

This PDF includes a chapter from the following book:

The Cognitive Animal

Empirical and Theoretical Perspectives on Animal Cognition

© 2002 Massachusetts Institute of Technology

License Terms:

Made available under a Creative Commons
Attribution-NonCommercial-NoDerivatives 4.0 International Public License

<https://creativecommons.org/licenses/by-nc-nd/4.0/>

OA Funding Provided By:

The open access edition of this book was made possible by generous funding from Arcadia—a charitable fund of Lisbet Rausing and Peter Baldwin.

The title-level DOI for this work is:

[doi:10.7551/mitpress/1885.001.0001](https://doi.org/10.7551/mitpress/1885.001.0001)

Lori Gruen

On January 13, 1962, the *London Daily Mirror* ran a story, “The Death of a Hero.” The hero was a dog, Blackie, who tried to drag Ian Beech, the human infant with whom he lived, from a blazing fire that was consuming the Beech house. Blackie was unable to escape in time, and both he and Ian perished in the fire. The coroner remarked at the inquest that Blackie’s teeth marks on Ian’s shoulder were “gentle, gripping marks [indicating] that this dog made an attempt to get the body away from the fire.” Ian was found just a foot away from Blackie’s outstretched paws.

On August 16, 1996, at the Brookfield zoo near Chicago, a 3-year-old boy fell 18 feet onto the concrete floor of a gorilla enclosure. The child hit his head and was unconscious. Nervous onlookers and the child’s parents panicked, believing the child was in danger from the gorillas. To their astonishment, a 7-year-old gorilla mother named Binti Jua, with her own baby on her back, gently picked up the child and carried him to a door within easy reach of zoo staff. The boy was taken to the hospital and recovered quickly.

In 1871, Darwin described a “case of a little American monkey”:

Several years ago a keeper at the Zoological Gardens showed me some deep and scarcely healed wounds on the nape of his own neck, inflicted on him, whilst kneeling on the floor, by a fierce baboon. The little American monkey, who was a warm friend of this keeper, lived in the same compartment, and was dreadfully afraid of the great baboon. Nevertheless, as soon as he saw his friend in peril, he rushed to the rescue, and by screams and bites so distracted the baboon that the man was able to escape, after, as the surgeon thought, running great risk of his life. (Darwin 1871/1981)

Such anecdotes capture our attention perhaps because they show cross-species concern in an unusual direction. We humans care about animals, but it is remarkable when animals act as if

they care about us. But does it make sense to describe these behaviors as motivated by what might be called moral concern? When animals behave in “heroic” or “generous” ways within or across species; when tolerance and assistance is offered to handicapped conspecifics; when animals behave as if they are experiencing guilt, shame, or embarrassment; when they build alliances, cooperate, and reconcile after conflicts; when they shun individuals who do not play fair; when they seek revenge or retribution for previous unacceptable behavior, can we usefully and meaningfully describe their actions as stemming from moral sentiments? (Bekoff 2001; de Waal 1989, 1996; Flack and de Waal 2000)

The systematic study of behaviors that might be described as morally motivated—behaviors that are empathetic, sympathetic, compassionate, trustworthy, shameful, vengeful, conciliatory; or that display a sense of friendship, loyalty, justice, or fairness—has just gotten under way. But interest in the topic is certainly not new and the idea that we might achieve a better understanding of morality by studying animal cognition has been suggested at least since Darwin’s day. As he noted, his “investigation” into the development of mental capacities in humans and nonhumans “possesses, also, some independent interest, as an attempt to see how far the study of the lower animals throws light on one of the highest psychical faculties of man”—the moral sense (Darwin 1871/1981).

Recent studies being done to explain putatively moral behavior and the complex emotional and cognitive capacities on which such behavior depends, raise interesting and important questions relevant to those working in ethics. There are obvious questions about the boundaries of the moral community, i.e., who should matter, how they should matter, and why (DeGrazia 1996; Singer 1975; Van de Veer 1979; Varner 1998), as well as questions about human obliga-

tions to nonhumans within the moral community. For example, if animals feel sadness when they are separated from their kin, should we endeavor to keep families together in captivity? If anesthetized animals are being physically manipulated in laboratory experiments, should we be sure that their conspecifics do not witness these actions? What sort of cognitive enrichment should be provided for animals in captivity (Fouts 1986)?

