

THE EVOLUTION OF ETHOLOGY: AN INTERVIEW WITH MARC BEKOFF

G. A. BRADSHAW

Marc Bekoff is Professor Emeritus of Ecology and Evolutionary Biology at the University of Colorado, Boulder, where he taught animal behavior for 32 years. He pioneered the study of animal emotions and cognitive ethology and is an internationally renowned author of numerous books, including *The Emotional Lives of Animals*, *Wild Justice: The Moral Lives of Animals* (with Jessica Pierce), and *The Animal Manifesto: Six Reasons for Expanding Our Compassion Footprint*. Together with Jane Goodall, Marc co-founded Ethologists for the Ethical Treatment of Animals. Gay Bradshaw interviewed Marc for *Spring* to reflect on how ideas about animals—their minds and our own—have evolved over the past three decades.

Spring: Given your experience studying animal minds and behavior, do you think that the field of ethology has changed much over the past three decades?

G. A. Bradshaw, Ph.D., Ph.D., is Executive Director of The Kerulos Center (www.kerulos.org) and founder of the field of trans-species psychology. She holds doctorate degrees in ecology and psychology and is the author of *Elephants on the Edge: What Animals Teach Us about Humanity* (Yale Univ. Press, 2009), an in-depth psychological portrait of elephants in captivity and in the wild. Her research focuses on the traumatic effects of human violence on elephants, grizzly bears, chimpanzees, and parrots and on wildlife cultural recovery.

Marc Bekoff: Yes and no. No, it has not changed because millions of animals are still suffering at the hands of researchers. A lot of animal behavior research is still conducted in old-school traditional ways (animals are numbered, not named, animals are referred to as “the subjects”, and papers are written in the the third- rather than the first-person perspective—the researcher did this or that rather than I or we did this or that) and biomedical research uses animals as throwaway experimental tools. But the answer is also “yes” because there have been a lot of changes in how scientists view animals compared to the past.

Most ethological research used to focus on what humans wanted to know about animals. We studied animals for our own purposes and not with much thought about what animals needed. Until Donald Griffin, myself, and some others started the field of cognitive ethology, no one in science really thought of animals as having very active minds. Animals were typically treated and used as objects just we might use a piece of laboratory equipment. Animals were taken from the wild, housed in small cages and experimented on, and then often just killed after the study was over. As a result, behavioral research has caused animals a lot of suffering and death. I was involved in some myself, and to this day feel very remorseful for my part. But I saw the light and changed my ways.

Overall there seems to be a huge shift in attitudes towards animals, but it’s slow-going. Today, most everyone agrees that animals have feelings and minds. When I started out as a student, this was considered a crazy idea. Now more and more researchers are aware of the ethical implications of using animals and make efforts to use humane methods so that animals don’t suffer as much. But we can do much better because “good welfare” is *not* “good enough”. For example, some major universities in India and Russia have stopped performing animal dissection—and there are changes in technology like the design of radio-collars that are used to track wildlife movements. In some cases, radio collars were so heavy that they caused injuries to animals and also affected their behavior. Also, people now realize that putting an animal in a cage is not natural and that the experiment results are therefore not scientifically valid. Confinement and manipulations cause stress and stress changes behavior and physiology and these changes can compromise the reliability of the data collected. Another big difference is that now the study of animal emotions is taken seriously.

Spring: Animal emotions—you are one of the main people responsible for making how animals feel a scientifically legitimate research topic. As a result, psychology and ethology are converging into one field.

Marc: Yes, the fact that animals are now understood to have emotions is truly an amazing breakthrough. It reflects a huge change in science. When I first started out, I was the only practicing scientist in this field who really pushed the idea that animals had deep and rich emotional lives and a point of view—they didn't like to be treated like objects and endure unnecessary pain and suffering. Now you see books and studies in all sorts of places and in many academic disciplines—mainstream journals publish essays on topics such as joy and laughter in rats and empathy in mice. People talk openly and naturally about animals having a sense of humor, feeling grief, and joy. It's funny because Charles Darwin wrote about the animal emotions years ago, and it has taken that long for science as a whole to accept this idea. Social change is slow to come, but it is coming.

Spring: Has your teaching changed?

