demonstrations of the role of empathy in moral judgment. My main argument is that in many of these experiments we can identify other non-empathic processes that better explain the relevant phenomena. I will also identify other emotions that appear to be more central to our moral response to animals.

#### 3.1 Empathy Predicts Moral Concern Toward Animals

If empathy is central to producing moral concern for animals, then at the very least we should find a *positive statistical correlation* between empathy and moral concern for animals. This should be the case either for dispositional empathy (as an enduring trait) or occurrent empathy (as elicited by experimental factors). Dispositional empathy, for instance, does indeed predict helping behaviors toward other human beings (Davis et al. 1999), so perhaps a similar relationship exists with animals. I think that such a relationship *does* exist, but it is not strong enough to support the centrality thesis.

Consider first an experiment by Sevillano, Aragonés, and Schultz (2007), whose findings are characteristic of other research on empathy and attitudes to animals. They measured both dispositional and occurrent empathy. Like much of the classic research on empathy (e.g., that of Daniel Batson), participants received one of two prompts to complete their task. They were asked either to remain neutral and objective or to take the target's perspective and to think about how the target feels (as discussed above).

Participants were shown ten photos of animals, five of which depicted animals being harmed (e.g., a seal caught in a fishing net) and five just of animals in nature (e.g., a rhinoceros on a savannah). Participants' level of concern for the environment was also measured. Results showed that neither dispositional empathy nor the empathy prompt, taken on their own, correlated with concern for the environment. However, when those who received the empathy prompt *also* saw the photos of animals being harmed, they *did* express increased concern for the environment (which is also consistent with previous studies using similar stimuli and only induced empathy; Schultz 2000). There were no effects observed for dispositional empathy. This suggests there is a relationship between perceiving animal harm, being induced to feel empathy, and expressing concern for the environment.

There is one caveat to this experiment, however, one which pops up repeatedly in empathy experiments. Those who did not receive the empathy inducing instructions, but who were instead told to remain objective when viewing the pictures, also scored relatively high (to statistical significance) on concern for the environment after viewing animals being harmed. These participants still scored lower than those who received the empathy prompt, but this indicates that empathy is not *necessary* for moral concern, just that it is slightly more effective than being told to remain objective.

Of course, Sevillano et. al. (2007) study measured environmental concern, not concern for animals as such. But other research more directly on empathy and animals has provided a similarly complicated and ambiguous picture. For instance, consider one of the most widely cited pieces of evidence for the importance of empathy, from an experiment conducted by Shelton and Rogers (1981). They showed people films of whaling activities, some of which were higher in intensity (e.g., more gore) than others. Participants in one condition were given no special instructions while watching the films (low empathy), while those in another

condition (high empathy) were told to try to feel what the whales were feeling, and to sympathize and empathize with the whales (that sympathy was included in the prompt is problematic methodologically, but that will not matter for the rest of the discussion). After the films had been played, participants filled out an emotion scale, designed to measure the effect of the film on their emotional state, and were also asked if they would be willing to provide assistance to whales in the future.

The results showed that levels of empathy increased after viewing the high-intensity films, regardless of whether people received the empathy prompt (that is, for participants in both the low and high empathy conditions). But only those who received the empathy prompt showed increased empathy after either high- *or* low-intensity scenes. So intense harm elicited empathic responses not elicited by low-intensity harm, but both types of harm elicited additional empathic responses when combined with the empathy prompt. Those in the high-empathy condition were also more likely to declare an intention to help whales. Overall, this evidence suggests that something about the empathy induction led to greater moral concern for whales.

This study is important because of the fact that low-intensity harm produced a significantly lower empathic response as well as a decreased intention to help in people who had not received the empathy prompt. This appears to illustrate that empathy plays an important role in responding to harm. The whales in the low-intensity film were clearly being harmed, but because the harm was not made salient, people were not induced to provide assistance.

However, it's not clear from the experiment whether those who did not receive the empathy prompt were truly *without* moral concern. Those in the low empathy condition—where, remember, they received no instructions at all—still scored relatively high on their willingness to help. The overall means, on a ten-point scale for willingness to help, was 7.8 for those who received the prompt and 6.8 for those who received no instructions. When viewing the low intensity films specifically, those who received no instructions had a mean of 5.5. Remember that levels of reported empathy before and after the films did not change for participants in this condition. While 5.5 is a fair distance from the average score of 8.3 for those in the high intensity, high empathy condition, it's certainly not zero. So it's not the case that those in the low empathy condition were blind to the harm caused by whaling, just that they would be much more willing to help if they had received the empathy prompt.

I take a measured conclusion from the two experiments just described. Empathy amplifies our moral concern for nonhumans, but it is not central to this moral concern, and certainly is not necessary. Participants in both experiments expressed relatively high levels of concern for nonhumans prior to any empathy induction. In Sevillano et al., this preexisting concern had no relationship to dispositional empathy, and in Shelton and Rogers, one group of participants expressed a significant degree of concern without any measurable change in empathy.

Shelton and Roger's experiment also highlights the role of other, non-empathic, processes, in producing moral concern. Consider how moral anger likely plays a role in people's responses to the whale videos. An alternative explanation for their results is that asking participants to empathize with the whales caused anger, which then motivated people's willingness to help whales. Emotion researchers classify anger as an *approach-related* emotion, in that it produces motivation to approach a target or goal. Fear and sadness, by contrast, are avoidance-related emotions (Carver and Harmon-Jones 2009; Harmon-Jones et al. 2003; Harmon-Jones, Gable, and Peterson 2010). Various studies have shown that the approach motivation produced by anger has carryover effects—the sort that could explain the willingness to help in Shelton and Roger's experiment. Harmon-Jones et al. (2003), for example, found that college students who were angry about increased tuition costs showed increased activation in approach-motivational areas of the brain when told they would have an opportunity to sign a petition to prevent future increases in tuition. That is, having the opportunity to

perform some action directly related to one's anger actually increased approach-motivation. Relatedly, Tagar, Federico, and Halperin (2011) found that people who were more angry about a political conflict were more likely to propose solutions when asked how they would ameliorate the conflict.