Work that examines moral sentiments in nonhumans also raises less obvious but equally important questions about the conditions of moral agency and notions of practical reasoning. Because it has been presumed that humans are the only beings capable of moral sentiments and behavior, some ethical theorists believe they have license to theorize in ways that are disconnected from empirical studies in cognitive ethology (and even human psychology, but that is a topic for another day). In this brief discussion, I want to highlight the impact that cognitive ethology can have on debates about moral agency. I want to suggest that cognitive ethology can help reframe topics in ethical theory. Along the way I will identify dangerous ethical assumptions that cognitive ethologists should seek to avoid. Like Darwin, I believe there are exciting morals to be drawn from the study of animal minds.

One of the things that sets humans apart from other animals is our perennial efforts to establish our distinctiveness from them. Identifying which capacities are distinctively human, however, has not been easy. Showing how those capacities are morally important has been harder still. A number of candidate capacities and activities have been proposed over the years: using tools, maintaining family ties, generating culture, solving social problems, starting wars, having sex for pleasure, and using language are just a few. As it is turning out, while all of these capacities are to some degree cognitive, it looks as if none are distinctly human. Most of the ordinary activities that humans engage in have been observed, often in less elaborate form, in some nonhuman animal or other.

It has often been suggested that the morally important difference between humans and nonhumans is that humans are moral agents. Moral agency has been understood to mean a number of different things: the ability to have moral sentiments, the ability to engage in moral deliberation, the ability to make moral judgments, or the ability to act morally. These abilities in turn are thought to require different cognitive capacities. The notion of personhood has often been used to describe the capacity necessary for moral agency, and historically Kant is the most noted defender of this view. Kant maintained that “The fact that the human being can have the representation ‘I’ raises him infinitely above all the other beings on earth. By this he is a person. . . . that is, a being altogether different in rank and dignity from things, such as irrational animals, with which one may deal and dispose at one’s discretion” (Kant 1798/1977; Wood 1998). More recently, some Kantian scholars have redescribed this distinctness as the capacity for reflective consciousness, a capacity that nonhumans supposedly lack:

A lower animal’s attention is fixed on the world. Its perceptions are its beliefs and its desires are its will. It is engaged in conscious activities, but it is not conscious *of* them. That is, they are not the objects of its attention. But we human animals turn our attention on to our perceptions and desires themselves, on to our own mental activities, and we are conscious *of* them. That is why we can think *about* them. (Korsgaard 1996, p. 93)

Our reflective minds, on this view, allow moral agents to think about whether or not to act on their desires, or, to put it in popular philosophical terminology, moral agents have the capacity to determine whether particular desires should be elevated to reasons for action.

Philosophers are not the only ones trotting along this neo-Kantian path. For example, Marc Hauser has a hunch that nonhuman animals lack moral emotions or moral senses. He writes:

They lack the capacity for empathy, sympathy, shame, guilt, and loyalty. The reason for this emotional hole in

their lives, I believe, is that they lack a fundamental mental tool: self-awareness; there is no evidence that they are actually aware of their own beliefs and desires. (Hauser 2000, p. 224)

This hunch, and the Kantian notion of personhood, rests on a number of problematic assumptions about moral agency. One is the idea that the reflective structure of human minds or self-awareness is either there or not. This obscures the possibility that there may be stages of cognitive moral development that lead to full-blown self-awareness in some humans, and it overlooks the cognitive continuity between human and non-human minds. As Darwin wrote:

[A]ny animal whatever, endowed with well-marked social instincts would inevitably acquire a moral sense or conscience, as soon as its intellectual powers had become as well, or nearly as well developed, as in man. For, firstly, the social instincts lead an animal to take pleasure in the society of its fellows, to feel a certain amount of sympathy with them, and to perform various services for them. . . . Secondly, as soon as the mental faculties had become highly developed, images of all past actions and motives would be incessantly passing through the brain of each individual. . . . Thirdly, after the power of language had been acquired, and the wishes of the community could be expressed, the common opinion how each member ought to act for the public good, would naturally become in a paramount degree the guide to action. . . . Lastly, habit in the individual would ultimately play a very important part in guiding the conduct of each member. (Darwin 1871/1981)

Darwin may not have been right about the particulars, but his suggestion that moral sentiments develop in stages seems quite plausible (and is substantiated by some psychological work on moral development in children; see Gilligan 1982; Kohlberg 1981).

