

Experimental Approaches to Moral Standing

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Abstract

Moral patients deserve moral consideration and concern – they have moral standing. What factors drive attributions of moral standing? Understanding these factors is important because it indicates how broadly (or narrowly) individuals conceptualize the moral world, and suggests how they will treat various entities, both human and non-human. This understanding has recently been advanced by a series of studies conducted by both psychologists and philosophers, which have revealed three main drivers of moral standing: the capacity to suffer (psychological patiency), intelligence or autonomy (agency), and the nature of an entity's disposition (whether it is harmful). These studies have also revealed causal links between moral standing and other variables of interest, namely, mental state attributions and moral behavior. In this review, I consider this recent research, aiming to clarify what the balance of evidence indicates about how moral standing is judged and about its links to mind perception and behavior. I conclude by suggesting open questions for future research on this exciting topic.

To whom, or to what, do we owe moral consideration? Like many important questions in ethics, this question is answered differently by the two great systems of ethical thought, consequentialism and deontology. The dialectic between these two systems has framed recent empirical investigations regarding how people attribute moral standing (or 'moral patiency') to both human and non-human entities. Following the Benthamite tradition, one perspective is that people's main (and possibly only) consideration in attributing moral standing is whether an entity can suffer. On this perspective, suffering is a fundamental negative consequence that we should seek to avoid, and so only entities that are capable of experiencing suffering have moral standing. On an alternative view, a consideration that originates with Kant is more decisive: Entities have moral standing only to the extent that they are intelligent or autonomous. Hybrid views, in which both factors matter, are also viable. And still other factors that have not been defended normatively may also enter people's thinking regarding which entities have moral standing, such as whether an entity is harmful or whether it is attractive. In this review, my goal is to review recent empirical evidence pertaining to how people grant moral standing. I will also consider the downstream consequences of moral standing attributions and how far such attributions extend into the animal kingdom. First, however, it is worth reviewing exactly what moral standing is, how it has been conceptualized, and how it has been operationalized in empirical research.

1. *What is Moral Standing?*

An agreed upon conceptualization is as follows: An entity with moral standing is one that can be morally wronged. For instance, Sytsma and Machery (2012) define their use of the term 'moral standing' in precisely this way: 'An entity has moral standing if and only if it can be morally wronged' (p. 304; see also Gray et al. 2007; Piazza et al. 2014, for similar usages). Why is it that one sort of entity can be morally wronged and another cannot? In a highly influential paper on this topic, Feinberg (1974) regarded the possession of interests as fundamental to moral standing

(see also Jaworska 2007, among others). In order to possess moral standing – and (for Feinberg) the accompanying rights to be treated with moral consideration – it is critical that an entity possess interests, such that it has a ‘good’ or welfare of its own. Possessing interests, in turn, arises from having a conative life – having desires, wishes, hopes, and strivings – essentially, goals. Accordingly, on this conception, mere things, even highly valuable things, or living but non-conative things (such as plants, which have latent tendencies towards growth, but not goals, *per se*), cannot have moral standing. They cannot be wronged.

Entities that possess interests are often referred to as ‘moral patients’. Accordingly, following standard usage, I will be treating ‘moral patiency’ and ‘moral standing’ as synonymous terms and will use the term ‘moral patients’ to refer to those entities that have moral standing.¹ But I will generally use the term ‘moral standing’ in preference to ‘moral patiency’, in order clearly to demarcate it from ‘psychological patiency’, which, as its name suggests, is a purely psychological, and not moral, attribute. The concept of moral standing (or moral patiency) is fundamentally evaluative, because it pertains to the moral worth, value, or considerability, of a particular entity. In contrast, the notion of psychological patiency pertains simply to whether an entity has the capacity to suffer (or feel pleasure). It must be kept conceptually separate from the moral-evaluative concept of moral standing (or moral patiency).

The interests of moral patients enter ethical decision-making directly. If it is morally wrong to harm a moral patient, this is because the interests of the patient in question matter directly, and not indirectly, or instrumentally. In Kantian parlance, the moral patient is an end in itself and not a mere means. This is important because there are some ethical perspectives on which it is morally wrong to harm non-human animals not because those animals have moral standing, or interests that can be infringed, but rather because doing so would inculcate the habit of cruelty (see Carruthers 1992, 2011). In contrast, perspectives that grant entities genuine moral standing view it as morally wrong to harm those entities precisely because doing so would directly infringe upon their interests. Correspondingly, the moral obligation not to harm such entities is direct, too.

Understanding moral standing in this way distinguishes it from a broader notion that has been much discussed in the literature on environmental ethics, namely, the notion of moral considerability (or in some writings, intrinsic value). Environmental ethicists have regarded some non-sentient, and non-conative entities, as being morally considerable in their own right, and so have resisted the idea that only moral patients should be directly considerable in ethical decision-making. For instance, Goodpaster (1978) defines moral considerability as being broader than mere moral patiency, such that something’s being a living thing is a necessary and sufficient condition for it to be morally considerable. This kind of ethic implies that the entire biotic community is morally considerable, not just sentient beings (Callicott 1980). In what follows, I will set aside this broader notion of moral considerability, focusing only on the narrower notion of moral standing.²