These studies illustrate the motivational strength of anger. They are also supported by numerous other studies illustrating anger's role in producing moral concern for others, particularly in promoting others' well-being. For example, Vitaglion and Barnett (2003) found that feeling anger after reading about a drunk driving incident predicted whether participants would offer assistance to the victims, while dispositional empathy showed no effect (for a review of similar findings, see van Doorn, Zeelenberg, and Breugelmans 2014). As explained above, the intensity of the whale films actually had a greater effect on the declared intention to help whales than did the empathy induction. This is unsurprising when we consider that harm, especially unjustified harm as it was depicted in the film, normally elicits outrage among Westerners (Blader and Tyler 2002; Rozin et al. 1999). Though empathy might play a role in this, research from psychology suggests that the primary cause would be anger.

The study showing the strongest positive correlation between empathy and concern for animals comes from Henry (2006). Using the Attitudes Toward the Treatment of Animals Scale and the Interpersonal Reactivity Index (common assessments of attitudes toward animals and dispositional empathy), Henry found a 0.43 correlation between dispositional empathy and caregiving attitudes toward animals. These results certainly are promising and can be taken as evidence that empathy is positively related to moral concern for animals.

However, again there are caveats. Numerous other studies have found much lower correlations. For instance, Taylor and Signal (2005) found a 0.33 correlation between empathic concern and positive attitudes toward animals among Australians, and Erlanger and Tsytsev (2012) found a 0.32 relationship between dispositional empathy and discomfort toward animal cruelty (for similar data on Norwegians see Ellingsen et al. 2010). These lower correlations are significant because a common heuristic used by personality psychologists is to treat as unreliable any correlations lower than 0.30 between traits and behaviors (Mischel 1968). Such a low correlation cannot be relied upon for accurate prediction. At this level, any correlation observed between a trait and a behavior in one instance does not reliably predict that correlation in any other instance. All of these correlations are above the 0.30 threshold, but just barely.

The weak relationship found in the majority of these studies should make one skeptical of the centrality of empathy. The only strong conclusion that can be taken from these studies is that there is a slight positive correlation between empathy and concern for animals. There is also good reason to suspect that other emotions, like anger, are more central.

### 3.2 Those Who Express the Most Concern for Animals do so Out of Empathy

The experiments just described could be interpreted as suggesting that, at the very least, possessing a *great* capacity for empathy is a good thing—animals will be treated better by those who are more empathic. This can be phrased as an explanation for the phenomenon of animal loving and animal protectionism: high levels of empathy cause increased concern for the welfare of animals. If this is true, then ethicists have a good reason to promote empathy.

Researchers have indeed found some support for a positive relationship between empathy and abnormally high concern for animals. Signal and Taylor (2007), for instance, found evidence for this relationship among self-identified animal protectionists (e.g., people who work at animal shelters). One interesting feature of Signal and Taylor's results can be seen in responses to the different subsets of the Interpersonal Reactivity Index (IRI), which they used

to calculate the overall empathy score. The IRI consists of a subset called Empathic Concern that primarily measures automatic emotion sharing, and a more cognitive subset called Perspective Taking that measures intentional and controlled emotion sharing. Signal and Taylor found that Empathic Concern was correlated with positive attitudes toward animals, but Perspective Taking was not. As explained above, it is important to distinguish between empathy as automatically sharing emotions with another (like emotional contagion) and empathy as perspective taking. Animal protectionists scored high on their overall empathy score and showed positive attitudes toward animals, but this was apparently not something that was related to actively taking the perspective of animals. This is interesting because it suggests that empathizing with animals is an automatic attitude among this group of people, and not something that has been taught or is under their direct control.

There are other complications with interpreting this data, however. First, while there is good evidence that being for or against animal experimentation correlates with differences in empathy (Broida et al. 1993; Furnham, McManus, and Scott 2003), it's not clear what causal role empathy plays. For instance, Furnham et al. found that opposition to animal experimentation also correlated with the personality traits of openness, agreeableness, and introversion, which may serve as more fundamental explanations of pro-animal attitudes.

Other evidence on this relationship is ambiguous and somewhat inconsistent with Signal and Taylor's results. Plous (1993) found that when viewing pictures of animals in pain, self-described animal activists ascribed more pain to the animals than did non-activists. However, in a separate measure of skin conductance, which measures physiological response, there were no significant differences between activists and non-activists. If differences in pain ascription led to greater discomfort among activists, or were caused by shared emotions (i.e., through empathy), there should have been corresponding differences in the skin conductance measure. The automaticity of empathy, as suggested by Signal and Taylor's (2007) evidence, would predict that skin conductance would bear this out.

Some have suggested that vegetarianism is due to enhanced empathy (Gruen 2004), which could be construed as an argument that increased empathy causes vegetarians to care more about animals. While some studies have found no differences in empathy between vegetarians and non-vegetarians (Preylo and Arikawa 2008), others have found evidence to suggest the contrary. I will briefly describe an experiment by Filippi et al. (2010), which might be taken as evidence for a connection between empathy and vegetarianism.

Filippi et al.'s experiment showed scenes depicting torture of humans and animals to self-described vegetarians, vegans, and omnivores. Results showed more activation in areas of the brain that process emotion in vegetarians and vegans than in omnivores when torture scenes were viewed. This seems to suggest that eating practices reflect a difference in emotional processing, which one could argue is due to differences in empathy.

I again think there are other more plausible, non-empathic, explanations for these results. One is that these differences in emotion processing might be a result of differential responses to *moral transgressions*. Vegetarians and vegans are likely to have strong moral convictions. These would likely be activated by torture (particularly of animals), thus producing greater emotional responses. Thinking that torture is wrong is sufficient to produce a strong emotional response when presented with graphic evidence of torture. Another possible explanation is that vegetarians and omnivores responded differently to specific features of the torture scenes. For instance, some of the pictures showed mutilated bodies, which tend to elicit disgust and fear, with no further evidence to suggest torture specifically. Some studies have found that disgust sensitivity in particular is known to predict vegetarianism (Rozin, Markwith, and Stoess 1997). So perhaps the role of disgusting stimuli explains the difference in emotion processing. Omnivores still expressed moral activation in response to scenes of torture, indicating that

they responded emotionally, just not in the same way as vegetarians and vegans. Both of these explanations seem plausible and do not require empathy to account for the results.