Importantly, self-awareness is not the first stage. Consider one of your recent experiences of sympathy and ask yourself how much of a role self-awareness played in that experience. When you rush to assist an elderly woman whose leg has fallen between a train and the platform or

when you jump into the street to prevent a car from hitting a stray dog, are you acting from sympathy and a desire to prevent the harm that will befall the woman or the dog, or are you acting for a reason that arose by self-reflectively testing your desire to determine whether it should be elevated to the status of a reason? This latter process certainly plays a role in our discussions and analyses of sympathetic experiences, but how much of a role does it play in the experience itself? [For a similar point about the role of language in thought, see Dretske (1993).]

Further, moral reflection may best be understood, not as a single, unified capacity, but rather as made up of a set of capacities: the capacity to have belieflike and desirelike states; the capacity to allow information to alter those states; the capacity to recognize conflicts in desires and to deliberate about solutions and to modify one's motivations so as to act on the solution; the capacity to sympathize or empathize with others; the capacity to weigh outcomes; the capacity to plan; the capacity to coordinate actions; the capacity to step back from all this believing, desiring, deliberating, planning, and coordinating and see it as one's own. In addition, reflective awareness itself comes in degrees. Reflective awareness manifests itself differently within members of our own species and at different times in the course of one's life; sometimes I am more reflective than other times and some humans are always more reflective than I am. Certainly it can be argued that the final suite of capacities, stepping back and endorsing one's believing, desiring, deliberating, etc., is what counts as the *sine qua non* of moral agency. But these arguments will be compelling only if they track empirical understandings of cognition and are based on defensible conceptions of moral motivation and behavior. Recent arguments about moral sentiments and moral agency in nonhumans by some philosophers and some ethologists do neither.

Consider the following claims: Moral agents must place value on moral emotions; moral

agents must consider the beliefs, desires, and needs of others when planning action; and moral agents must understand the notions of duty and responsibility (Hauser 2000). Each of these assertions about what is required for moral agency rests on a particular type of normative theory that is focused on the intention of actors rather than on their ability to improve outcomes or the quality of the behavior. The adequacy of various types of normative theory is a matter of continuing philosophical debate. Cognitive ethologists or primatologists who simply pick up one type of normative theory (wittingly or not) and then uncritically adopt the conception of moral agency embedded in that theory are in danger of designing experiments that may not be helpful in understanding the moral cognition of nonhumans.

This brings me to a related concern at a different level of philosophical analysis. I worry that problems in the way most “moral psychology” is currently being done may also lead to the misformulation of the questions being asked by those studying moral sentiments in nonhuman animals. Let me briefly describe one popular view in moral psychology. To be a moral agent, one must act on reasons. Moral agency requires the ability to engage in practical reason, which has traditionally been explicated by reference to belief-desire psychology. Moral beliefs indicate what should be done or what the morally right thing to do is; moral desires motivate us to do that thing, and thus morally right actions are those based on the appropriate beliefs and desires. A problem emerges when our beliefs about what is right are in conflict with our desires—when we desire to do that which we believe to be wrong, or when we fail to desire to do that which we believe to be right. A moral agent will attempt to resolve this conflict (the attempt itself is enough for agency; one does not have to succeed to be considered a moral agent, although continual failure will mark one as immoral). This conflict can be resolved by an exercise in practical reasoning, either by reflecting on one’s desires and altering them accordingly or by

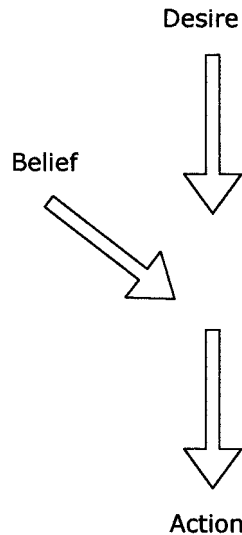


Figure 54.1

reflecting on one’s beliefs about what is right and altering them accordingly.

This basic moral psychology, which posits simply beliefs and desires, has been at the heart of much debate among philosophers. Humeans, who accept something like the picture shown in figure 54.1, in which we start with desires and then add beliefs to guide the desires toward their object, are at odds with the Kantians, who accept something like the picture in figure 54.2, in which we start with beliefs and add a motivating desire that is an expression of respect for the moral law or a commitment to one’s practical identity. However, both of these pictures seem limited and quite removed from much of the experiences and behaviors in which the complexity of moral sentiments is expressed.

