

BEING CONSCIOUS OF MARC BEKOFF: THINKING OF ANIMAL SELF-CONSCIOUSNESS

by Gregory R. Peterson

Abstract. The preceding article by Marc Bekoff reveals much about our current understanding of animal self-consciousness and its implications. It also reveals how much more there is to be said and considered. This response briefly examines animal self-consciousness from scientific, moral, and theological perspectives. As Bekoff emphasizes, self-consciousness is not one thing but many. Consequently, our moral relationship to animals is not simply one based on a graded hierarchy of abilities. Furthermore, the complexity of animal self-awareness can serve as stimulus for thinking about issues of theodicy and soteriology in a broader sense.

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Are animals self-conscious? As we usually think of it, self-consciousness is one of the defining traits of humankind. The inscription at Delphi commanded the ancient Greek to “know thyself.” Not only do human beings think, we think about ourselves in a number of sophisticated ways. Not only can I think about my individual thoughts, I also have a self-conception, a mental picture of what I am like, which may be adjusted and developed as I grow and mature. Not only do I think about my own thoughts, I think of the thoughts of others as well; that I can do both has, from a historical perspective, been of considerable importance for how we define ourselves as well as for our ability to act morally.

But do animals possess self-consciousness? Historically, Western philosophers, theologians, and scientists either have not taken the question seriously or have simply dismissed it. Yet, as Marc Bekoff’s article (2003)

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shows, recent research and reflection reveal that the questions and potential answers are much more complex than they initially appeared. Recognizing the complexity of issues surrounding animal awareness must lead to a proper reassessment of how we think of the significance of self-consciousness altogether.

ANIMAL CONSCIOUSNESS AND SELF-CONSCIOUSNESS:
THE STATE OF THE SCIENCE

It is some mark of progress and the changing of times that scientists like Bekoff are able to speak about animal consciousness and self-consciousness at all. For much of the twentieth century, claims about animal consciousness and self-consciousness held about the same status as phrenology or U.F.O. research among leading researchers of animal behavior. Strongly influenced by the behaviorist paradigm pioneered by John Watson and B. F. Skinner, categories of the mind were dismissed as superfluous to a proper understanding of animal behavior. Simply speaking, animals could not be said to have minds, and even if they could, they were irrelevant. Although the legacy of behaviorism lingers, it is now permissible to speak of animal minds again, due in no small part to the work of Donald Griffin (1976; 1992) and the students he has inspired.

Yet, as Bekoff's article also shows, important basic issues remain. Central among these is the status of animal consciousness itself. In his works that established cognitive ethology as a field, Griffin held that animal consciousness should be the focus of researchers' attention. While research has significantly progressed in many areas since the establishment of cognitive ethology, the nature and status of consciousness remains an important and difficult problem.

It may be the case that the subject of animal consciousness is not scientifically tractable at all. Consciousness cannot be observed directly; we can only infer its presence from other, detectable traits. As Bekoff notes, many infer the presence of consciousness from the presence of behavioral flexibility, a criterion that was prominently put forth by Griffin himself. Why behavioral flexibility? To be flexible and adaptable, it would seem, requires some thought, as opposed to instinct, which is simply programmed in. To be flexible is to be more like human beings than like rocks, and so ultimately rests on some analogy with our own experience. It also, I suspect, derives partly from the older criterion of reason as the defining trait of human beings as well as the dichotomy between human beings and machines/computers. Be that as it may, it seems to be one of the better criteria that we have. In human beings, consciousness is associated with those states of maximal behavioral flexibility, while states that involve limited flexibility (sleepwalking or hypnosis, for example) are often understood to be unconscious. It certainly seems reasonable, then, to attribute

consciousness to animals with such flexibility, but there is no logical necessity involved in such an attribution. Likewise, as Bekoff points out, the absence of such flexibility does not imply the absence of consciousness, and Bekoff opts instead for perception as an identifying criterion. Perception is also a reasonable criterion, as our own consciousness is dominated by our own perceptual states. Again, however, there is no necessary correlation between the presence of perception and the presence of consciousness. Indeed, borderline cases such as sea anemones (which could be said to perceive their prey, but I think hardly anyone would claim that they are conscious) would suggest that perception needs to be accompanied by other criteria as well, such as the presence of a centralized or reasonably sophisticated nervous system.

