1 Why animals matter

In early summer 2004, off the northern coast of the North Island of New Zealand, four swimmers were suddenly surrounded by a pod of bottlenose dolphins herding them into a tight circle. The dolphins were agitated, flapping at the water, and they continuously circled the swimmers, keeping them close together for over half an hour. A lifeguard patrolling in a boat nearby saw the commotion and dove in with the swimmers to find out what was happening. While under water, he saw a great white shark, now swimming away, beneath the swimmers. Presumably, the arrival of his patrol boat had scared the shark off, but it was the dolphins who were protecting the swimmers from a shark attack until help arrived. Dr. Rochelle Constantine, from the Auckland University School of Biological Science, noted that this behavior was rare, but not unheard of. "From my understanding of the behaviour of these dolphins they certainly were acting in a way which indicated the shark posed a threat to something. Dolphins are known for helping helpless things. It is an altruistic response and bottlenose dolphins in particular are known for it."[1]

Are dolphins really altruistic? Do they think of humans as helpless things? Can they understand threats to individuals other than themselves? Do they care about other individuals, even members of different species? If dolphins care about us, should we care about them and other animals? The anecdote about dolphins saving humans from a potential shark attack generates curiosity and amazement and opens up a world of questions, many of which we will address throughout this book.

Humans have always lived with or in close proximity to other animals. Animals have worked beside us. They have hunted us, and we have hunted them. We have used them as human surrogates in scientific and medical

[1] www.nzherald.co.nz/nz/news/article.cfm?c_id=1&objectid=3613343.

experiments, and we have physically and genetically altered them to suit our tastes, our lifestyles, and our domestic needs. They have been the source of entertainment, inspiration, loyalty, and devotion. Non-human animals also serve a conceptual role in helping us define ourselves as human. We are not them. It is against the animal that we define humanity. Their differences from us highlight our similarity to other humans. Both the actual and the conceptual relationships humans have with other animals raise ethical questions, as do all relationships between feeling individuals. We coexist with other animals on a planet that does not have resources to sustain all of us endlessly. Many, if not all, of our decisions and actions affect not just fellow humans, but fellow animals as well. In this book we will explore a variety of ethical issues raised by the relationships humans have with other animals.

Not everyone agrees that there are ethical issues raised by our relations to animals, so we should start by examining the view that we do not have ethical responsibilities to other animals. This view – what I will call human exceptionalism – results, in part, from the way we psychologically and intellectually distance ourselves from our own animal natures and, by extension, from other animals. Our humanity is distinct from, and some even suggest, transcends, our animality. We see humans as world-builders and meaning-makers and think other animals are not. We engage in uniquely human activities, activities that elevate us above animals. Because humans are thought to occupy a separate and superior sphere, some people believe that only humans are the proper subjects of ethical concern.

This view has lofty historical antecedents. Aristotle was probably the most prominent early philosopher to argue that animals were lower on a natural hierarchy because they lacked reason. This natural hierarchy, he believed, gave those on higher rungs both the right and the responsibility to use those on the lower rungs. Later, the Stoics went a bit farther and denied that animals had any capacity for thought and existed solely to be used. As philosopher Richard Sorabji writes:

> The most extreme elaboration of the idea that animals are for man is found in the Stoics. According to Chrysippus, bugs are useful for waking us up and mice for making us put our things away carefully. Cocks have come into being for a useful purpose too: they wake us up, catch scorpions, and arouse us to battle, but they must be eaten, so there won't be more chicks than is useful. As for the pig, it is given a soul . . . of salt, to keep it fresh for us to eat.[2]

[2] Sorabji 1993: 199.

Early Christian theologians, with the noted exception of Francis of Assisi, also viewed animals as fundamentally distinct from humans in that they lacked souls and were here just to satisfy human ends.[3] And the "father of modern philosophy," René Descartes, is the most commonly cited proponent of the view that humans have minds and are thus ensouled beings who have moral standing, while other animals are merely bodily, mechanical creatures here for us to use as we want. For Descartes, not unlike his predecessors, animals were thought of simply as living machines who respond automatically to stimuli, unaware that anything is happening to them when they encounter such stimuli. Their lack of reason, thoughts, consciousness, and souls corresponds with their lack of moral standing. We don't have ethical relationships with alarm clocks, toasters, or cell phones and we don't have ethical relationships with other animals.