Marc: Again, yes and no. My basic lectures have not changed over time. I still talk about how ethological observations and descriptions are critical to any study about animals. I bring in the work of Konrad Lorenz and Niko Tinbergen and talk about how to frame research studies from the perspective of Darwin's theory of evolutionary continuity. And my teaching has always included discussions about the importance of ethics. I was lucky because I was taught about this early on when I was a student, so my courses and lectures always include discussion of *who* we are talking about not *what*. I really stress how important it is to see animals as individuals, not just as members of a species or as property, but as unique sentient beings with feelings and emotions. I encourage students to maintain the highest moral standards in what they do.

But there is one thing that has changed over the past ten years or so. I use more stories about animals with great data to illustrate an idea. I don't want to be a member of the "p<0.05" crowd where we supplant what we know intuitively with numbers. The reality is that people don't really learn through numbers—they learn through stories

in combination with solid data. But stories count, and as I like to say, the plural of anecdote is data. For example, whenever I lecture, people want to hear details about how a coyote lives, how a dog plays and how he feels. They want to know the *real* animals, not just what science tells them. People relate to stories because that is how they understand their own lives. It's what Jessica Pierce calls narrative ethology.

Spring: So what you are saying is that people want to be close to other animals and do feel close, but at the same time, they think and do things that keep them apart. Why is that?

Marc: We all have old brains—humans and animals share the same brain structures and neurochemicals, but we live in new sociocultural and technological milieus. You have to remember that our ancestors lived side by side with other animals, and the feeling of closeness with other species is ancient and natural, although our ancestors did kill them for food and other items. It's our old brains that constantly pull us back to nature. We crave contact with animals. But culture doesn't always agree with genetics. Look how most of us live our lives—in front of computers, sitting in houses, surrounded by artificial things. I have friends who tell me “Wow, the day went so fast that I didn't get a chance to take a run or go outside.” Our modern society is so packed with human things and demands that it overwhelms us and takes us away from what we would do naturally. We don't take siestas and don't just hang out. We don't take down time, alone time, to look at a tree or marvel at the flight of a bird or an insect. We are busy all the time doing a zillion things and become frustrated and out of touch with natural rhythms and ourselves. So while we want to be close to animals and nature, we just don't make the time. Culture clashes with nature.

Spring: How then do we create a way of living that honors other animals and brings us back to what you call the ancient and more natural ways?

Marc: There are a lot of small simple things to do that can make a big change. The first is to acknowledge that humans are animals and that we should feel lucky to be part of the animal kingdom—treat the expression “behaving like an animal” as a compliment, not something negative. I believe we are born to be good and that includes animals.

“Nature red in tooth and claw” does not hold nor does our assumption that competition is the rule in the wild. In fact, what social ethology studies show is how cooperation, not competition, is the rule rather than the exception. Of course animals compete with one another but not the way we envision it: the importance of competition, without factoring in the significant roles of cooperation, compassion, and empathy, has been overblown.

It’s also important to admit that humans cause a lot of unnecessary pain, suffering, and death. We need to strive to become more compassionate to create a larger “compassion footprint” in our interactions with animals and Earth. This includes being more compassionate with ourselves and other people. It’s easy to feel overwhelmed with all the bad news and then take it out on others. So we need to treat other humans in a better and more caring way and try not to be so critical of others even if they are doing things in ways we don’t like.

To feel empowered and to recognize that each individual can make changes happen—that we all can make positive differences when we make more humane and ethical choices, is equally critical. For example, what you buy and use is a positive vote for change. We need to realize that preventing a cow or pig from suffering is worth a lot more than wearing a new pair of leather shoes or buying a new purse. So at least don’t eat factory farmed meat or wear and use leather or fur. Be mindful that what makes the animal feel good makes us feel good too. Animals are asking us to treat them better or leave them alone and we need to listen to them and look in their eyes if we dare do so.

And get involved—volunteer at an animal rescue shelter, humane society, or sanctuary, for example. Bring animals into your life. We each have a lot of love to give and so do other animals. Doing those kinds of things makes a huge difference in all our lives—nonhuman and human.

Generally people need to step back and really smell the roses. When I start to feel really stressed, I usually stop, shift gears, and do something else because I don’t want my brain and body to get into that space. I protect myself this way. What each one of us must do is learn our own set point individually and not think we are “wasting time” if we sit by a stream or watch the stars or just sit and do nothing. Going to nature

is good for us, of this there can be no doubt.

Spring: You talked about how science has changed over the past three decades, but have you changed?

