

Animal Consciousness and Science Matter

Anthropomorphism Is not Anti-science¹

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1. INTRODUCTION

In 2007 I published a book called *Animals Matter* (Bekoff 2007a) and at about the same time Erin Williams and Margo DeMello published a book called *Why Animals Matter* (DeMello and Williams 2007). And just some months ago another book called *Why Animals Matter* by Marian Dawkins (2012) has been published. I think of it as ‘Dawkins’ Dangerous Idea’.

It is often very interesting how communication among colleagues and the publishing industry works and this brief backstory shows this clearly. To wit, in mid-February 2012 I received a review copy of Professor Dawkins’ book from an editor at Oxford University Press asking me to write a supportive comment for the cover. I was very surprised to receive this request because I had actually learned about the book a few weeks before in an email message from my colleague Bruce Friedrich who works for Farm Sanctuary about another matter in which Professor Dawkins told him, “[...] Marc may no longer speak to me when he sees a book that is about to come out!” (Friedrich, February 4, 2012). I was taken by surprise on both occasions because not only was I unaware of another book called *Why Animals Matter* when I saw Dawkins’ email but also that I would be asked to support a book that clearly took me (and many others) to task. If Dawkins’ criticisms were merely about me I would have let them go but one does not have to read between the lines to see that she is putting forth a sweeping dismissal or denial of a large body of solid scientific data that have passed the litmus test of credibility in that they have been published

¹ The current paper first appeared in the online journal *Psychology Today*, in May 2012 (Bekoff 2012b). Adapted by permission of the author.

in the most prestigious peer-reviewed professional journals and books by renowned scientists, many of whom remain agnostic (at least publicly) about how their findings can be used for promoting or increasing animal protection. They do not have any agenda other than do the best scientific research they can, and often harm other animals in their efforts to learn more about them.

2. ANTHROPOMORPHISM

Despite Dawkins' not so veiled warning, I began reading the uncorrected galley proofs and immediately learned why Dawkins wrote her ominous note although I would be more than happy to talk with her. In my brief response to her new book, I want to be fair. There is a lot of very useful food for thought in Dawkins' new and challenging book but not much new. However, I was literally shocked by some of her accusations about my and other colleague's positions on topics including the best ways to explain animal behavior, animal emotions, and animal consciousness. I often assess books by reading about topics with which I am most familiar, including an author's rendition of my own work, and I was very surprised to read Dawkins' take on my position on these and other matters. There is a slippery slope between reasoned criticism and insult and I frankly feel that Dawkins' criticisms not only are ungrounded but also demeaning, disrespectful, and insensitive in her rendition of my and other's views on animal consciousness, anthropomorphism, and science.

Early in Dawkins' book I learned that "others, most notably Marc Bekoff, go in for full-blooded, genuine anthropomorphism" (Dawkins 2012, 21). Dawkins goes on to write that my and other's brand of anthropomorphism "may well be right" and then, misleadingly claims, "Bekoff is essentially saying that there are no limits to how we interpret animal behavior" (Dawkins 2012, 22). Nothing can be further from the truth. While I maintain we should consider all sorts of data I have also written on many occasions that solid and noninvasive science are needed as well to assess their reliability.

Dawkins then goes on to cite something I wrote and still stand by, "To live with a dog is to know first hand that animals have feelings. It's a no brainer" (2012, 26). Dawkins follows:

It began to look as though no further thought or investigation were going to be necessary. Even worse, this new wave of anthropomorphism threatened the very scientific basis of the study of animal behaviour itself, particularly that branch of it known as cognitive ethology. (Dawkins 2102, 26)

This is really over-dramatic and plain wrong as many researchers see the heuristic value of ‘being anthropomorphic’ and then determining how correct or incorrect these sorts of explanation may be.