From these studies, I conclude that the evidence is, at best, ambiguous as to whether high rates of empathy produce greater moral concern for animals. One final complication I'll mention is that greater empathy toward animals appears to come at a cost. Knight, Bard, Vrij, and Brandon (2010) found that animal welfarists showed more empathy toward animals and less empathy toward human beings. Animal welfarists' enhanced empathy toward animals, that is, was associated with a corresponding decrease in empathy toward humans. Among other groups, like scientists, empathy toward animals was positively correlated with empathy toward human beings, but the overall level of empathy to either group was much lower than that expressed toward animals by animal welfarists. This research did not establish a causal relationship, but it does suggest a troubling possibility: our capacity for empathy is limited, and high degrees of empathy only result from narrow focus on a single moral object. Empathy might assist and support moral concern for animals, but only in instances of single-minded devotedness to their causes, to the exclusion of others (a finding that would be consistent with some research on human empathy as well; Batson et al. 1995).

### 3.3 Empathy Toward Animals Increases Empathy Toward Humans

The "sentinel hypothesis" (Patterson-Kane and Piper 2009), or what is often referred to as "The Link" (Linzey 2009), claims that cruelty to animals indicates a corresponding propensity for cruelty toward humans. Kant and Aquinas both famously advocated this position. An apparent corollary of this is that acting kindly toward animals indicates a kindness toward humans. We can hypothesize that the relationship runs in the opposite direction as well: cruelty and kindness toward humans indicates a similar propensity toward animals.

This family of relationships is important for empathy because it indicates that the capacity for empathizing, or sharing emotions with entities other than oneself, is generalizable. We can call this the *generalization hypothesis*: kindness (or cruelty) to one category of beings (humans or nonhumans) will increase kindness (or cruelty) to the other. This section will investigate this hypothesis by specifically examining the role of empathy.<sup>3</sup>

The Knight et al. (2010) study just discussed identifies two potential implications for the generalization hypothesis. On the one hand, self-described animal welfarists seem to refute the generalization hypothesis: their empathy is attuned more to animals than to human beings. But scientists, on the other hand, showed the exact relationship predicted by the generalization hypothesis (as did other groups). One main difference between these groups of people, we might think, is their experiences with animals. Usually The Link is discussed in terms of how early childhood experiences with animal abuse teaches children about abuse more generally. The generalization hypothesis can be taken to make a similar claim, such that empathizing with animals teaches people about empathy more generally.

In interventionist situations, where animals are introduced explicitly in order to change attitudes toward human beings, it has been found that children's empathy toward humans does indeed increase as a result of interacting with and learning more about animals (Ascione 1992; Thompson and Gullone 2003). However, in these studies children learn about much more besides empathy. In Ascione (1992), for instance, children were also taught about justice and

<sup>3</sup> One example of people advocating something like the generalization hypothesis comes from Munro (2005), p. 66. She reports that self-described animal protectionists often ask people to apply the empathy they show toward their pets and other human beings to a wider variety of animals.



pain and how these concepts applied to animals. This makes it difficult to conclude that empathy is responsible for the observed increase in empathy toward humans.

This raises a question for the generalization hypothesis: what type of animal experience is necessary for the cultivation of empathy? Mere exposure is insufficient, but more extensive training will cultivate much else besides empathy. One plausible proposal is that what is needed is providing care for animals—ensuring that their basic needs are met. This would plausibly also teach people how to provide care for other human beings, and the mechanism responsible would be empathy.

One piece of evidence against this care feature is that self-described animal protectionists generally score high on empathy while farmers generally score low (Hills 1993). Farmers, arguably, spend a lot of time providing care for animals, so they should possess more empathy. Of course, someone could argue that this is unsurprising because farmers exploit animals and use them for human ends. Perhaps, someone might say, cultivating empathy requires the *right kind* of care, the kind farmers generally do not engage in. But it seems unlikely that farmers do not possess the right experiences. It is often pointed out that farmers are quite sensitive to the welfare of their animals, as, at the very least, they must be in order to gain a profit and meet contemporary agricultural standards. Thus, farmers should show great empathy if caring for animals possesses a strong relationship to empathy.

Other empirical research can help sort out these issues. Evidence that runs contrary to the predictions of the generalization hypothesis can be gathered from Paul (2000). Paul found that, among Scottish participants, the correlation between empathy toward humans and empathy toward animals was significant but still below the .30 cutoff discussed above (.26). More problematically, the results showed that owning a pet correlated with animal empathy but *not* human empathy. So the connection observed between empathy toward animals and empathy toward humans, slight as it was, did not come about because of interactions with animals (or at least not with pets).

Paul's (2000) results point to a common phenomenon observed with empathy: we tend to be partial, and empathize with those who have special relationships with us. Pet owners, for instance, show more empathy toward their pets than toward human beings. This will be discussed in more detail in later sections, but its role here is important because it functions as a counter to the generalization hypothesis. Rather than generalize our empathy from animals to humans, it is instead the case that we empathize with those we are close to, and this often involves both animals and humans.

To further illustrate this, consider a set of experiments conducted by Angantyr, Eklund, and Hansen (2011). They gave people in Sweden a story describing a situation in which a man, woman, cat, or dog had been found lying on a street with broken ribs and a punctured lung. Participants were then asked to rate 16 emotions they were feeling toward the target, including empathy. In other conditions, the same situation was described but for a human child, human infant, and a puppy. Interestingly, they found that parents showed more empathy for infants and pet-owners showed more empathy for puppies. This difference did not show up for the adult pets or for the human child. The researchers did find that empathy to animals (either dog or cat) correlated positively with empathy to humans (either male or female), but experience with puppies and infants created additional, localized empathy, particular just to those groups. The generalization hypothesis would predict the opposite, that any localized empathy would generalize to others.