2. Empirical Measurement of Moral Standing

Moral standing has been operationalized in a wide variety of ways in recent empirical literature. It has sometimes been assessed by asking subjects whether it would be morally wrong to harm, kill, experiment upon, or otherwise infringe upon various target entities (e.g., Sytsma and Machery 2012). Ratings of this sort are informative and closely track how moral standing has been conceptualized. However, they do not always distinguish between the direct and indirect senses of moral relevance described above – it is conceivable that some subjects might regard such harmful practices as morally wrong in an indirect way – because they might encourage cruelty or other vices, for instance. Other means of assessing moral standing evade this problem by

asking subjects directly whether particular entities deserve protection or care (e.g., Piazza et al. 2014), or whether considerations of fairness should apply to them (Opatow 1993). Such questions retain a normative flavor (through the use of concepts such as desert and obligation) while focusing directly on the target of interest. Alternative methods have asked subjects for their emotional and evaluative reactions to targets of interest, absent any normative component – for instance, whether they actually do have (rather than ought to have) respect for, or sympathy for, a target of interest (Piazza et al. 2014), concern for the welfare of the target (Jack and Robbins 2012), or willingness to protect and support the target (Opatow 1993). Finally, other methods call for reactive evaluations such as how bad it would feel to harm the target (e.g., Gray et al. 2007; Jack and Robbins 2012), for indirect moral judgments such as the appropriate punishment due in such cases of harm (Jack and Robbins 2012), or for judgments of the importance of protecting an entire species (e.g., Gunnthorsdottir 2001; Piazza et al. 2014). Fortunately, despite some subtle conceptual differences between these different sorts of judgment, research shows that responses to them tend to correlate very highly together (see Piazza et al. 2014), suggesting that judgments of moral standing are coherent and can be assessed in a variety of complementary ways.

3. *Questions of Interest*

A fertile test bed for investigating questions about moral standing is to examine people's intuitions about non-human animals. Some studies have also examined judgments about more abstract or hypothetical entities, and some have examined human beings with compromised psychological capacities. The dominant focus of research to date has been to understand what factors predict and cause judgments of moral standing: On what basis is moral standing granted? This question focuses on judgments of moral standing as a dependent variable and explores the causal inputs to this judgment. A closely related question, in which moral standing is also positioned as a dependent variable, is whether perceptions of moral agency decrease perceptions of moral standing (or 'moral patiency') as postulated by moral typecasting theory (Gray and Wegner 2009). Another area of research has treated attributions of moral standing as an independent variable and asks whether such attributions influence perceptions of mindedness (i.e., what psychological capacities are possessed by entities with moral standing). Finally, research has also considered how far lay attributions of moral standing extend. I next review each of these questions in turn.

4. *On What Basis is Moral Standing Granted?*

In a seminal paper published in *Science*, Gray et al. (2007) identified two dimensions that emerge in the perception of other minds³: an agency dimension, corresponding to an entity's ability to control and direct its actions autonomously, and a patiency dimension, corresponding to the capacity for hedonic experience and, ultimately, the capacity to suffer. A key finding was that these two dimensions of mind perception correlate with two related, yet distinct, moral capacities. The agency dimension of mind correlated with the moral agency – entities that were seen as possessing more agentic qualities (e.g., self-control, memory, and planning abilities) were also seen as more deserving of punishment in the event that they had caused someone's death (i.e., they were seen as more morally responsible). The patiency dimension of mind correlated with moral patiency (or moral standing) – agents that were seen as having the capacity for experience (e.g., the ability to experience hunger, fear, pain, and pleasure) were the ones that subjects most strongly wanted to avoid harming.⁴

In this research, in accordance with the conceptualization above, the psychological dimension of patiency, reflecting the capacity to suffer – is not identical with *moral* patiency

(moral standing), the capacity to be wronged. Rather, the patency dimension of mind predicts, or causes, judgments of moral patency.

Around the same time as this study, Knobe and Prinz (2008) conducted an intriguing study that led them to a similar conclusion. Participants were asked to indicate why it might be that a fisherman would want to know whether a fish had the capacity for memory or, alternatively, the capacity to feel pain. Open-ended responses showed that while the capacity for memory was thought most pertinent to being able to predict, explain, and control the fish's behavior, the capacity to feel pain was thought most relevant to making moral judgments about how it should be treated, consistent with the idea that psychological patency predicts judgments of moral standing.⁵

Both of these early studies therefore identify psychological patency, principally the capacity to suffer, as the primary (and possibly only) determinant of judgments of moral standing. This research therefore implies that lay individuals adopt a moral perspective that is consonant with classic Benthamite utilitarianism. Bentham's famous line in relation to the moral standing of non-human animals was: 'The question is not, Can they reason? nor, Can they talk? but, can they suffer?' (Bentham 2011, p. 236), and it appears that subjects in these studies were most focused on this capacity as well. This perspective also aligns closely with the focus on sentience among modern moral philosophers, particularly those associated with the animal liberation movement, who have argued that animals possess moral standing because of their capacity to suffer (Regan 1983; Singer 1975).

However, this early evidence was not entirely decisive: The Gray et al. (2007) finding was correlational, while the Knobe and Prinz (2008) finding was indirect – the capacity to experience pain was judged relevant for making moral judgments, but there was no direct demonstration that psychological patency causally influenced judgments of moral standing (see, e.g., Jack and Robbins 2012). However, two later investigations make the point more clearly. In two interesting studies, Jack and Robbins (2012, Experiments 1 and 2) showed that experimentally varying the extent to which lobsters were alleged to feel pain influenced subjects' judgments of how morally wrong it would be to harm them (specifically, to subject them to 'rough treatment'). Analogously, Sytsma and Machery (2012) pioneered an innovative 'alien species' method, in which subjects were asked to make judgments about a hypothetical alien species. An attractive feature of this method is that it allows for plausible manipulations of relevant mental capacities, without prior knowledge potentially contaminating subjects' judgments, as it might for well-known existing species (see Opatow 1993, for a related method using an obscure beetle species). In Study 4 of this investigation, Sytsma and Machery found that an experimental manipulation of an individual alien animal's ability to feel pleasure and pain influenced judgments of how wrong it would be to capture, kill, experiment on (harm), and dissect the animal. Thus, solid experimental evidence does indeed show that psychological patency increases judgments of moral standing.