Despite their dismissive attitudes toward other animals, even these thinkers believed that there were some ethical issues raised by our interactions with them. No reflective person thinks that wanton cruelty to animals does not raise ethical concerns. In fact, it is quite common to find examples in the philosophical literature of actions involving such wanton cruelty that are thought to be unarguably wrong. If it makes sense to say it is wrong to torture a dog for fun or to burn a cat alive out of curiosity, then it appears that on some occasions other animals can appropriately be the subjects of ethical assessments. Some philosophers have suggested that the wrongness of acts of wanton cruelty does not arise from the *direct* harm the act has on the animal victims, but rather that such actions are thought to be wrong because they reflect the type of character that often allows a person to engage in unethical behavior toward humans. According to Immanuel Kant, for example, although "irrational animals" were mere things to which we have no direct duties and "with which one may deal and dispose at one's discretion," there are implications of actions toward animals for humanity. For Kant, "if a man has his dog shot, because it can no longer earn a living for him, he is by no

[3] Trying to articulate how animals made their way through the world without the ability to think often generated extreme philosophical contortions, as in this quote from Augustine: "Though in fact we observe that infants are weaker than the most vulnerable of the young of other animals in the control of their limbs, and in their instincts of appetition and defense, this seems designed to enhance man's superiority over other living things, on the analogy of an arrow whose impetus increases in proportion to the backward extension of the bow." *City of God*, Book XIII, Chapter 3. Thanks to Mary Jane Rubenstein for bringing this quote to my attention.

means in breach of any duty to the dog, since the latter is incapable of judgment, but he thereby damages the kindly and humane qualities in himself, which he ought to exercise in virtue of his duties to mankind."[4] According to thinkers who embrace some form of human exceptionalism, when a nonhuman animal is tortured, the harm to the animal is not what matters from an ethical point of view but rather the harm that reflects on the torturer and the society to which the torturer belongs.

Many in law enforcement believe that cruelty to animals is a precursor to violent crimes against humans, and some of the most notorious serial killers had an early history of animal abuse. Torturing and killing animals are also signs of antisocial psychological disorders. Consider a case of cruelty that occurred in New York City in the summer of 2009. Cheyenne Cherry, aged 17, after being arrested on animal cruelty and burglary charges, admitted in court that she let a kitten roast to death in an oven. According to newspaper reports, Cherry and a friend "ransacked a Bronx, NY apartment before putting the cat, Tiger Lily, in the oven, where it cried and scratched before dying." While leaving court, Cherry was confronted by animal protection activists holding signs protesting the killing. "It's dead, bitch!" snapped the unrepentant Cherry to the activists outside the court, while grinning widely and taking credit for stuffing the helpless kitten into a 500-degree oven. The kind of depravity that Cherry displayed raises concerns about her ability to make any moral judgments at all and her suitability for living freely in society.

Philosophers, generally known for their consistent reasoning, have not been completely consistent in their attitudes about ethics and animals. This is probably due, at least in part, to an untenable commitment to human exceptionalism. In the next section, we will explore this view in some depth to see just how it is problematic.

Analyzing human exceptionalism

There are two distinguishable claims implicit in human exceptionalism. The first is that humans are unique, humans are the only beings that do or have X (where X is some activity or capacity); and the second is that humans, by doing or having X, are superior to those that don't do or have X. The first claim raises largely empirical questions – what is this X that only we do or have,

[4] Kant 2001: 212.

and are we really the only beings that do or have it? The second claim raises an evaluative or normative question – if we do discover the capacity that all and only humans share, does that make humans better, or more deserving of care and concern, than others from an ethical point of view? Why does doing or having X entitle humans to exclusive moral attention? In order to evaluate the legitimacy of human exceptionalism, we will need to explore these two separate claims.

How are we different?

Let's start with the empirical questions. Surely, we are different from other animals, but can we establish what it is that makes us unique? What capacities do all humans have that other animals don't? What do we do that no other animal does?

Many candidate capacities have been proposed to distinguish humans from other animals. Solving social problems, expressing emotions, starting wars, developing culture, having sex for pleasure, and having a sense of humor are just some of the traits that were considered uniquely human at one point or another. As it turns out, none of these is uncontroversially unique to humans. All animals living in socially complex groups solve various problems that inevitably arise in such groups. Canids and primates are particularly adept at it, yet even chickens and horses are known to recognize large numbers of individuals in their social hierarchies and to maneuver within them. One of the ways that non-human animals negotiate their social environments is by being particularly attentive to the emotional states of those around them. When a conspecific is angry, for example, it is a good idea to get out of his way. Animals that develop lifelong bonds are known to suffer terribly from the death of their companions. Some will risk their own lives for their mates, while others are even said to die of sorrow. Coyotes, elephants, geese, primates, and killer whales are among the species for which profound effects of grief have been reported.[5] Recently observed elephant rampages have led some to posit that other animals are prone to post-traumatic stress, not unlike soldiers returning from war.[6] While the lives of many, perhaps most, animals in the wild are consumed with struggles for survival, aggression, and battle, there

[5] Bekoff 2002. [6] Bradshaw 2009.

are some whose lives are characterized by expressions of joy, playfulness, and a great deal of laughter and sex.[7]

Studying animal behavior is a fascinating and informative way to identify both differences and similarities between our way of being in the world and the way that other animals make their ways. So much of what we observe them doing allows us to reflect on what we are doing, often to our surprise and delight. However, it isn't simply the differences and similarities in behaviors that are at the heart of human exceptionalism, but rather what underlies that behavior – the *cognitive* skills that we have and they lack. Our intelligence, many have argued, is what makes us unique. If claims of human uniqueness are to be more than trivially true – only humans have human intelligence, because only humans are human – there will need to be some capacity or set of capacities that track this unique intelligence. What might the capacities that are indicative of unique human intelligence be?