I interpret these results as speaking against the generalization thesis insofar as there is no discernable causal connection between empathy toward animals and empathy toward human beings. Rather, we have enough positive relationships with both animals and humans that we naturally respond to either group with empathy. In the studies just discussed, neither empathy

toward puppies nor empathy toward infants showed any generalized effects. Pet owning also failed to transfer to empathy toward humans. More direct tests are needed, however. For instance, if someone low in dispositional empathy were to be introduced to animals, and subsequently increased their empathy toward both humans and animals, that would provide stronger evidence for the causal role of empathy.

### 3.4 Cruelty to Animals is Caused by a Lack of Empathy

The idea that empathy is necessary for moral concern entails the further claim that without empathy we cannot and will not express moral concern. Some take this further and say that a lack of empathy causes cruelty (Ascione 1999; Baron-Cohen 2011). We should of course promote empathy if doing so will avoid the creation of cruelty and evil.<sup>4</sup>

One way of being cruel to animals is by abusing them. Some have claimed that only by urging people to empathize can animal abuse be avoided (e.g., Aaltola 2012, p. 160; Fox and McLean 2008). However, evidence linking abuse of animals to lack of empathy is mixed. Henry (Henry 2006), for instance, surveyed people on their past experiences with animals, including past caregiving as well as past abuse, in addition to measuring participants' empathy. Results showed that empathy was a strong predictor of caregiving attitudes toward animals regardless of past experiences with animals. Importantly, those who reported participating in animal abuse were no different than others on the empathy measure. Whatever caused people to participate in animal abuse, it was not a failure of dispositional empathy. In fact, the only predictor of animal abuse was having been sexually abused as a child.

A frequently cited counterexample to the cruelty-empathy link is the widespread love of animals in the Third Reich. The Nazis notoriously proposed and passed ambitious animal protectionist laws, advocating for anti-vivisection, humane hunting, pain reduction in livestock animals, and species preservation, as well as promoting vegetarianism as a moral ideal (Arluke and Sanders 1996; Sax 2000). Moreover, they often justified these ambitious laws by appealing to the non-instrumental value of animals—they did not exist just to be used by Germans or anyone else (Arluke and Sax 1992). They also frequently cited various emotions related to empathy in justifying their actions. For instance, one of their stated aims in promoting animal protection laws was to “awaken and strengthen compassion as one of the highest moral values of the German people” (Arluke and Sax 1992, p. 8). Nazis are typically considered the archetype for cruelty and insensitivity, so it would seem that their cruel traits must either be caused by something unrelated to empathy or by a very specific form of empathy failure.

Another potential counterexample comes from work derived from Stanley Milgram's famous shock experiments. In these experiments, participants were instructed to deliver increasingly painful shocks to someone who was ostensibly just another participant. Across a wide variety of different experimental conditions, people readily delivered the shocks, even when the target (who was actually a confederate enlisted by Milgram) explicitly asked not to continue and in some cases showed signs of harm, even apparent death. Sheridan and King (1972) conducted a variation on this experiment in which they replaced the human confederate with a puppy. However, for this experiment, the puppy received *actual* shocks. Sheridan and King found that 77 % of participants were willing to deliver shocks to the puppy. Though the shocks were deemed to be harmless, they were jolting enough to occasionally elicit howls from

<sup>4</sup> Here I understand “cruelty” to encompass both active (e.g. intentional abuse) and passive (e.g. neglect) forms of mistreatment. This is generally how the term is used in clinical (Ascione 2008) and legal (Favre 2011) contexts.

the puppy. Apparently, this was not enough to motivate people to desist from following the instructions to shock.

One might affirm in response to these disturbing results that these participants were indeed failing to empathize with the puppy. A common explanation for Milgram's results is that people readily conform to authority. In the case of the puppy, it could be said, people similarly conformed to authority and thus failed to consider the situation from the puppy's perspective. The circumstances were so abnormal, and the external pressure so strong, that participants' empathy either wasn't engaged properly or was easily overwhelmed. Either way, it still indicates an empathy failure. As Miller (2009) argues, one can make a case for the importance of empathy by simply saying that *if* the right triggers are available for eliciting empathy, then people will act kindly and provide assistance. In the Milgram experiments the right triggers were not available, so people could not respond empathically, leading to cruel behaviors.

This interpretation seems hopeless, however, if empathy is supposed to be central to moral concern. Empathy with animals must be able to operate outside of situations in which it is relatively easy to empathize. Many industries in which animals are said to be treated cruelly, including in laboratories and on farms, possess precisely the sort of authoritative structure used in Milgram's experiments. If the failure to treat animals well in intensive animal agriculture, for instance, is a result of an empathy failure, then it would seem that empathy is too weak to rely on for many of our moral aims. Presumably cruelty caused by empathy failures would be pervasive throughout society.

### 3.5 Empathy Expands our Moral Concern to Outgroups

One task commonly attributed to empathy is expanding concern to those for whom we normally have difficulty showing concern. Members of outgroups, typically those from countries or ethnicities that are not our own, receive less attention and moral concern than people in our ingroup. Empathy is responsible for expanding our "moral circle" in a way that our normal treatment of outgroups cannot accomplish. For example, research has found that empathy can induce positive attitudes toward normally stigmatized people—those who are considered low in warmth and competence (Batson et al. 1997, 2002). This includes people with AIDS, homeless people, drug addicts, and convicted murderers.

We might predict that empathy plays a similar function with respect to animals. Many animals live in our homes as members of our family, and are at the very least considered honorary members of our ingroup, but many others are clearly treated as outgroup members. Perhaps empathy can induce positive attitudes toward even outgroup animals, and potentially motivate increased moral concern. This possibility is nicely characterized by Robert Solomon, in describing our expanding moral sense:

[W]hat allows the circle to expand is not reason...but rather knowledge and understanding in the sense of coming to appreciate the situations and the circumstances in which other people and creatures find themselves. This requires what many theorists now call "empathy" or "feeling with"... *We learn to empathize with others.... We learn to perceive chickens, cows, and warthogs as sentient beings with real emotions, and we learn to conceive of our uses of animals as a moral choice, not, first of all, because of any rational principles but because of our cultivated and expanded emotional awareness.* (1999, p. 75–76).