But is psychological patency the sole ground on which attributions of moral standing are made? Drawing on the Kantian tradition noted above, Sytsma and Machery (2012) explored an additional factor – whether the entity in question is an agent. In two out of four of their studies, they found that a manipulation of an entity's agentic qualities influenced judgments of how morally wrong it would be to harm it. The entities in question were again members of a hypothetical alien species, and the manipulation of agency consisted of a multi-faceted description of several agentic qualities, including the possession of intelligence, thoughts, opinions, beliefs, and desires, 'complex social and political interactions', and 'highly developed literary, musical, and artistic traditions'. Both at the level of the entire species (Study 2), and its individual members (Study 4), this agency manipulation influenced judgments of moral standing, such that subjects indicated that it would be more wrong to harm, kill, or destroy animals and species

to the extent that they were agentic. This evidence therefore identifies two distinct sources of judgments of moral standing, psychological patency, and agency.

Yet, this finding was itself subject to critical scrutiny. As Jack and Robbins (2012) noted, Sytsma and Machery's (2012) agency manipulation implicates several elements of emotional responsiveness and thus may be thought to implicate psychological patency (or, in their parlance, 'phenomenal consciousness') as well.⁶ In particular, they noted that 'the suggestion that a creature could be capable of sophisticated social, political, literary, musical and artistic behaviors (comparable to those found in our own species) while lacking a rich emotional life and the ability to reflect upon those emotions, seems quite unintuitive' (p. 402). Thus, according to Jack and Robbins, Sytsma and Machery's (2012) agency manipulation implicates the capacity to suffer, and so it ultimately provides further evidence for the influence of only a single factor, psychological patency, on judgments of moral standing. Notably, in one of Sytsma and Machery's other studies (Study 1), a narrower manipulation of agency, involving only intelligence and inquisitiveness, had no significant effect on judgments of the moral standing of monkeys, consistent with Jack and Robbins' skepticism about whether agency in fact influences judgments of moral standing.

However, more recent studies have clarified this picture and have supported Sytsma and Machery's (2012) account. They have revealed independent effects of both agency and patency on attributions of moral standing while also revealing the powerful influence of a third factor. Piazza et al. (2014, Study 2) drew upon Sytsma and Machery's alien species method and manipulated agency, patency, and a third factor – the harmfulness of an entity's overall disposition. In each case, the manipulations were circumscribed only to the dimension in question. The patency manipulation had to do only with the alien animals' sensitivity to pain and the richness of their emotional life. The agency manipulation had to do only with the animals' intelligence, inquisitiveness, and problem-solving abilities. And the harmfulness manipulation had to do only with whether the animals were vicious and aggressive (or gentle and peaceful). These factors were manipulated orthogonally in a full factorial design, and subjects made judgments of moral standing by indicating how morally wrong it would be to harm and kill the animal, how much the animal deserved to be protected and treated with compassion, and how important it would be to protect it from extinction (which all correlated together highly). All three factors independently contributed to judgments of moral standing. And, perhaps surprisingly, the harmfulness factor produced the largest effect size, with more harmful animals being granted substantially lower moral standing than less harmful ones. The influence of harmfulness on judgments of moral standing was also revealed in a correlational study in which judgments of the moral standing of 34 real non-human animals were predicted by two independent factors – one that reflected intelligence/agency and psychological patency together (which were highly correlated with one another), and another reflecting harmfulness. A later study (Study 3) showed that the effect of harmfulness reflects an antipathy towards harmful dispositions per se, rather than towards capacities to act harmfully – a dog with a harmful disposition was granted equivalently low moral standing regardless of whether it was able-bodied and capable of acting on that disposition, or, alternatively, blind and ultimately non-dangerous. This effect also seems primarily to reflect a species-centric concern for harmfulness directed towards humans – a dog that was harmful towards humans but not other animals was granted significantly lower moral standing than a dog that was harmful towards other animals but not humans (Study 4).

In sum, this research corroborates the Sytsma and Machery (2012) finding that agency (operationalized in terms of intelligence, inquisitiveness, and problem-solving) does indeed increase judgments of moral standing, alongside psychological patency, while also providing clear evidence that the nature of an entity's disposition also affects judgments of moral standing.⁷ These three dimensions exert independent effects, but they are not orthogonal. In particular,

there is a strong link between intelligence and patency, such that participants tended to see greater intelligence as both predicting and causing a greater capacity for suffering (Piazza et al. 2014, Studies 1 and 2). But these dimensions are clearly conceptually distinct and are sufficiently distinct empirically that they produce independent effects on judgments of moral standing in experimental (rather than correlational) designs.

Unlike Sytsma and Machery's dual source model, which neatly parallels existing normative arguments in moral philosophy, this tripartite model overlaps only partially with normative perspectives. In particular, the justifiability of taking into account the harmfulness of an individual's disposition when granting moral standing is questionable. It might be reasonable to take into account harmfulness when it comes to human actors, who are seen as morally responsible for their actions. Individuals who have committed harmful actions (e.g., criminal acts of harm) are usually required to forfeit some fundamental rights, which people see as justified (Astor 1994; Carlsmith 2006; Carlsmith et al. 2002; Darley et al. 2000). Furthermore, the harmfulness (or helpfulness) of a person or group's underlying disposition is known to play a predominant role in social cognition and impression formation (Abele and Wojciszke 2007; Goodwin et al. 2014; Brambilla and Leach 2014; Wojciszke et al. 1998), which may also be justifiable. But, it is not clear that the harmfulness factor ought to be taken into account for non-human animals that are not morally responsible for their actions or dispositions. The fact that participants did find harmfulness relevant seems to represent an encroachment of ordinary principles of social cognition into a domain in which they may not justifiably apply (see Goodwin and Benforado 2015, for related evidence).

