

657a. Broom, D.M. 2013. Review of Rowlands M. *Can Animals be Moral?* pp. 258. New York: Oxford University Press, 2012. *Appl. Anim. Behav. Sci.*, 147, 243-244.

Donald M. Broom, Centre for Animal Welfare and Anthrozoology, Department of Veterinary Medicine, University of Cambridge, Madingley Road, Cambridge CB3 0ES, U.K.

Mark Rowlands, who is an academic philosopher, commences his book with anecdotes of tolerant, solicitous dogs and ends it with detailed philosophical arguments about moral subjects, moral agents and respect. Whilst thoughtful, wide-ranging and interesting in his explanation of the philosophical literature, he refers to a narrow range of biological writings on the subject and misses some of the key biological arguments. For example, although de Waal is mentioned, his major writing on this subject (de Waal 1996) is not reviewed and the extensive biological and philosophical arguments in Ridley (1996), Rottschaefer (1998) and Broom (2003) are not discussed at all.

Broom (2003, Section 4.7) says "it is argued that morality has a biological basis and has evolved" and "The idea that the various aspects of morality have evolved implies that human morality has or had parallels or antecedents in our immediate ancestors, other primates, other mammals and other vertebrate animals." The great diversity of biological mechanisms that are necessary for moral actions to occur is hardly mentioned by Rowlands. Indeed, much of the biological information that is included is taken from Bekoff and Pierce (2009) and much of the criticism of biological ideas is addressed to the writings of Bekoff. Whilst Marc Bekoff's writings are interesting and include valuable factual information, I do not think that he would claim that they are comprehensive scientific documents.

In his descriptions of animal behaviour, Rowlands follows some other authors in referring to dogs, elephants and apes using human names. However, it is not necessary to use human names to convey the idea that these animals are individuals and, in my view, to use such names trivialises the animals and misleads the audience. The names are not concepts initiated by the animals and their use unreasonably implies that the animals are in some way human when we should be considering their actual qualities. It would be better if the use of human names for non-human animals were not permitted in scientific papers and books.

An interesting contribution of this book is an exploration of the links between capabilities in relation to morality, capacity to have emotions and the functioning of motivational systems. In some parts of the book, the author states that emotional components are essential in order for any moral action to be taken. A long list of emotions is presented, some of which might not be included by biologists as being emotions, and it is argued (p.69) that "animals can be moral objects in the sense that they act on the basis of moral reasons. These moral reasons take the form of moral emotions". Rowlands also supports Dixon (2008), who says that animals do not have morally-laden emotions, and then has to introduce the idea of two levels of emotions in order to link morality with emotions. However, I would say that the brain and behaviour literature

exemplifies moral actions in humans and non-humans that do not necessarily involve emotional responses. He does not use the term motivation in the scientific sense used by behavioural scientists, for example he says (p. 214) that animals are not moral subjects because they “do not have control of their motivations”. Scientists would say that the motivational system of an individual encompasses all decision-making mechanisms so the control is part of the motivation. Rowlands must be referring to a component of the motivational system that is not controlled.

Much of the biological information available is not considered in Rowlands’ arguments. In an interesting discussion (pp. 73-82) of what those adopting the various philosophical positions might conclude about morality in animals, an idea supported by the author is that only a rational individual can be moral and animals are not rational so cannot be moral agents. On page 242, Rowlands states that “a moral agent must understand her actions, their consequence and how to evaluate them”. This follows views on the metacognitive abilities of animals, which have been the subject of much scientific research, but very little of this is mentioned. The substantial evidence for rational decision-making in a variety of species and situations makes it invalid to say that animals are not at all rational.

The book concludes with a discussion of (p. 244) “Would a cognitive ethologist from Mars find humans moral” and (p. 250) what is worthy of respect. Overall, the book is interesting and informative about philosophical issues related to the concept of morality. However, the much less thorough use of scientific information is frustrating to a biologist and results in conclusions that would be likely to be different if all information available were utilised.

Bekoff, M. and Pierce, J. 2009. *Wild Justice*. Chicago: University of Chicago Press.

Broom, D.M. 2003. *The Evolution of Morality and Religion*. Cambridge: Cambridge University Press.

Dixon, B.A. 2008. *Animals. Emotions and Morality*. New York: Prometheus Books.

Ridley, M. 1996. *The Origins of Virtue*. London: Viking.

Rottschaefer, W.A. 1998. *The Biology and Psychology of Moral Agency*. Cambridge: Cambridge University Press.

Waal, F. de 1996. *Good Natured*. Cambridge Mass: Harvard University Press.