Here Solomon emphasizes that acquiring empathy and moral sensitivity to others is a learning process. This is conceding, to a certain extent, that we are not naturally sensitive to the

emotions of outgroup members. But this still allows for the use of empathy to extend our concern to outgroups (indeed it provides a reason to encourage explicit teaching of empathy).

While this is a noble goal, it faces significant obstacles in being realized in human psychology. We might be able to bypass issues concerning our natural empathic abilities by advocating explicit use of empathy (where this includes prompts and reminders), but this does not mean that people will be capable of setting aside other psychological limitations they possess in empathizing with outgroups. Notwithstanding some of Batson's work, research on human-oriented empathy has generally found that empathy does *not* motivate help for outgroups. When people do help outgroups, they usually do so because of some sense of similarity to themselves (Stürmer et al. 2006). When people are given the option to empathize with both ingroups and outgroups, they generally focus only on their ingroup (Brown, Bradley, and Lang 2006). This is true even if other typical elicitors are manipulated. For example, Stürmer, Snyder, and Omoto (2005) found ingroup biases even if outgroup members were physically attractive and even if outgroup members had a serious illness in need of treatment. An explanation for this phenomenon offered by recent brain imaging experiments is that our empathic neural substrates are attuned *only* to ingroups (Gutsell and Inzlicht 2010, 2012; Xu et al. 2009).

A related phenomenon in empathizing with animals is the effect of physical similarity to humans. A common finding in various surveys (Batt 2009; Eddy, Gallup, and Povinelli 1993) is that people attribute mental states to animals based roughly on phylogenetic proximity and physical similarity to humans. A similar finding has been observed with empathy and moral concern. For instance, Plous (1993) showed participants pictures of a monkey, raccoon, pheasant, and bullfrog, and told them that each animal had been abused in certain ways. Skin conductance measurements showed increased activity in response to the animal's similarity to humans (see also Opatow 1993). Westbury and Neumann (2008) similarly found that empathic emotional responses to animals in abusive situations increased according to phylogenetic similarity (as measured by survey as well as skin conductance responses).

This bias for similarity to humans can also be seen in people's allocation of punishment for animal abuse. In one experiment (Allen et al. 2002), people read about abuse of a goose, monkey, possum, or goanna. They were then asked how much punishment they would give the transgressor. Those who scored highest in empathy gave out harsher punishments, and this was mediated by similarity to humans. So those high in empathy did indeed rush to protect some animals, but this was limited to species nearest to us, most notably the primates. Moreover, people were willing to allocate harsh punishments for abusing these animals. It's not clear from this experiment whether people were *too* harsh, but this is nonetheless worrisome in that it replicates the favoritism shown generally to human ingroups.

As Jesse Prinz (2011) says about the limitations of empathy, "We can no more overcome its limits than we can ride a bicycle across the ocean; it is designed for local travel" (p. 229). The evidence cited here suggests that many animals are not considered part of any ingroup for humans. The only way in which empathy can assist animals is if they possess physical, functional, or phylogenetic similarity to humans, or if they are made honorary ingroup members through domestic companionship. This makes empathy useful in terms of prompting moral concern for some animals, but its scope is too limited to expand generalized moral concern to all animals.

### 3.6 Empathy Motivates Us to Act on our Moral Duties

A common idea is that empathy is helpful for motivating moral action. For instance, we might in fact view animals positively, and recognize that they are owed improved treatment, but fail to act appropriately because we are not sufficiently motivated. Consider factory farming: few

would deny that factory farming is morally problematic, yet few take action to improve or abolish such practices. What is needed, one might say, is more empathy, to transform our moral judgments into appropriate action. Empathy assists us in meeting the moral ends we have set for ourselves. I reject this claim: empathy is a weak motivator, and when it does motivate, the results often run contrary to our moral aims.

In response to the arguments of the previous section, it could be maintained that empathy is a strong motivator of moral concern, so long as it is directed at ingroup members. For instance, someone could point out that dogs in the U.S. are generally considered ingroup members, yet dog abuse and abandonment is still quite high. Promoting empathy could increase moral concern expressed toward these animals and others like them. Farm animals may also be potential targets of ingroup empathy. Domestic companions and livestock, assuming they are sufficiently close to human ingroups, demand moral attention best served by empathy.

A good deal of the evidence in support of the motivational powers of empathy in humans comes from the work of Daniel Batson. One application of Batson's methods to animals comes from Berenguer (2007), who also found strong evidence for the motivational powers of empathy. Berenguer showed people one of two pictures, either a row of trees that had been cut down or a bird covered in oil. People were then asked to either judge the pictures objectively or to imagine the feelings of the entity affected and how the event affected that entity's feelings. Participants' opinions were then solicited on how a global funding agency should spend its money. Results showed that those who were asked to imagine the feelings of the target (the empathy condition) wanted more money to be donated to environmental causes (for both targets). This provides pretty straightforward evidence that empathy can motivate prosocial behaviors toward animals. It's also important to note that the intention to help was generalized. The assistance participants were willing to provide went beyond the targets and was aimed at environmental causes in general. This indicates that empathy is capable of producing general prosocial behaviors (which is consistent with other research on the effects of empathy toward humans; Eisenberg, Fabes, and Spinrad 2006; Eisenberg and Miller 1987).

I discussed above how this sort of phenomenon could also be accounted for by moral anger (which could also explain the effects of participants' responses to something like a bird covered in oil). Here I'll pursue a different objection, directed at the strength of motivation provided by empathy. A common criticism of Batson's research is that empathy produces only superficial helping (Neuberg et al. 1997). While the forms of helping uncovered by Berenguer are important (such as donating money to help animals), the centrality thesis sets a high bar for what empathy should accomplish.