While there is good evidence for the role of these three factors, they likely do not represent the only important inputs to judgments of moral standing. Indeed, other research suggests that additional factors may play an important role. One such factor is attractiveness. Ruby and Heine (2012) found that disgust at eating various non-human animals was predicted by their attractiveness – extremely attractive animals prompted disgust at the thought of eating them.⁸ Disgust is not a direct measure of moral standing, but this finding implies that more attractive animals may be granted greater moral standing.⁹ Related work has shown that physically more attractive animal species are seen as more important to preserve from extinction (Gunnthorsdottir 2001).

Perceived similarity to humans may also be a factor that drives attributions of moral standing. Subjects who watched disturbing film clips of non-human animals in negative circumstances showed greater phasic skin conductance responses and reported greater subjective empathy to the extent that the animals in question were phylogenetically related to humans (Westbury and Neumann 2008).¹⁰ However, it is not clear whether this effect pertains to similarity per se – as phylogenetic relatedness to humans increases, so too does intelligence, as does the capacity to suffer (and possibly also perceptions of non-harmfulness). This point cuts both ways – it could be that the effects of intelligence, psychological patency, and non-harmfulness on judgments of moral standing are ultimately explained by all three variables being cues to animals' similarity to humans. But, this alternative explanation seems unlikely, particularly in the case of psychological patency and non-harmfulness – these factors likely affect judgments of moral standing directly, rather than through perceptions of similarity. Nonetheless, disentangling these effects cleanly is not straightforward and requires further exploration. In sum, we know that three factors matter to judgments of moral standing, but there clearly is scope to explore other factors that may affect such judgments and to search for a single unifying explanation (if one exists).

5. Does Moral Agency Inversely Predict (And Cause) Moral Standing?

One factor that has been thought to affect moral standing is moral agency, as postulated by moral typecasting theory (Gray and Wegner 2009; Gray et al. 2012).¹¹ This theory links the psychological dimensions of patency and agency, to their corresponding moral dimensions, moral patency and

moral agency, respectively. As we saw above, typcasting theory argues that an entity's capacity for suffering (psychology patency) is what grants it moral patency (or moral standing), while its capacity for agency grants it moral agency (i.e., moral responsibility). This theory makes a further, more controversial claim regarding the relation between moral agency and moral patency, namely, that these two constructs are inversely causally related. The strongest statement of this relation is that the perception of moral agency entirely precludes the perception of moral patency, and vice versa (see Gray and Wegner 2009; Gray et al. 2012). The more moderate reading, as Arico (2012) points out, is that there is a causally inverse relation, such that the perception of moral agency directly diminishes (but does not fully preclude) the perception of moral patency, and vice versa. Gray and colleagues use language that variously implies the stronger or more moderate reading.

However, the studies conducted to support this contention of moral typcasting theory do not provide direct evidence for even the more moderate reading of the relationship between moral agency and moral patency, as none of them directly measured (or manipulated) perceptions of *moral* patency, i.e., judgments of the capacity to be wronged (Gray and Wegner 2009). Instead, the relevant variable throughout these studies was *psychological* patency (the capacity to suffer). For instance, in many of these studies, the dependent variable was some measure of pain sensitivity, or the ability to withstand pain, which was inversely predicted or caused by moral agency (see Studies 1a, 1b, 3b, 3c, 4a, 5, and 6). Other studies measured patency in terms of subjects' reluctance to cause pain to various targets as a function of those targets' presumed sensitivity to pain (Study 7), while one study manipulated patency in terms of a target's genetic sensitivity, or insensitivity, to pain (Study 3a). A final study measured patency through judgments of a target person's likelihood of being victimized by a psychopath (Study 4b), which arguably draws on a different construct altogether. In each case, to the extent that patency is being measured, its operationalization is psychological and not moral. Thus, although Gray et al. (2007) were clear to distinguish moral patency from psychological patency (and moral agency from agency), Gray and Wegner (2009) treat these notions as essentially synonymous. This conflation is a recipe for confusion – while the capacity to experience pain is undoubtedly related to moral patency, they are distinguishable concepts: 'moral patency' *means* moral standing and not simply the capacity to suffer (psychological patency).¹² Accordingly, these studies ultimately cannot directly show what they purport to show regarding the link between moral agency and *moral* patency, namely that increases in perceptions of moral agency lead to a *decrease* in perceptions of moral patency or standing (and the accompanying rights to be treated with moral consideration). Instead, they could only show that perceptions of moral agency decrease perceptions of psychological patency.

However, even then, matters are still problematic, because as Arico (2012) astutely points out, each of the empirical demonstrations in Gray and Wegner (2009) is plagued by various confounds and artifacts of stimulus selection, such that the most plausible explanation in each case draws on factors entirely separate from moral typcasting theory (readers are referred to Arico's excellent analysis for further details). In sum, there is no evidence that moral agency is a negative input to moral patency, and the evidence for it being a negative input to psychological patency is also questionable.

Further research would be needed to investigate whether moral agency truly does inversely predict moral standing. However, in light of the strong, convergent evidence for a positive relation between psychological agency and moral standing (Piazza et al. 2014; Sytsma and Machery 2012), reviewed above, this hypothesis seems improbable.