The standard picture readily allows for the design and implementation of experiments that will determine whether nonhuman animals are moral agents as thus understood. However, the theorizing that lies behind these models is decidedly a prioristic and it seems quite possible,

Belief



Desire



Action

Figure 54.2

indeed likely, that because this model of agency simply posits certain moral concepts and categories and describes moral actions based on those posits, it may not accurately reflect actual moral agency at all.

We would do better, I believe, to find out what mental capacities are operating or available when we perform moral actions (and nonintentional mental capacities will probably play a role here) and then seek to understand their operation. Since the social psychological literature has provided interesting and useful challenges to certain philosophical understandings of folk psychology, studying animals' apparently moral behavior can help us obtain a better understanding of the cognitive mechanisms that are required for ethical behavior. Recent studies of animal cognition reveal that their mental capacities may be far more complicated and that moral belieflike states and moral desirelike states are much less homogeneous than one might think if one only looked at the armchair folk psychologizing that is done by ethicists discussing reasons for action.

Clearly, more conceptual work on what moral agency is, and what counts as evidence for it, as well as more empirical evidence from a variety of social species is needed before we can confidently assert that humans are moral agents and nonhumans are not. I believe cognitive ethologists interested in the moral sentiments of animals are in a position to lead the way, in the company of sympathetic moral philosophers, rather than following current fashions in philosophical ethics. Indeed, cognitive ethology can contribute greatly to work on naturalizing ethics if the conceptual dangers I have discussed are avoided.

One of the central intuitions at the base of controversies surrounding the legitimacy of cognitive ethology is the view that nonhuman animals do not really think and thus that cognitive ethologists and others who rely on their work are engaging in anthropomorphism, wishful thinking, or worse. My suggestion that cognitive ethology can reshape our thinking about the nature of ethical behavior will surely be met with even more extreme skepticism. Even if animals think, they cannot possibly think ethically. Much will depend on how we conceive of what it means to think ethically and what behaviors are considered ethical. Collaborations between those working in more naturalistic ethics and those working in cognitive ethology promise to create more controversy, but also to yield a deeper understanding of what it means to be moral.

Acknowledgments

I would like to thank the volume editors and Matthew Barrett and Valerie Tiberius for constructive comments and helpful discussions.

References

Bekoff, M. (ed.) (2000). *The Smile of a Dolphin: Remarkable Accounts of Animal Emotions*. New York: Random House/Discovery Books.

- Bekoff, M. (2001). Social play behavior: Cooperation, fairness, trust and the evolution of morality. *Journal of Consciousness Studies* 8: 81–90.
- Darwin, C. (1871/1981). *The Descent of Man, and Selection in Relation to Sex*. Princeton, N.J.: Princeton University Press.
- DeGrazia, D. (1996). *Taking Animals Seriously: Mental Life and Moral Status*. New York: Cambridge University Press.
- de Waal, F. B. M. (1989). *Peacemaking Among Primates*. Cambridge, Mass.: Harvard University Press.
- de Waal, F. B. M. (1996). *Good Natured*. Cambridge, Mass.: Harvard University Press.
- Dretske, F. (1993). The nature of thought. *Philosophical Studies* 70: 185–199.
- Flack, J. C. and de Waal, F. B. M. (2000). Any animal whatever: Darwinian building blocks of morality in monkeys and apes. *Journal of Consciousness Studies* 7: 1–29.
- Fouts, R. (1986). *Signs of Enrichment*. Videotape produced by Friends of Washoe, Central Washington University, Ellensburg, Wash.
- Gilligan, C. (1982). *In a Different Voice*. Cambridge, Mass.: Harvard University Press.
- Hauser, M. (2000). *Wild Minds*. pp. 250–252. New York: Henry Holt.
- Kant, I. (1798/1977). *Anthropologie in pragmatischer Hinsicht* (translated as *Anthropology from a Pragmatic Point of View* by Victor Lyle Dowdell). Carbondale: Southern Illinois University Press.
- Kohlberg, L. (1981). *The Philosophy of Moral Development*. Cambridge, Mass.: Harvard University Press.
- Korsgaard, C. (1996). *Sources of Normativity*. Cambridge: Cambridge University Press.
- Singer, P. (1975). *Animal Liberation*. New York: Avon Books.
- Van de Veer, D. (1979). Interspecific justice. *Inquiry* 22: 55–70.
- Varner, G. E. (1998). *In Nature's Interests? Interests, Animal Rights, and Environmental Ethics*. New York: Oxford University Press.
- Wood, A. (1998). Kant on duties regarding non-rational nature. *Aristotelian Society Supplementary Volume*: 189–210.