3. BIOCENTRIC ANTHROPOMORPHISM AND ANECDOTE: EXPANDING SCIENCE WITH CARE

I was even more shocked to read this because I have never set up an ‘anthropomorphism vs. science’ dichotomy and while on occasion I can be critical of science I also am proud to be a scientist and to do science. Indeed, in an essay I published in *BioScience* in 2000 following the publication of *The Smile of a Dolphin* (Bekoff 2000a) in which numerous distinguished scientists wrote essays about the emotional and conscious lives of the animals they studied I had written about what I called *biocentric anthropomorphism*, following up on Gordon Burghardt’s notion of *critical anthropomorphism*, and how we can use science to access the minds of other animals. Here is what I wrote:

The way human beings describe and explain the behavior of other animals is limited by the language they use to talk about things in general. By engaging in anthropomorphism – using human terms to explain animals’ emotions or feelings – humans make other animals’ worlds accessible to themselves (Allen and Bekoff 1997; Bekoff and Allen 1997; Eileen 1999). But this is not to say that other animals are happy or sad in the same ways in which humans (or even other conspecifics) are happy or sad. Of course, I cannot be absolutely certain that Jethro, my companion dog, is happy, sad, angry, upset, or in love, but these words serve to explain what he might be feeling. However, merely referring acontextually to the firing of different neurons or to the activity of different muscles in the absence of behavioral information and context is insufficiently informative. Using anthropomorphic language does not have to discount the animal’s point of view. Anthropomorphism allows other animals’ behavior and emotions to be accessible to us. Thus, I maintain that we can be biocentrically anthropomorphic and do rigorous science. (Bekoff 2000b, 867)

Dawkins also writes, “Rampant anthropomorphism threatens the very basis of ethology by substituting anecdotes, loose analogies, and an ‘I just know that the animal is thinking so don’t bother me with science’ attitude to animal behavior” (Dawkins 2012, 33). I have argued elsewhere that what I call the ‘A’ words, namely anthropomorphism and anecdote, play a large role in helping us to understand animal behavior and consciousness but they are *not* substitutes for solid science.

So, what is science got to do with it? A lot. Frankly, I find Dawkins' misrepresentation of my and other's view to be off-putting, serving no purpose other than to set up sides on the important issues at hand. We may indeed disagree on some matters but being anthropomorphic and paying attention to anecdotes is *not* to be against the need for good science.

Later in her book Dawkins notes, "Animal welfare needs new arguments [...] it needs the best scientific evidence available, not wishful thinking or anthropomorphism" (Dawkins 2012, 175). This not so subtle implication that other researchers and I are anti-science is truly insulting.

Dawkins goes on to discuss different areas of animal consciousness, remaining skeptical throughout because the scientific evidence is "indirect" and that "there is no proof either way about animal consciousness and that it does not serve animals well to claim that there is" (Dawkins 2012, 111-2). She goes on to write "The mystery of consciousness remains. The explanatory gap is as wide as ever and all the wanting in the world will not take us across it" (Dawkins 2012, 171-2).

I firmly disagree with this assertion, and I know I am not alone. While the mystery of consciousness, nonhuman and human remains, we have made great advances in reducing the explanatory gap. There is ample and solid direct scientific evidence that shows that many other animals are conscious beings – including, for example, fish (Bekoff 2007b; Broom 2007, 99-108; Braithwaite 2010) and magpies – and that we know enough right now to use this information for interpreting and explaining the behavior of a wide range of species and for developing and implementing strict guidelines for animal protection – I just learned about some very interesting research using functional Magnetic Resonance Imaging (fMRI) on dogs (Berns, Brooks, and Spivak 2012).

Charles Darwin's ideas about evolutionary continuity also strongly argue in favor of other animals being sentient and conscious beings and it is important to stress that their sentience and consciousness does not have to just like ours to make them members of the sentience and consciousness club. Dawkins seems to be taking more of a dualistic approach that in my opinion is rather weak not only because it questions continuity but also because it ignores much of what we already know about other animals. Along these lines it is important to note that the Lisbon Treaty, passed on December 1, 2009, recognizes animals as sentient beings meaning "they can feel pain and suffer; learn from experience; make choices; feel joy, fear or misery; and enjoy the company of others" (Webster 2009).

4. SKEPTICISM

Dawkins (2012, 115) claims that to make animal welfare more of interest to the masses we need to appeal to human self-interests and not rely on anthropomorphism or flimsy science. There is something to the argument that we can have animal welfare without consciousness (Dawkins 2012, 116-26), but there is ample evidence that many other animals are conscious and care about what happens to them and that innumerable people care as well because of what science tells us about them.