My point here is not to dismiss the claim that many animals are conscious but only to raise the continuing question of scientific tractability. Certainly, I would agree with Bekoff that there are good grounds for attributing consciousness to many animals (“many” here meaning especially vertebrates with centralized nervous systems). Certainly, we can define consciousness in such a way as to make it tractable—to simply identify it as perceptual consciousness or as thinking consciousness for which behavioral flexibility might be a clear sign. While there are grounds for doing so, such redefinition risks losing the important philosophical and moral connotations of consciousness, that there is a subjective awareness, a “what is it like to be” that thing (Nagel 1974). This latter sense is what David Chalmers has denoted as the “hard problem” of consciousness (see 1997, chap. 1). Bekoff, it seems to me, is right to attribute this latter sense of consciousness to other animals, but it remains an attribution that is made on philosophical as much as scientific grounds.

With this in mind, it is curious to note that the attribution of self-consciousness does not suffer a similar kind of problem. This is because self-consciousness as a concept has little directly to do with consciousness *per se* but is rather a kind of mental ability or set of mental abilities that is in principle detectable. An organism cannot definitely show you it is conscious, but it can show you that it is self-conscious. This may seem peculiar on the face of it. Presumably, one must be conscious in order to be self-conscious. Most usages of the term *self-conscious*, however, imply only the sort of issues that fall under Chalmers’s easy problems of consciousness. The ability of a person to use the word *I* and to reflect on her own thoughts (“I am thinking about animals right now”) or to construct a picture of herself (“I am quite shy but very talkative once you get to know me”) are the sort of things another person can observe. We infer from such examples the presence of consciousness, even if (implausibly) it is logically possible to demonstrate such abilities while lacking consciousness in Chalmers’s strong sense. Indeed, many of the arguments regarding artificial intelligence involve precisely this sort of distinction.

There is a problem with self-consciousness, but it is rather different from that of consciousness. The problem with self-consciousness is that it seems to denote not one kind of ability but a range of abilities. Indeed, as it is commonly used, self-consciousness seems to primarily imply one of two things. First, it usually implies the ability to have a picture of a *self*, a sort of mental image of who and what one is and (perhaps) how one appears to others. Such a picture may or may not be accurate (and human history leads us to conclude that our self-pictures have only at best a modest correlation to the way we really are). Second, self-consciousness is sometimes taken to be the ability to think about one's own thoughts and can thus be identified as a kind of higher-order thinking, or what cognitive psychologists sometimes refer to as metacognition. No doubt the two are linked, but they seem to be distinct abilities that, at the very outset, indicate the complexity of what we mean by self-consciousness.

Bekoff notes this complexity well, and he clearly indicates the kinds of issues that must be considered with regard to the presence of animal self-consciousness. Even very simple animals have some kind of rudimentary self-consciousness, which can take the form of a body awareness and self/other distinction. The centrality of body awareness has been put forth by Antonio Damasio (1999), and I would suggest that Bekoff could emphasize the importance of body awareness even more than he does. Indeed, some rudimentary level of body awareness and self/other distinction would almost have to be present for any animal with mobility and perception. Ants do not gnaw off their own antennas; Bekoff's canine companion, Jethro, at some level knew that he was not his canine pal Zeke. Even on the level of body awareness, however, there are likely a number of hidden complexities. Jethro's body awareness was undoubtedly much richer than that of an ant's. The classic article "What the Frog's Eye Tells the Frog's Brain" (Lettvin et al. 1965) comes to mind here. Frogs, it would appear, do not see objects in the same way we do. They do not see caterpillars, trees, and rocks as much as they see objects that move and objects that don't, objects that are threatening and objects that are food. The sense in which they are aware of their bodies may be similarly limited. The argument, of course, can work both ways. Animals whose sense abilities are relevantly greater than our own—a dog's sense of smell, for example—may have the potential for relevantly richer sense of self.

The ability to have a self-representation, however, seems to imply something more than simply body awareness. The mirror experiments performed by Gordon Gallup (1977) and others is an indicator of at least one form of such awareness. As Bekoff rightly notes, however, such body representation (presumably a step beyond comparatively simple body-awareness) is by no means the same thing as full-fledged human self-consciousness. Turning to forms of social awareness may imply other, more sophisticated forms of self-consciousness. Thus, a great deal of research has been de-

voted to the question of the extent to which other animals may be said to have a “theory of mind,” the ability to think about the thoughts of others. The results of this research has been inconclusive, although whether this is caused by animals’ genuine lack of a theory of mind or by the limits of experimental conditions can be debated. To have a theory of mind implies other-consciousness, but what kind of self-consciousness does it imply? Presumably, enough for me to modify my behavior in light of the real or anticipated behavior of others. This, again, may be a specialized ability and not the same kind of full-blown self-consciousness that we attribute to humans.