One illuminating study indicating that empathy is a relatively weak motivator comes from Krueger et al. (2013). They injected participants with oxytocin, a hormone known to increase empathy, after which participants read about different transgressions involving one person causing serious physical harm to another person (e.g., a robber punching a gas station attendant). The results showed that oxytocin injections increased participants' perception of harm but did not have any effect on how much punishment they thought the transgressors deserved. Though this might be cited as evidence that empathy produces moral concern (perceiving greater harm), it also perfectly illustrates empathy's inability to motivate moral behavior, even when clearly influencing people's moral judgments. Participants could have acted on the greater harm they perceived by delivering greater punishment, but they did not.

By contrast, the experiments discussed earlier indicate that anger is highly motivating, especially in responding to perceived transgressions. Of the six empirical theses I have examined, the centrality of moral anger—not empathy—is perhaps clearest on the issue of motivation. When attempting to rectify injustices, responding to personal threats, or simply trying to achieve some highly desired moral goal, an enormous body of research in psychology

suggests that anger is the best candidate for providing motivational power (Carver and Harmon-Jones 2009; Rozin et al. 1999; van Doorn et al. 2014). This provides ethicists a reason to privilege moral anger, and not empathy.

Moreover, anger seems to be a better motivator even with respect to showing moral concern toward members of one's ingroup. For instance, Batson et al. (2007) found that participants who had been treated unfairly in a resource allocation game would express anger in response to unfair treatment of other participants, but participants who had not been treated unfairly appeared indifferent. That is, people responded negatively to injustice only if they themselves had been victims of the same sort of injustice. Batson calls this "empathic anger," to indicate that it is anger aimed at protecting those with whom we identify. A similar phenomenon was observed in another experiment (Batson, Chao, and Given 2009) in which people living in the U.S. showed anger toward the torture of U.S. soldiers but not soldiers of other countries. Increased moral motivation with respect to ingroup members provides another reason to think anger is more central than empathy in producing moral concern.

This is important when considering that in much of the empathy literature (including Berenguer 2007), participants are *prompted* to empathize. Participants could also be prompted with other, potentially more motivating, emotions, like anger. It's also possible that, because empathy functions to elicit other emotions, the process of empathy is motivational *only insofar* as it elicits other, more motivating, emotions (again, like anger; Batson et al. 2007). If other emotions are more motivational, either through direct prompting or indirectly through empathy, then those should be the focus for ethicists looking to motivate moral behavior.

#### 4 Concluding Thoughts

I have evaluated six prominent empirical claims made about empathy and found all of them to be, to different degrees, problematic. These claims are often taken to illustrate the centrality of empathy in producing moral concern for animals—they offer reasons to think empathy is psychologically essential to showing moral concern for animals. In rejecting these claims, I have also proposed that other, non-empathic, emotions are more capable of producing moral concern for animals. I have focused in particular on moral anger. Moral anger is highly motivating and can be used to respond to transgressions against animals.

Given my analysis of the centrality thesis, we must conclude that empathy is not central to producing moral concern for animals. Instead, ethicists should turn to the plethora of other moral emotions we possess toward animals. In doing this, one area needing further exploration is our emotional responses to animals' living conditions. Seeing how animals live evokes emotional responses and drives us to consider whether we are treating them rightly or wrongly. This includes not just moral anger, but all the other emotions we normally feel in response to moral transgressions—guilt, shame, disgust, and contempt, among others. Ethicists have been right to focus on our emotional responses to animal abuses, but it is these other emotions—not empathy—that have the potential to actually produce moral concern for animals.

One potentially fruitful area for future research is the role of anger in responding to moral transgressions against different types of animals. The huge body of research on anger in response to transgressions against human beings has yet to be tested empirically with respect to animals. For instance, it would be interesting to know whether moral anger shows a similar ingroup bias as empathy. It may be the case that people are blind to injustices against animals that are not their pets or are not perceived to be members of human ingroups. One way to test this would be to offer people with fictitious cases that involve harm to 1) their own pets or pets of the same breed or type as their own pet, 2) pets of the same breed or type as their own but

that are living semi-feral lives (outside of human communities), 3) other types of pets, and 4) other types of animals (e.g., in zoos). Empathy, anger, and other emotions could then be measured and compared to different expressions of moral concern (e.g., protective behaviors or punishment toward the transgressor) to see if there are ingroup effects. This sort of study would help determine whether anger is indeed more central than empathy in producing moral concern for animals.

**Acknowledgments** This paper benefited from helpful comments by Clare Palmer, Linda Radzik, Gary Varner, José Bermúdez, Brandon Schmeichel, and David Wright.