6. Does Moral Standing Affect Mental State Attributions?

Beyond the inputs to moral standing, a separate question concerns the outputs from judgments of moral standing. Does granting an entity moral standing lead to differential

conceptions of its mentality? This causal direction is much more difficult to study, because it is difficult to influence subjects' judgments of a target's moral standing directly, without simultaneously affecting their judgments of correlated psychological features the target possesses. However, several studies have made promising inroads. One of these is due to Jack and Robbins (2012), who investigated whether granting moral standing to a non-human animal would increase perceptions of its psychological patency. In two studies (Studies 3 and 4), they manipulated the age and apparent vulnerability of an obscure sea creature, on the assumption that younger and more vulnerable creatures would be seen as having greater moral standing. They found that subjects who were presented with the younger, more vulnerable creature were more inclined to attribute to it the capacity to experience suffering. The authors emphasize how counter-intuitive this result is, given that we typically attribute greater mindedness to older rather than younger creatures. They take this result as reflecting a process of motivated cognition, whereby attributing moral standing motivates individuals to perceive social targets in ways that justify this attribution. A notable gap in this chain of inference is that direct measures of moral standing were assessed in only one of these studies (Study 3), precluding mediation analysis. Moreover, in the study in which moral standing was assessed (via a judgment of whether it would be wrong for a scientist to destroy the creature), the condition difference in moral standing between the younger, more vulnerable creature and the older, less vulnerable creature was only marginally significant. An ideally informative design would investigate whether a measure of moral standing mediates the condition difference in perceived psychological patency.

Other studies have approached this question less directly but in highly intriguing and suggestive ways. One study showed that inducing subjects to view a non-human animal (a tree kangaroo) as an 'animal' rather than as 'food' thereby led them to perceive it as having a greater capacity to suffer (Bratanova et al. 2011). This manipulation also affected judgments of moral standing – subjects indicated that the tree kangaroo deserved greater moral consideration in the 'animal' framing. Bastian et al. (2012; Study 2) similarly found that reminding omnivores that a target non-human animal was being raised for meat eating led them to perceive that specific animal as having more primitive mental capacities (on a general, composite measure involving an aggregate of both psychological patency and psychological agency items). Bastian et al. also found that getting subjects to write about the grisly process of meat production while holding in mind an expectation of upcoming meat consumption (thereby inducing cognitive dissonance; Study 3) similarly led them to decrease attributions of mindedness to the animal about to be consumed (also using a general measure ranging across both psychological patency and psychological agency).

One reading of these latter studies is that people will take their own behavior as a guide to the moral standing of a non-human animal species, which in turn motivates differential perceptions of its mindedness. However, to fully support this inference (which was not the main purpose of the studies described above), one would ideally want clear mediation evidence that attributions of decreased moral standing immediately following the experimental manipulation were responsible for the later change in mental capacity attributions. As it stands, the current evidence is also consistent with the possibility that the attributions of mental capacities come first and subsequently feed into later decreases of moral standing (indeed, this was the pathway postulated by Bratanova et al. 2011). Further evidence would be needed to clarify the exact sequence. Nonetheless, there appears to be increasing evidence for a bidirectional relationship between judgments of moral standing and attributions of higher mentality.

7. *How Far Does Moral Standing Extend?*

To what range of creatures do people attribute moral standing? It is surprising that relatively little research has tackled this question head on, given its relevance to a range of basic human behaviors, including eating, and to policy-related issues pertaining to animal experimentation and species conservation. One of the most direct investigations to date was Laham's (2009) study of how widely people draw their 'moral circle' (defined as the set of creatures that we have some moral obligation to show concern for). Laham showed that the size of people's moral circle was influenced by whether they were asked to include entities within their moral circle, or to exclude entities from it – moral circle size was significantly larger in the inclusion frame. This result mirrored previous work in judgment and decision-making showing that inclusion thresholds are raised when items need actively to be included rather excluded and may result from an implicit desire for clear-cut reasons to justify the specific choice being made (see, e.g., Shafir et al. 1993). Laham (2013) also showed that experimentally manipulating the subjective ease of retrieving exemplars of animals that one feels morally obligated to show concern for increased the reported size of one's moral circle, which in turn affected willingness to obtain more information about the preservation of animal wildlife (via a World Wildlife Fund newsletter). In a similar vein, Bastian et al. (2012) showed that subjects' moral circle tended to be larger when they focused on how animals are similar to humans, rather than on how humans are similar to animals. These authors argued that when the referent of the comparison is the self (how similar are animals to *humans*), shared features become more salient than when the referent of the comparison is another (how similar are humans to *animals*), leading to greater overall judgments of similarity.

Together, this research suggests that there is unlikely to be a single, consistent answer as to how widely people draw their moral circle. The same individual may accord differential moral standing to entities depending on how the question posed to them is framed. And although it has not yet been explored in depth, individual differences may also incline some people to accord moral standing much more widely than others. An intriguing measure of how widely different individuals accord moral standing has recently been developed by Crimston et al. (2015), who found that their measure of 'moral expansiveness' predicted a variety of moral decisions, including people's willingness to self-sacrifice to assist both human and non-human targets. What psychological factors precede and predict 'moral expansiveness' are not yet known. Dispositional empathic concern may be one such predictor (see Jack and Robbins 2012, Study 4, and Westbury and Neumann 2008, for suggestive evidence). Finally, it may also be that people accord moral standing differently depending on the particular type of moral standing or status that is at issue (see later). Nonetheless, even without resolving these matters, it appears that most people do not adhere to the miserly conception of moral standing argued for by some philosophers, which grants moral standing only to rational, autonomous agents (namely, humans).