I would agree with Bekoff, however, that such distinctions should not be taken as a simple rejection of the intelligence and sophistication of animals. Rather, the scientific study of animal self-consciousness should lead us to an awareness that self-consciousness as we usually conceive it is not one thing but many. Human self-consciousness likely emerges from a range of abilities, some of which we share with animals, some of which we do not. From an evolutionary perspective, this is what we might expect, and continued human and animal research should lead us to a greater awareness of these complexities.

Some elements of the complexities yet to be explored come through in Bekoff’s article, most notably the interesting (and no doubt accurate) claim that certain forms of conceptualization and experimentation end the privileging of certain species over others. Thus, gaze-averse species might never pass a mirror test yet still have a rich sense of body representation. A further complexity may be raised by the differences said to exist between captive, lab-raised populations and wild populations of animals. At one point, Bekoff seeks to dismiss these animals as “pampered” and thus not truly representative of their species (see p. 235). But if these animals are different (which surely seems to be the case among chimps and bonobos in language-training programs), this also raises suggestive questions about the role of the environment in cognitive development, including the development of self-consciousness.

IS ANIMAL SELF-CONSCIOUSNESS MORALLY RELEVANT?

A presumption exists that being self-conscious is morally relevant, not least because it has frequently been understood in the modern period as the defining characteristic of humanity. But if self-consciousness is not one thing but many, how do we reflect on its significance? One option is to understand moral relations in terms of a hierarchy of being, to claim that the more self-conscious one is, the more deserving of moral consideration one should be. This route, or one similar to it, is taken frequently enough and can be seen in the special emphasis that some ethicists and animal rights activists give to chimpanzees (Cavalieri and Singer 1995).

The second route is to deny that self-consciousness has any moral significance in and of itself. Bekoff seems more sympathetic with this route, for what seem to be two primary reasons. First, he argues that placing a moral value on self-consciousness implies a hierarchy where one does not exist. From a scientific point of view, no one species and, consequently, no one form of consciousness or self-consciousness is better than another. Thus, to have a theory of mind is not better than having body awareness; both are adaptations to specific environmental contexts. It is now generally accepted that evolution is more like a bush than a tree, and we should not impose a unilinear pattern of development where there is diversity. For this reason, Bekoff has criticized an earlier work of mine that could be interpreted as supporting such a hierarchy (Peterson 2000; Bekoff 2002). Second, he also seems strongly concerned to not privilege certain groups of animals on moral grounds, a point made more clearly in his book *Minding Animals* (2002). To give chimpanzees a special status implies a lesser status for other animals and presumably fewer obligations on our part toward them.

These kinds of issues have been much discussed in the animal-rights literature, but there are two points worth emphasizing in the present context. First, the moral significance of forms of self-consciousness can be taken in two ways. On the one hand, they can be taken as some kind of absolute status marker, where possessing self-consciousness automatically (and perhaps somewhat arbitrarily) entitles an organism to certain rights and duties. Such a view seems to be implied by some critics of animal rights, and so self-consciousness (or some other trait) becomes a kind of litmus test for moral consideration. On the other hand, forms of self-consciousness can be seen as conferring new rights and duties not because of fixed, arbitrarily set criteria but because of the nature of the form of self-consciousness itself. As even Peter Singer observes (1975), it makes no sense to grant animals the right to vote, as they do not have the requisite capabilities and so are not able to participate in that particular kind of freedom and good. An animal incapable of social bonding is also incapable of suffering grief from social separation, although it may be able to experience other sorts of goods. More controversially, an animal lacking certain forms of self-consciousness may still be said to fear pain, but whether it could be said to fear death is much less clear.

While there are good grounds for regarding the first argument about the moral relevance of self-consciousness as dubious, it seems to me that Bekoff's approach should still support the second. The presence of self-consciousness by itself does not determine an animal's moral status, but once we have granted moral status to our fellow animals, the form of self-consciousness an animal can be said to have seems unavoidably relevant.

The second point concerns itself not with the moral status of self-consciousness per se but with a broader issue of our relation to animals that is

often left unspoken. Debates about animal rights are often conducted as if our relationship to animals is accidental rather than necessary. Partly as a result, most of such debate focuses on forms of relationship that are largely voluntary, such as the use of other animals as food and in scientific experimentation. While focusing on such issues is to a certain degree appropriate, it sometimes results in an assumption that we can take a God's-eye view of animals and how to interact with them. Thus, it is sometimes argued by theologically minded ethicists that we should value animals and nature because God values animals and nature. In the Christian tradition, support for this view is often given from scriptural passages dealing with creation, most notably Genesis 1. There is, of course, an important asymmetry between ourselves and God, for even if we say that God is in some sense dependent on the world (a view taken by process theologians, but certainly not by all theologians), God is certainly not dependent on the world in the same way that we are. As human beings, we derive our sustenance from the earth, and we do so in both competition and cooperation with the other creatures of the world. Our relationship with animals involves not only food and experimentation issues but also basic land- and resource-use issues. Acknowledging this raises a more difficult set of problems. In what sense does the mouse or the deer have the same right to use the field as the farmer? What kind of relationship do I have with the birds who make a nest in my eaves? If I am obligated not to eat the sheep, am I also obligated to protect it from the wolf? Am I also obligated to the wolf who is deprived of a meal, and in what sense?