## References

- Aaltola E (2012) *Animal suffering: Philosophy and culture*. Palgrave, New York
- Allen MW, Hunstone M, Waerstad J, Foy E, Hobbins T, Wikner B, Wirrel J (2002) Human-to-animal similarity and participant mood influence punishment recommendations for animal abusers. *Soc Anim* 10:267–284
- Angantyr M, Eklund J, Hansen EM (2011) A comparison of empathy for humans and empathy for animals. *Anthrozoös* 24:369–377
- Arluke A, Sanders CR (1996) *Regarding animals*. Temple University Press, Philadelphia
- Arluke A, Sax B (1992) Understanding Nazi animal protection and the holocaust. *Anthrozoös* 5:6–31
- Ascione F (1992) Enhancing children's attitudes about the humane treatment of animals: generalization to human-directed empathy. *Anthrozoös* 5:176–191
- Ascione F (1999) The abuse of animals and human interpersonal violence: Making the connection. In: Ascione FR, Arkow P (eds) *Child abuse, domestic violence, and animal abuse*. Purdue University Press, West Lafayette, pp 50–61
- Ascione F (ed) (2008) *The international handbook of animal abuse and cruelty: Theory, research, and application*. Purdue University Press, West Lafayette
- Baron-Cohen S (2011) *The science of evil: On empathy and the origins of cruelty*. Basic Books, New York
- Batson CD, Chang J, Orr R, Rowland J (2002) Empathy, attitudes, and action: can feeling for a member of a stigmatized group motivate one to help the group? *Pers Soc Psychol B* 28:1656–1666
- Batson CD, Chao MC, Given JM (2009) Pursuing moral outrage: outrage at torture. *J Exp Soc Psychol* 45:155–160
- Batson CD, Kennedy CL, Nord LA, Stocks EL, Fleming DA, Marzette CM (2007) Anger at unfairness: is it moral outrage? *Eur J Soc Psychol* 37:1272–1285
- Batson CD, Klein TR, Highberger L, Shaw LL (1995) Immorality from empathy-induced altruism: when compassion and justice conflict. *J Pers Soc Psychol* 68:1042–1054
- Batson CD, Polycarpou MP, Harmon-Jones E, Imhoff HJ, Mitchener EC, Bednar LL, Klein LL, Highberger L (1997) Empathy and attitudes: can feeling for a member of a stigmatized group improve feelings toward the group? *J Pers Soc Psychol* 72:105–118
- Batt S (2009) Human attitudes towards animals in relation to species similarity to humans: a multivariate approach. *Biosci Horiz* 2:180–190
- Berenguer J (2007) The effect of empathy in proenvironmental attitudes and behaviors. *Environ Behav* 39:269–283
- Blader SL, Tyler TR (2002) Justice and empathy: What motivates people to help others? In: Ross M, Miller DT (eds) *The justice motive in everyday life*. Cambridge University Press, Cambridge, pp 226–250
- Broida JP, Tingley L, Kimball R, Miele J (1993) Personality differences between pro and antivivisectionists. *Soc Anim* 1:129–144
- Brown LM, Bradley MM, Lang PJ (2006) Affective reactions to pictures of ingroup and outgroup members. *Biol Psychol* 71:303–311
- Carver CS, Harmon-Jones E (2009) Anger is an approach-related affect: evidence and implications. *Psychol Bull* 135:183–204
- Coplan A (2011) Understanding empathy: Its features and effects. In: Coplan A (ed) Goldie (eds) *Empathy: Philosophical and psychological perspectives*. Oxford University Press, Oxford, pp 3–18
- Coplan A, Goldie P (2011) *Empathy: Philosophical and psychological perspectives*. Oxford University Press, Oxford
- Darwall S (1998) Empathy, sympathy, care. *Philos Stud* 89:261–282
- Davis MH, Mitchell KV, Hall JA, Lothert J, Snapp T, Meyer M (1999) Empathy, expectations and situational preferences: personality influences on the decision to participate in volunteer helping behaviors. *J Pers* 67: 469–503

- Donovan J (1996) Attention to suffering: a feminist caring ethic for the treatment of animals. *J Soc Phil* 27:81–102
- Eddy TJ, Gallup GG Jr, Povinelli DJ (1993) Attribution of cognitive states to animals: anthropomorphism in comparative perspective. *J Soc Issues* 49:87–101
- Eisenberg N, Fabes RA, Spinrad TL (2006) Prosocial development. In: *Handbook of child psychology*, Vol. 3, Social, Emotional, and Personality Development, 6th edn. Wiley, Hoboken, pp 647–702
- Eisenberg N, Miller PA (1987) The relation of empathy to prosocial and related behaviors. *Psychol Bull* 101:91–119
- Ellingsen K, Zanella AJ, Bjerkås E, Indrebø A (2010) The relationship between empathy, perception of pain and attitudes toward pets among Norwegian dog owners. *Anthrozoös* 23:231–243
- Erlanger AC, Tsytsarev SV (2012) The relationship between empathy and personality in undergraduate student's attitudes toward nonhuman animal. *Soc Anim* 20:21–39
- Favre DS (2011) *Animal law: Welfare interests and rights*, 2nd edn. Aspen Publishers, New York
- Filippi M, Riccitelli G, Falini A, di Salle F, Vuilleumier P, Comi G, Rocca MA (2010) The brain functional networks associated to human and animal suffering differ among omnivores, vegetarians and vegans. *PLoS One* 5:1–9
- Fox MA, McLean L (2008) *Animals in moral space*. In: Castricano J (ed) *Animal subjects: An ethics reader in a post-human world*. Wilfrid Laurier University Press, Waterloo, pp 145–175
- Furnham A, McManus C, Scott D (2003) Personality, empathy and attitudes to animal welfare. *Anthrozoös* 16: 135–146
- Goldman A (1993) Ethics and cognitive science. *Ethics* 103:337–360
- Gruen L (2004) Empathy and vegetarian commitments. In: Sapontzi SS (ed) *Food for thought: The debate over eating meat*. Prometheus, New York, pp 284–293
- Gruen L (2009) Attending to nature: empathetic engagement with the more than human world. *Ethics Environ* 14:23–38
- Gruen L (2012) Navigating difference (again): Animal ethics and entangled empathy. In: Smulewicz-Zucker GR (ed) *Strangers to nature: Animal lives and human ethics*. Lexington Books, Lanham, pp 213–234
- Gutsell J, Inzlicht M (2010) Empathy constrained: prejudice predicts reduced mental simulation of actions during observation of outgroups. *J Exp Soc Psychol* 46:841–845
- Gutsell JN, Inzlicht M (2012) Intergroup differences in the sharing of emotive states: neural evidence of an empathy gap. *Soc Cogn Affect Neur* 7:596–603
- Harmon-Jones E, Gable P, Peterson C (2010) The role of asymmetric frontal cortical activity in emotion-related phenomena: a review and update. *Biol Psychol* 84:451–462
- Harmon-Jones E, Sigelman JD, Bohlig A, Harmon-Jones C (2003) Anger, coping, and frontal cortical activity: the effect of coping potential on anger-induced left frontal activity. *Cognit Emot* 17:1–24
- Hatfield E, Rapson RL, Le YL (2009) Emotional contagion and empathy. In: Decety J, Ickes W (eds) *The social neuroscience of empathy*. MIT Press, Cambridge, pp 19–30
- Held V (2006) *The ethics of care: Personal, political, and global*. Oxford University Press, New York
- Henry BC (2006) Empathy, home environment, and attitudes toward animals in relation to animal abuse. *Anthrozoös* 19:17–34
- Hills AM (1993) The motivational bases of attitudes toward animals. *Soc Anim* 1:111–128
- Holton R, Langton R (1999) Empathy and animal ethics. In: Jamieson D (ed) *Singer and his critics*. Basil Blackwell, Oxford, pp 209–232
- Howe D (2013) *Empathy: What it is and why it matters*. Palgrave Macmillan, New York
- Klimecki O, Singer T (2013) Empathy from the perspective of social neuroscience. In: Jorge A, Vuilleumier P (eds) *Cambridge handbook of human affective neuroscience*. Cambridge University Press, Cambridge, pp 533–549
- Knight S, Bard K, Vrij A, Brandon D (2010) Human rights, animal wrongs? Exploring attitudes toward animal use and possibilities for change. *Soc Anim* 18:251–272
- Krueger F, Parasuraman R, Moody L, Twieg P, de Visser E, McCabe K, Lee MR (2013) Oxytocin selectively increases perceptions of harm for victims but not the desire to punish offenders of criminal offenses. *SCAN* 8:494–498
- Linzey A (ed) (2009) *The link between animal abuse and human violence*. Sussex Academic Press, Brighton
- Luke B (1995) Taming ourselves or going feral? Toward a nonpatriarchal metaethic of animal liberation. In: Adams CJ, Donovan J (eds) *Animals and women*. Duke University Press, Durham, pp 230–319
- Miller C (2009) Empathy, social psychology, and global helping traits. *Phil Stud* 142:247–275
- Mischel W (1968) *Personality and assessment*. Wiley, New York
- Munro L (2005) *Confronting cruelty*. Brill, Leiden
- Neuberg SL, Cialdini RB, Brown SL, Luce C, Sagarin BJ, Lewis BP (1997) Does empathy lead to anything more than superficial helping? Comment on Batson et al. (1997). *J Pers Soc Psychol* 73:510–16
- Opatow SV (1993) Animals and the scope of justice. *J Soc Issues* 49:71–85
- Oxley JC (2011) *The moral dimensions of empathy*. Palgrave Macmillan, New York
- Patterson-Kane EG, Piper H (2009) Animal abuse as a sentinel for human violence: a critique. *J Soc Issues* 65: 589–614