8. *Conclusions and Future Directions*

Moral patients have moral standing. They can be morally wronged directly, as a function of their possessing interests (or a good of their own). Moral standing, or moral patiency, is heightened for entities that possess psychological patiency (the capacity to suffer) but also for entities that possess agency (including intelligence). And it is lowered for entities that possess harmful dispositions. To make sense of these causal links, it is vital to keep the notion of moral standing separate from the notion of psychological patiency. Doing so makes it clear that moral agency is unlikely to decrease moral standing, as has been argued for in moral typecasting theory – existing research shows that psychological agency actually increases moral standing, so it would be very surprising if moral agency did the opposite. Future research is needed to investigate other

potential determinants of moral standing, including physical attractiveness and similarity to humans. Granting moral standing has concomitant effects, and there is growing evidence for a bidirectional relationship between moral standing and psychological patiency. No consistent answer is likely to emerge regarding how broadly moral standing is granted – it depends on context, and probably also on individual differences and the type of moral standing being considered. More research is needed to explore these factors.

While existing studies have advanced our understanding of moral standing, many questions remain unanswered. Here, I list the ones I see as most important. One pressing question for future research is to explore how different types of moral consideration interrelate. In this paper, following several philosophers, I have equated moral standing and moral patiency, and distinguished them both from mere moral considerability. As environmental philosophers have stressed, however, something may be morally considerable (or have intrinsic value, e.g., a tree, a river, or an ecosystem) without being a moral patient. So far, little research has addressed this broader notion of moral considerability, and so we have little knowledge of what sorts of entities people see as morally considerable in their own right, rather than as merely instrumentally valuable. Sylvan's (1973) famous 'last man' thought experiment may provide a useful launching pad for empirical investigation in this area. Sylvan asked whether it would be morally wrong to destroy remaining natural wilderness areas if you were the last person surviving after an entire collapse of the world system. His goal was to provide an intuition pump for the notion of moral considerability (or intrinsic value): If your answer is "yes, it would be wrong", this suggests that you accord moral considerability to nature in its own right and not merely because it is instrumentally beneficial or aesthetically pleasurable to humans.

Coming at this question from the other side, it is also important to investigate gradations of moral standing, including how basic moral standing may differ from full moral standing. Even if people typically do grant non-human animals moral standing, they usually do not see them as equivalent in moral standing (or value) to human beings. Why not? Presumably, the capacity for rational autonomy plays a large role here, but we do not yet know the whole story. What role does the capacity for suffering play? Do people think human suffering is psychologically greater, or more intense, than animal suffering? Or do they just think it matters more, morally speaking, despite being psychologically equivalent in its intensity?

What privileges or rights are thought to follow from the full moral standing that is granted to persons, as opposed to a more basic moral standing that may be granted to some non-human animals? One possibility is that a longstanding philosophical distinction between negative rights not to be harmed – which may be seen as possessed by entities with both basic and full moral standing – and positive rights to be aided or helped – which may be seen as possessed only by entities with full moral standing – may help articulate the difference (see, e.g., Dinello 1971; Foot 1978; Green 1980; Kamm 1998; Quinn 1989; Thomson 1985; Trammell 1975; for relevant empirical evidence, see Goodwin and Landy 2014). An alternative proposal is that full moral standing may pertain to a more complete range of negative rights, including for example, the right not to be killed, whereas basic moral standing pertains to a more limited set of negative rights, such as the right not to be caused pain or suffering (see, e.g., Jaworska and Tannenbaum 2013).

Another question is whether people's conceptions of moral standing causally influence their behavior. Some prior studies have shown relatively little correlation between moral cognition and moral behavior (Blasi 1980). Is the same true with regard to moral standing? Laham (2013) showed that the size of a person's moral circle causally influenced their likelihood of seeking new information that might affect their behavior (a newsletter about the World Wildlife Fund). But as yet, no evidence indicates whether a person's conception of moral standing predicts personally costly moral behavior, so this is a topic that warrants further exploration.

Finally, we may also ask how conceptions of moral standing originate and develop. Do children start with a relatively narrow conception of moral standing, which then broadens, or do they start broad and then winnow down? What roles do culture and social learning play? Do conceptions of moral standing change in reliable ways across the adult lifespan? How do affective, cognitive, and personality factors guide which entities are seen as having moral standing?

In these, and many other respects, the psychology of moral standing, and its relation to people's everyday interactions with the world, is waiting to be further explored.

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Notes

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¹ The concept of 'moral status' is also often equated with 'moral standing' (see Jaworska and Tannenbaum 2013).

² In formulating things this way, I am treating the notion of 'moral standing' as narrower than the notion of 'moral considerability'. This may not accord with all existing usages of these terms. Sometimes, moral standing seems to have been taken as synonymous with moral considerability (e.g., Gruen 2014), while at other times it has been treated as narrower than moral standing (Jaworska and Tannenbaum 2013). Nonetheless, treating moral standing as a narrower, sub-type of moral considerability accords broadly with several existing formulations (e.g., Brennan 1984; Goodpaster 1978; O'Neil 1997; Schönfeld 1992; Sylvan 1973) and appears to me to be the most accurate formulation of the relation between these concepts.

³ The other minds investigated in this paper included those of the following: a baby, a chimp, a dead woman, a dog, a fetus, a frog, a girl, God, a man, a man in a persistent vegetative state, a robot, a woman, and the subjects themselves.

⁴ In this study, the psychological dimension of agency also predicted moral standing, though to a much lower degree. It is not clear from the original report whether psychological agency predicted moral standing once psychological patency was accounted for.

⁵ This research had the primary point of showing that attributions of 'phenomenal consciousness' (including, primarily, the ability to feel things) were made to individuals but not groups, which, though fascinating, is not directly relevant to the present article. Knobe and Prinz's (2008) contention that ordinary individuals possess the concept of phenomenal consciousness has been critiqued by other researchers (see, e.g., Arico 2010; Phelan et al. 2013; Sytsma and Machery 2009, 2010), and this issue has provoked lively debate among experimental philosophers. For a helpful overview, see Sytsma (2014).

