October 8, 2013

Are Dogs People? Really?

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Why MRI studies of the canine brain do not prove that "dogs are people."

Posted Oct 08, 2013

Are dogs people? Psychology Today blogger Gregory Berns thinks so. Recently, in a New York Times op ed titled, “Dogs Are People, Too” Berns, a professor of neuroeconomics at Emory University, argued that dogs “seem to have emotions just like us” and that our four-legged friends should be entitled to “personhood.”

These claims are based on a study of canine brain activity published last year in the journal PLoS One. Using operant conditioning, Berns and his colleagues trained two dogs over several months to hold their heads completely motionless for 30 seconds in an M.R.I. machine, not an easy task. The dogs were then shown hand signals that indicated the presence or absence of a food reward while researchers recorded their brains’ firing patterns. The scientists found that when the dogs were given signals indicating a reward, a part of the brain called the caudate nucleus showed increased activity.

It is a clever study, and it offers the first glimpse into the inner workings of the brains of man’s best friend. The dogs were enthusiastic about participating in the research. Since the publication of the PLoS article, Berns’ team has trained a dozen “M.R.I. certified” dogs. This is certainly an important line of research, and my friend and fellow PT blogger Marc Bekoff agrees with Dr, Berns' interpretation of his work. However, I don't find some of the claims Professor Berns made in the Times convincing. Here are the reasons why.

Dog Minds Are A Major Area of Research

My first problem is the assertion in the Times that canine M.R.I. research “pushes away the limitations of behaviorism.” Ironically, as described in their PLoS One article, the training procedures were all taken from the behaviorists’ tool kit. The trainers used classic operant conditioning techniques known to all undergraduate psychology majors—shaping, chaining, and primary and secondary reinforcement (clicker training). Further, the dogs performed a simple discrimination task —exactly the same task that generations of behaviorists subjected pigeons and rats to in Skinner boxes.

More importantly, when it comes to the canine mind, the limitations of behaviorism were pushed back well before the publication of this study. Over the past 15 years, the study of dog minds has become a cottage industry among cognitive ethologists. Canine researchers from Manhattan to Budapest have published studies showing that dogs are attuned to human emotional states, can learn human words with amazing rapidity, and even play a doggy version of Simon Says. Further, old school behaviorists would be delighted to learn that the caudate

nucleus is a reward center in dogs—but there aren't many of them left. The idea that an M.R.I. study is the final nail in the coffin of behaviorism is absurd.

Second, the real importance of the M.R.I. study is not that the caudate nucleus lights up when a dog is happy. Rather it is that dogs can be trained to sit motionless in an M.R.I. machine so we can see what is going on in their heads. As the Emory research team pointed out, it has long been known that the caudate nucleus is involved in the experience of pleasure in human and non-human animals. Indeed, in their PLoS article they explicitly state that their results "were not surprising."

Are Dog Emotions Just The Same As Human Emotions?

Third, professor Berns argues that his M.R.I. studies indicate that dogs have the same emotions as people. I don't see the connection. There is considerable disagreement among neuroscientists about the meaning of M.R.I pictures in humans, much less dogs. Further, just because the same part of a human and a dog brain light up at the prospect of eating a juicy piece of steak does not mean that the emotional lives of dogs and people are the same. I have interviewed animal activists whose eyes lit up when they told me about the happiness they derive from not consuming animal flesh. I would, however, be surprised if Dr. Berns's dog Callie experienced the same emotional satisfaction from giving up meat.

Finally, I am baffled by the claim that neural activity in the caudate nucleus bestows "personhood" on a creature. Linking personhood to nerve cells can backfire. Anti-abortionists use the same logic to argue that fetuses are persons because they (presumably) show embryonic brain activity at 40 days gestational age. And, if a hunk of neural tissue has considerable moral relevance, doesn't the fact that my brain is 20 times bigger than the brain of my neighbor's beagle also count for something?

What Is "Personhood" (And What If Dogs Are Persons?)

Nor am I sure what it means to give dogs personhood. If it means we should treat dogs better, I am all for it. But I think personhood implies the recognition and respect for another creature's autonomy. As the University of Colorado sociologist and animal protectionist Leslie Irvine points out, there is a downside to considering animals persons. She writes, "If we recognize the intrinsic value of animals' lives, then it is immoral to keep them for our pleasure, regardless of whether we call them companions or pets." If, as Dr. Berns claims in the title of his op ed, "Dogs Are People, Too", how can we justify imprisoning them in our houses, making them fetch and sit on command, and depriving them of the joys of sex by removing their reproductive organs?

Dr. Berns' lab is producing ground breaking research. Further, as indicated in Brian Hare and Vanessa Woods book, *The Genius of Dogs*, lots of evidence indicates that dogs are smart and have emotional lives. However, the claims that dogs and humans experience the same emotions and that dogs are persons do not logically follow from the fact that the caudate nucleus lights up when dogs are happy.