Marc: Yes. I have shifted philosophically, and it is because of the teachers I have had. Not only wonderful people like Jane Goodall and Donald Griffin, but the animals. Jasper is a moon bear. I aspire to practice what he teaches. Here's why. For fifteen years Jasper was kept in the most inhumane conditions one could imagine. His home was a tiny, filthy "crush cage" on a bear farm in China in which he couldn't move.¹ Imagine being pinned in a phone booth for even fifteen minutes. As if this wasn't enough, Jasper also had a catheter inserted into his gall bladder so that his bile could be collected to treat various ailments in the spurious name of traditional Chinese medicine.² How Jasper recovered at the Moon Bear Rescue Centre outside Chengdu China³ is beyond belief. Despite all the pain and indignity he endured Jasper is a genuinely compassionate being and peacemaker. He's truly the spokes-bear for forgiveness, peace, and hope. I've met Jasper and looked into his omniscient eyes that say, "All's well, the past is past, let go and move on". Thank you, Jasper, for sharing your journey and your dreams. I bet it's Jasper's optimistic spirit and trust that's allowed him to thrive. His spiritual path is as an inspirational lesson for how we can all be healthy, alive, and connected.

I am much more positive now than I used to be, but I've always been an optimist. I work a lot with kids and their positive energy and focus on what is working, not on what is *not* working, really keeps me going. Over the last fifteen years I feel I have become more patient and have tried harder to understand other people's views. I have stopped expecting that everyone will think the same way I do and agree with me. I'm not trying to change the world overnight because true change can take time. I preach to the unconverted and try to institute change by putting out information in a positive way. I don't try anymore to convince someone that dogs have feelings if people are really resistant to this reality. If they believe it or not, that is fine with me because there are always people who are open to meaningful discussions from which change can emerge. It is up to them to do something to make the world a better place for animals, including other humans. My job is to provide the information and knowledge and let them decide. I

really like the saying, “If you take the leap, the net will appear.” Put out information and people will absorb it.

Spring: You are involved in prison education programs.

Marc: Yes, and I have learned a lot from this experience too. For one it is astounding how, across the board, these men trust and love animals and feel safe with animals. They seek out time and solace with animals and talk about how much they miss the connection with their cat or dog. Also I have learned that you receive what you give. The guys and I spend a lot of time listening to each other. They all have a story. You only have to listen. The time together has made me more empathic and made me appreciative of them as individual beings and my wanting to know what they are feeling. Hearing their stories and how so many love animals has made me reach out to help give them a voice that has been silenced.

Spring: What role do you think psychology and psychologists can play?

Marc: I’m now really active in relatively new and exciting interdisciplinary fields called *conservation psychology* and *conservation social work*. Basically, it’s pretty straightforward. Conservation, psychology, and social work are brought together so that we can understand how people form the attitudes they hold and how they can be changed in positive ways. If minds and hearts change then we can more effectively solve the problems we’ve caused.

We biologists need psychologists, sociologists, and social workers to partake in this revolution. We need to invite all of them into the discussions and exchange ideas. We can do the best if we share what we know. Studies of animal cognition try to understand how information is processed and used in the myriad social and other situations in which animals find themselves. In a sense, studies of animal cognition can help us understand how attitudes are formed and used. Psychologists can do the same thing with people. Conservation psychology brings to the table ideas about how humans process information about, for example, losses of biodiversity and an understanding of how people perceive these losses and what they mean to them. We can then take these insights and translate them into specific ways to foster positive change in the behavior of individuals. A lot of the work also goes on in communities and this is where social workers



Fig. 1: Jasper, a Moon bear (*Ursus thibetanus*), hunted almost to extinction for their body parts used in Oriental medicine.

Photo courtesy of AnimalsAsia.



Fig. 2: Marc feeding Jasper.

Photo courtesy of Jill Robinson

and the field of conservation social work can help us along. Teach the children well, for they are the ambassadors for a more harmonious, peaceful, compassionate, and gentle world.

All in all I remain an optimist and a dreamer that we can make positive differences in the lives of animals, including humans, and in the future of our one and only planet because concentrating on the negative drains time and energy from what needs to be done to make the world a better place for all. I welcome everyone to join me on this journey because everyone counts and everyone can make a difference. The time is now. Negativity is out.

We can and must keep our hopes and dreams alive.

NOTES

1. <http://www.newscientist.com/article/mg20227061.400-bear-tapping-a-bile-business.html>
2. For details about bear farming and bear rescue see <http://www.animalsasia.org/index.php?module=2&lg=en>
3. <http://www.animalsasia.org/>