So, do I recommend this book? Well, yes and no. Surely, to be fair to the people whom she takes to task, it is essential for students and others to know more about existing data and alternative views that are indeed based on solid science. When I put Dawkins' combative style aside I can see her skepticism helping to keep the discussion going for a while, but it should not be at the expense of my and other's professional reputations – including renowned scientists Donald Griffin, Michel Cabanac, Jaak Panksepp, and Joseph LeDoux; however, she is a fan of Temple Grandin (Bekoff 2010) – and/or by offering misleading views on our attitudes toward science, and surely not by ignoring solid research.

There is really not that much new about which Dawkins has not written or spoken elsewhere, other than a more strident effort to set up false and misleading divisions and the same old skepticism that surprisingly dismisses much solid scientific research. She claims:

It is much, much better *for animals* if we remain skeptical and agnostic [about consciousness] [...]. Militantly agnostic if necessary, because this keeps alive the possibility that a large number of species have some sort of conscious experiences [...]. For all we know, many animals, not just the clever ones and not just the overtly emotional ones, also have conscious experiences. (Dawkins 2012, 177)

I disagree and frankly do not see how anyone who works closely with any of a wide array of animals could remain skeptical and agnostic about whether they are conscious. I really do not know anyone who does. They say repetition is boring conversation but many others and I see a wealth of scientific data that makes skepticism, and surely agnosticism, to be anti-science and harmful to animals.

As time goes on and more data are amassed Dawkins seems to be upping the ante in that there never seems to be enough data for her on topics such as animal emotions and animal consciousness. As I wrote above, while the mystery of consciousness may remain and the knowledge about the nitty-gritty details of consciousness may still (and perhaps always)

remain elusive, we know enough now to use it in interpretations and explanations of animal behavior and in arguments for animal protection.

Dawkins worries that bad science will drive people away from being concerned with animal welfare but I maintain that if we remain so skeptical of what we already know it undermines our efforts to learn about who other animals are and to protect them. Dawkins' sweeping claim that "what has become the new orthodoxy about animal welfare – that anthropomorphism is all we need [...]" (Dawkins 2012, 176) truly misrepresents the views of numerous people around the world, researchers and non-researchers alike, who are keenly interested in making the lives of other animals far better than they are.

I am not a science-basher nor do I ridicule scientists for "pointing out how hard it is to study consciousness" (Dawkins 2012, 184) and I believe Professor Dawkins has done a disservice to the many researchers with whom she takes issue and whose hard work she easily discounts in pushing, once again, her skepticism de jour. One of my colleagues who read this piece thought I was being 'too nice and forgiving' given Dawkins' rather harsh words about what she takes to be my views on the matters at hand. My colleague felt there was something 'disturbingly unprofessional' about Dawkins' strident and dismissive prose. Be that as it may, I do not feel the need to push my agenda by putting others down. On the one hand Dawkins could also be taken to be anti-science, or more specifically 'anti the science with which she disagrees', as much of the research she questions (or ignores) has been published in highly prestigious peer-reviewed professional journals and books. On the other hand I thank her for making me think about the issues at hand and for helping me come to a firmer basis for rejecting much of what she writes.

While Dawkins feels that loose science and anthropomorphism will harm efforts to protect animals I argue that her skepticism – nay-saying, doubt, and denial that fly in the face of available data – and failure to heed what we know is more harmful. Additional research that is noninvasive such as that done recently on empathy in rats (Bartal, Decety, and Mason 2011, 1427-30; Gewin 2011) is what is sorely needed. Much research can be enriching to the animals who are studied and does not have to be (Bekoff 2000b, 861-70) nor should it be harmful. We also need to factor in what we know about free-ranging animals who are able to perform the full array of species-typical behavior patterns. Although we can always welcome more data, we know enough now about a wide array of animals to use this information to work hard to protect them.

5. CONCLUSION

So, why do animals matter? Animals matter because they exist, not because of what they can do for us, although they surely do a lot. By paying attention to what we know about their fascinating lives and *who* (not what) they are we can and must all work together, in harmony, to make their lives better. As I travel all over the world I see that we are making much progress because so many people really do care about the well-being of other animals. We can rewild our hearts (Bekoff 2011) by respecting who other animals are and by working on their behalf. And we can rest assured that solid science firmly supports our efforts to offer more protection to the billions of animals who are abused in myriad ways ².

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² In July 2012 a group of prestigious scientists wrote the *Cambridge Declaration on Consciousness* declaring that many animals, including all mammals, are conscious, using the same data that Marian Dawkins rejected in her book (Bekoff 2012a).

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