- Paul ES (2000) Empathy with animals and with humans: are they linked? *Anthrozoös* 13:194–202
- Plous S (1993) Psychological mechanisms in the human use of animals. *J Soc Issues* 49:11–52
- Preylo BD, Arikawa H (2008) Comparison of vegetarians and non-vegetarians on pet attitude and empathy. *Anthrozoös* 21:387–395
- Prinz J (2011a) Against empathy. *South J Philos* 49:214–233
- Prinz J (2011b) Is empathy necessary for morality? In: Coplan A, Goldie P (eds) *Empathy: Philosophical and psychological perspectives*. Oxford University Press, Oxford, pp 519–38
- Rozin P, Lowery L, Imada S, Haidt J (1999) The CAD triad hypothesis: a mapping between three moral emotions (contempt, anger, disgust) and three moral codes (community, autonomy, divinity). *J Pers Soc Psychol* 76: 574–586
- Rozin P, Markwith M, Stoess C (1997) Moralization and becoming a vegetarian. *Psychol Sci* 8:67–73
- Sax B (2000) *Animals in the Third Reich*. Continuum, New York
- Sevillano V, Aragonés JI, Schultz PW (2007) Perspective taking, environmental concern, and the moderating role of dispositional empathy. *Environ Behav* 39:685–705
- Schultz PW (2000) Empathizing with nature: The effects of perspective taking on concern for environmental issues. *J Soc Issues* 56:391–406
- Shapiro K (1994) The caring sleuth: portrait of an animal rights activist. *Soc Anim* 2:145–165
- Shelton ML, Rogers RW (1981) Fear-arousing and empathy-arousing appeals to help: the pathos of persuasion. *J Appl Soc Psychol* 11:366–378
- Sheridan CL, King RG (1972) Obedience to authority with an authentic victim. *P Annu Conv Am Psychol Assoc* 80:165–166
- Signal T, Taylor N (2007) Attitude to animals and empathy: comparing animal protection and general community samples. *Anthrozoös* 20:125–130
- Slote M (2007) *The ethics of care and empathy*. Routledge, London
- Slote M (2010) *Moral sentimentalism*. Oxford University Press, Oxford
- Solomon RC (1999) Peter Singer's Expanding Circle: Compassion and the liberation of ethics. In: Jamieson D (ed) *Singer and his critics*. Blackwell, Oxford, pp 64–84
- Stueber K (2006) *Rediscovering empathy: Agency, folk psychology, and the human sciences*. MIT Press, Cambridge
- Stueber K (2012) Varieties of empathy, neuroscience and the narrativist challenge to the contemporary theory of mind debate. *Emot Rev* 4:55–63
- Stürmer S, Snyder M, Kropp A, Siem B (2006) Empathy-motivated helping: the moderating role of group membership. *Pers Soc Psychol Bull* 32:943–956
- Stürmer S, Snyder M, Omoto AM (2005) Prosocial emotions and helping: the moderating role of group membership. *J Pers Soc Psychol* 88:532–546
- Tagar MR, Federico CM, Halperin E (2011) The positive effect of negative emotions in protracted conflict: the case of anger. *J Exp Soc Psychol* 47:157–164
- Tam KP (2013) Dispositional empathy with nature. *J Env Psychol* 35:92–104
- Taylor N, Signal TD (2005) Empathy and attitudes towards animals. *Anthrozoös* 18:18–27
- Thompson KL, Gullone E (2003) Promotion of empathy and prosocial behavior in children through humane education. *Aus Psychol* 38:175–182
- van Doorn J, Zeelenberg M, Breugelmans SM (2014) Anger and prosocial behavior. *Emot Rev* 6:261–268
- Vitaglione GD, Barnett MA (2003) Assessing a new dimension of empathy: empathic anger as a predictor of helping and punishing desires. *Motiv Emot* 27:301–325
- Westbury HR, Neumann DL (2008) Empathy-related responses to moving film stimuli depicting human and non-human animal targets in negative circumstances. *Biol Psychol* 78:66–74
- Xu X, Zuo X, Wang X, Han S (2009) Do you feel my pain? Racial group membership modulates empathic neural responses. *J Neurosci* 29:8525–8529