⁶ Jack and Robbins' (2012) concept of 'phenomenal consciousness' is broader than the concept of 'psychological patency', because it includes aspects of conscious experience beyond pain and suffering. However, Jack and Robbins view phenomenal consciousness as relevant to moral judgment precisely because of its connection with psychological patency. The thrust of their argument is that phenomenal consciousness increases judgments of moral standing because it enables suffering. Reflecting this conception, each of their experimental manipulations of phenomenal consciousness makes direct reference to pain and suffering.

⁷ The effect of harmfulness had also been suggested by a prior study (Opotow 1993) in which the moral standing of the Bombardier beetle was increased when the beetle was described as economically beneficial as opposed to economically harmful (by virtue of its effects on ecosystems, crop yields, etc.).

⁸ Interestingly, the thought of eating extremely unattractive animals also prompted disgust, though that finding speaks less directly to questions of moral standing because it probably represents a more basic aversion response.

⁹ Some researchers have speculated that the experience of disgust itself may also serve to shrink a person's 'moral circle' (see Pizarro et al. 2006; Sherman and Haidt 2011), but as yet, there appears to be no work directly establishing this relation.

¹⁰ Opotow (1993) found no effect of a similarity manipulation on judgments of the moral standing of a Bombardier beetle. However, this may have been because judgments of similarity were quite low notwithstanding the manipulation (exact details on the means were not provided). The manipulation of similarity was also confounded with a manipulation of intelligence, making the overall result somewhat difficult to interpret.

¹¹ This theory uses the term 'moral patency' rather than 'moral standing', but as noted earlier, these terms are synonymous.

¹² Perhaps, the clearest way to see how these constructs come apart is to consider the perspective of contractualist philosophers such as Carruthers (2011), who grant moral standing on the basis of agentic qualities only. Carruthers does not deny that non-human animals have *psychological* patiency, i.e., the capacity to suffer. But he denies that this grants them moral standing, i.e., *moral* patiency, because they do not possess the kind of rational autonomy that he sees as necessary for moral standing.

Works Cited

- Abele, A. E. and B. Wojciszke. 'Agency and communion from the perspective of self versus others.' *Journal of Personality and Social Psychology* 93 (2007): 751–763.
- Arico, A. 'Folk psychology, consciousness, and context effects.' *Review of Philosophy and Psychology* 1 (2010): 371–393.
- Arico, A. J. 'Breaking out of moral typecasting.' *Review of Philosophy and Psychology* 3 (2012): 425–438.
- Astor, R. A. 'Children's moral reasoning about family and peer violence: The role of provocation and retribution.' *Child Development* 65 (1994): 1054–1067.
- Bastian, B., et al. 'When closing the human–animal divide expands moral concern the importance of framing.' *Social Psychological and Personality Science* 3 (2012): 421–429.
- . et al. 'Don't mind meat? The denial of mind to animals used for human consumption.' *Personality and Social Psychology Bulletin* 38 (2012): 247–256.
- Bentham, J. *An Introduction to the Principles of Morals and Legislation*. London: British Library, 2011. (Original work published in 1789).
- Blasi, A. 'Bridging moral cognition and moral action: A critical review of the literature.' *Psychological Bulletin* 88 (1980): 1–45.
- Brambilla, M. and C. W. Leach. On the importance of being moral: The distinctive role of morality in social judgment. *Social Cognition* 32 (2014): 397–408.
- Brennan, A. 'The moral standing of natural objects.' *Environmental Ethics* 6 (1984): 35–56.
- Bratanova, B., S. Loughnan, and B. Bastian. 'The effect of categorization as food on the perceived moral standing of animals.' *Appetite* 57 (2011): 193–196.
- Callicott, J. B. 'Animal liberation.' *Environmental Ethics* 2 (1980): 311–338.
- Carlsmith, K. M. 'The role of retribution and utility in determining punishment.' *Journal of Experimental Social Psychology* 42 (2006): 437–451.
- Carlsmith, K. M., J. M. Darley, and P. H. Robinson. 'Why do we punish? Deterrence and just deserts as motives for punishment.' *Journal of Personality and Social Psychology* 83 (2002): 1–16.
- Carruthers, P. *The Animals Issue: Moral Theory in Practice*. Cambridge, UK: Cambridge University Press, 1992.
- . 'Against the moral standing of animals.' *Questions of Life and Death: Readings in Practical Ethics*. Ed. C. Morris. Oxford: Oxford University Press, 2011. 274–284.
- Crimston, D., et al. *Moral Expansiveness: Examining Variability in the Extension of the Moral World*, 2015. Manuscript in preparation.
- Darley, J. M., K. M. Carlsmith, and P. H. Robinson. 'Incapacitation and just deserts as motives for punishment.' *Law and Human Behavior* 24 (2000): 659–683.
- Dinello, D. 'On killing and letting die.' *Analysis* 31 (1971): 83–86.
- Feinberg, J. 'The rights of animals and unborn generations.' *Responsibilities to Future Generations*. Ed. E. Partridge. Buffalo, NY: Prometheus Books, 1974. 139–150.
- Foot, P. 'The problem of abortion and the doctrine of double effect.' *Virtues and Vices*. Berkeley, CA: University of California Press, 1978. 19–32.
- Goodpaster, K. E. 'On being morally considerable.' *The Journal of Philosophy* 75 (1978): 308–325.
- Goodwin, G. P. and A. Benforado. 'Judging the goring ox: Retribution directed toward animals.' *Cognitive Science* 39 (2015): 619–646.
- Goodwin, G. P. and J. F. Landy. 'Valuing different human lives.' *Journal of Experimental Psychology: General* 143 (2014): 778–803.
- Goodwin, G. P., J. Piazza, and P. Rozin. 'Moral character predominates in person perception and evaluation.' *Journal of Personality and Social Psychology* 106 (2014): 148–168.
- Gray, H., K. Gray, and D. Wegner. 'Dimensions of mind perception.' *Science* 619 (2007): 315.
- Gray, K., A. Waytz, and L. Young. 'The moral dyad: A fundamental template unifying moral judgment.' *Psychological Inquiry* 23 (2012): 206–215.
- Gray, K. and D. M. Wegner. 'Moral typecasting: Divergent perceptions of moral agents and moral patients.' *Journal of Personality and Social Psychology* 96 (2009): 505–520.
- Green, O. H. 'Killing and letting die.' *American Philosophical Quarterly* 17 (1980): 195–204.