I ask these questions not because I think that they are unanswerable but because they demonstrate the wider context of relationships that we find ourselves in and to which the questions of animal self-consciousness (and cognitive ethology more generally) may be relevant. Such questions, perhaps, have a hidden theological element as well, for they reveal both the beauty and the tragedy of the biological world. The wolf who is aware of itself and of others may be happiest in the wild, but it is in the wild that it must eventually suffer one of many cruel fates. To take animals seriously is also to take their joy and suffering seriously. To do so, however, reveals our own limits, for they are joys and sufferings that we can only partially understand and participate in.

IS ANIMAL SELF-CONSCIOUSNESS THEOLOGICALLY RELEVANT?

It is said that one of the important factors in Darwin's move away from a Christian understanding of God was his awareness of the scope and nature of animal suffering, pondering even the plight of caterpillars who, paralyzed by wasps as fodder for their larvae, suffer being eaten alive from inside out. It is not clear to what extent consciousness can be attributed to caterpillars, but there are plenty of other forms of animal suffering to make

us ponder the question. Indeed, there is some reason to believe that it is precisely because of this kind of consideration that Descartes and his followers were driven to the beast-machine thesis, which denied consciousness to animals altogether, for how could a good God consign so many creatures to so much misery? The evolutionary context seems to make the question only so much worse—by making us aware of the extreme depths of time that are involved and by supplying a mechanism (natural selection) that seems to incorporate such suffering as a necessary part of the biological world.

Historically, theologians have shied away from this question, although it has received renewed interest in the past decade or so (Haught 2001; Rolston 1991; McDaniel 1989). The question is particularly acute if animals are somehow regarded as extras on the cosmic stage, incidental bit players who form the backdrop to the grand, human drama. There are theological reasons, however, to suggest that we should not regard this to be the case. Christian theology speaks of the goodness of creation, and while the dominant historical tradition has indeed focused on humanity, there are also grounds to speak of soteriology in a broader, cosmic sense (Peterson 2002).

In this light, forms of animal self-consciousness may have relevance for thinking of particular kinds of theological questions. While our understandings of animal suffering may always be murky, it seems reasonable to suppose that different forms of self-consciousness may allow for both novel joys and sorrows. This is perhaps most obvious in the case of social mammals, who are able not only to suffer physical pain and pleasure but also to experience socially relevant emotions such as friendship, sorrow, and loss. Awareness of the forms of animal self-consciousness may accentuate the problem of theodicy in a way that is both novel and relevant.

Conversely, the presence of animal self-consciousness may give rise to certain kinds of soteriological questions, raising issues of divine action and purpose. One form of this question that has been popularly addressed is the question of ultimate purpose and direction: Is evolution going anywhere, or is it simply a random walk? The evidence for an overall directionality in evolution is modest at best, although it is championed by some on scientific grounds, broader philosophical and theological interpretations, or both (Wright 2000; Rolston 1999; Haught 2001). Yet, even if such a directionality is present and is seen to have a theological dimension, it would be a mistake to see the varied forms of animal life, including forms of animal self-consciousness, as mere stepping stones on this path to progress. From a theological standpoint, it would also be a mistake to see such other creatures as yet one more inconsequential twig on a giant bush of life, leading nowhere and illuminating nothing. Instead of directionless bushes and random walks, a theologically more promising metaphor might be something along the line of living waters, flowing in many directions

and curling around in unique and beautiful patterns. The presence of animal self-consciousness is significant not simply because it leads to us but because of its unique character, manifested in the lives of animals who make use of it.

CONCLUSION

Research into animal self-consciousness is significant scientifically, morally, and theologically. Bekoff's article reveals some of the most important aspects of these issues and also suggests how much work needs to be done along each of these dimensions. Historically, we have often treated other animals as simply extensions of the natural world. As our knowledge and understanding of those with whom we share the world grows, however, we will need to continue to reflect carefully and thoughtfully on our relationships with them now as well as in times to come. Becoming aware of these relationships inevitably leads us to the broader theological questions. It will also be the case, I suspect, that answering the theological questions will better inform our understanding of the moral ones and shape how we understand the significance of what the sciences tell us.

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