- Gruen, L. 'The moral status of animals.' *The Stanford Encyclopedia of Philosophy*. Ed. E. N. Zalta, 2014. <<http://plato.stanford.edu/archives/fall2014/entries/moral-animal/>>.
- Gunthorshdottir, A. 'Physical attractiveness of an animal species as a decision factor for its preservation.' *Anthrozoos: A Multidisciplinary Journal of the Interactions of People and Animals* 14 (2001): 204–215.
- Jack, A. I. and P. Robbins. 'The phenomenal stance revisited.' *Review of Philosophy and Psychology* 3 (2012): 383–403.
- Jaworska, A. 'Caring and full moral standing.' *Ethics* 117 (2007): 460–497.
- Jaworska, A. and J. Tannenbaum. 'The grounds of moral status.' *Stanford Encyclopedia of Philosophy*. Ed. E. N. Zalta, 2013. <<http://plato.stanford.edu/archives/sum2013/entries/grounds-moral-status/>>.
- Kamm, F. M. 'Moral intuitions, cognitive psychology, and the harming-versus-not-aiding distinction.' *Ethics* 108 (1998): 463–488.
- Knobe, J. and J. Prinz. 'Intuitions about consciousness: Experimental studies.' *Phenomenology and the Cognitive Sciences* 7 (2008): 67–83.
- Laham, S. M. 'Expanding the moral circle: Inclusion and exclusion mindsets and the circle of moral regard.' *Journal of Experimental Social Psychology* 45 (2009): 250–253.
- . 'Ease of retrieval and the moral circle.' *Social Psychology* 44 (2013): 33–36.
- O'Neil, R. 'Intrinsic value, moral standing, and species.' *Environmental Ethics* 19 (1997): 45–52.
- Opatow, S. 'Animals and the scope of justice.' *Journal of Social Issues* 49 (1993): 71–85.
- Phelan, M., A. Arico, and S. Nichols. 'Thinking things and feeling things: On an alleged discontinuity in folk metaphysics of mind.' *Phenomenology and the Cognitive Sciences* 12 (2013): 703–725.
- Piazza, J., J. F. Landy, and G. P. Goodwin. 'Cruel nature: Harmfulness as an important, overlooked dimension in judgments of moral standing.' *Cognition* 108 (2014): 108–124.
- Pizarro, D. A., B. Detweiler-Bedell, and P. Bloom. 'The creativity of everyday moral reasoning.' *Creativity and Reason in Cognitive Development*. Eds. J. C. Kaufman and J. Baer. Cambridge, UK: Cambridge University Press, 2006. 81–98.
- Regan, T. *The Case for Animal Rights*. Berkeley, CA: University of California Press, 1983.
- Ruby, M. B. and S. J. Heine. 'Too close to home: Factors predicting meat avoidance.' *Appetite* 59 (2012): 47–52.
- Quinn, W. S. 'Actions, intentions, and consequences: The doctrine of doing and allowing.' *The Philosophical Review* 98 (1989): 287–312.
- Schönfeld, M. 'Who or what has moral standing?' *American Philosophical Quarterly* 29 (1992): 353–362.
- Shafir, E., I. Simonson, and A. Tversky. 'Reason-based choice.' *Cognition* 49 (1993): 11–36.
- Singer, P. *Animal Liberation: A New Ethics for Our Treatment of Animals*. New York: New York Review and Random House, 1975.
- Sherman, G. D. and J. Haidt. 'Cuteness and disgust: The humanizing and dehumanizing effects of emotion.' *Emotion Review* 3 (2011): 245–251.
- Sylvan, R. 'Is there a need for a new, an environmental, ethic?' *Proceedings of the XV World Congress of Philosophy*. Vol. 1. Sophia, Bulgaria: Sophia Press, 1973. 205–210.
- Sytsma, J. 'Attributions of consciousness.' *Wiley Interdisciplinary Reviews: Cognitive Science* 5 (2014): 635–648.
- Sytsma, J. M. and E. Machery. 'How to study folk intuitions about phenomenal consciousness.' *Philosophical Psychology* 22 (2009): 21–35.
- Sytsma, J. and E. Machery. 'Two conceptions of subjective experience.' *Philosophical Studies* 151 (2010): 299–327.
- . 'Two sources of moral standing.' *Review of Philosophy and Psychology* 3 (2012): 303–324.
- Thomson, J. J. 'The trolley problem.' *The Yale Law Journal* 94 (1985): 1395–1415.
- Trammell, R. L. 'Saving life and taking life.' *The Journal of Philosophy* 72 (1975): 131–137.
- Westbury, H. R. and D. L. Neumann. 'Empathy-related responses to moving film stimuli depicting human and non-human animal targets in negative circumstances.' *Biological Psychology* 78 (2008): 66–74.
- Wojciszke, B., R. Bazinska, and M. Jaworski. 'On the dominance of moral categories in impression formation.' *Personality and Social Psychology Bulletin* 24 (1998): 1251–1263.