Tool use

For a long time, many thought that humans were the only creatures that had the ability to make and use tools, and it was this tool-using capacity that marked our unique intelligence. Early on it was even proposed that we be classified as *Homo faber*, "man the toolmaker," rather than *Homo sapiens*, "wise man," to highlight our particularly creative, intelligent nature.[8] The view that humans are the only animals that use tools was initially challenged in the mid-1960s when Jane Goodall made a startling discovery at her Gombe field station in Tanzania. Chimpanzees were removing leaves from twigs and using the twigs to fish for termites by inserting them into termite mounds. After creating the right tool and inserting it into the mound, a chimpanzee would carefully remove the twig once the termites had climbed on, and then promptly run the termite-coated twig through his teeth for a protein-rich meal.[9] Ethologists began observing other animals, even birds, using tools. New Caledonia crows, for example, have been observed using sticks as tools in the wild; and in a lab, an untrained female crow, presented with a pipe-like structure containing a food bucket with a handle, bent a piece of wire into a hook to retrieve the bucket from inside the pipe.[10] The species of dolphins

[7] Woods 2010. [8] Napier 1964 and Oakley 1949.
[9] Goodall 1964. See also Goodall 1986. [10] Hunt 1996. See also Weir, et al. 2002.

that saved the swimmers from a great white shark are also known to use tools. Bottlenose dolphins in Australia have been observed using sea sponges as tools. With sponges covering their beaks, they dive to the bottom of deep channels and poke their tools into the sandy ocean floor to flush out small fish dwelling there. They then drop their sponges, eat the fish, and retrieve their sponges for another round. According to the scientists studying the dolphins, they are able to sweep away much more sand when they use the sponges.[11]

As exciting as these observations are, they are usually dismissed as a true challenge to human uniqueness. The chimpanzees' termite fishing rods, the New Caledonia crows' food-fetching hooks, and dolphin fishing sponges are examples of non-human animals using simple tools. But humans develop *toolkits* that can serve different functions, and animals don't use toolkits.

Or do they?

Christopher Boesch and his colleagues observed chimpanzees first using a stone to crack a nut and then a stick to dig the edible nutmeat out. The chimpanzees were using different tools sequentially to achieve their goal. In other words, they had developed a toolkit.[12] Japanese primatologists observed chimpanzees making leaf sponges to soak up water; when the water was out of reach, the chimpanzees would push the leaf sponges into the hard-to-reach areas with sticks. Recently, chimpanzees in the Congo were observed using toolkits that consist of two kinds of sticks – a thick one to punch a hole in an ant nest and a thin, flexible one to fish for the ants. If the chimpanzees were simply to break open the nest, the ants would swarm, delivering painful bites, and the chimpanzees would have fewer ants to eat.[13] So chimpanzees combine different tools to achieve their ends.[14]

Combining tools has also been observed in crows. In a laboratory experiment conducted in New Zealand, New Caledonia crows were presented with a short stick (and a useless rock); a toolbox, into which the bird could place her beak but not her whole head, containing a longer stick; and a piece of food buried in a hole that could not be reached with the short stick but could be reached with the long stick. In order to get the food, the bird would have to use the short stick to retrieve the long stick from the toolbox and then carry the long stick to the buried food to extract it. Six out of the seven crows initially attempted to retrieve the long stick with the short stick, and four

[11] Mann, et al. 2008. [12] Boesch & Boesch 1990. [13] Sanz, et al. 2009.
[14] Sugiyama & Koman 1979.

obtained the food reward on their first try.[15] That apes and birds combine different tools to solve problems suggests that humans are not unique as tool-users.

Those who hold on to the notion that tool use is the trait that makes humans unique have come up with ever finer distinctions, some suggesting that what makes human tool use different is that humans follow cultural trends in tool-using. Then primatologists observing chimpanzees in Africa began to notice cultural variation in tool use in different locations and among different groups of chimpanzees.[16] When the directors of nine long-term chimpanzee field sights in Africa compared notes, thirty-nine behavioral patterns were identified as cultural variants, and these variations cannot be accounted for by ecological or environmental explanations. For example, one group of wild chimpanzees might crack nuts with stones while another geographically distant group might crack nuts with wood, when both stones and wood are available in both sites. Another group might not eat the nuts at all, even though they are available. Victoria Horner and her colleagues decided it might be useful to see whether or not captive chimpanzees demonstrate signs of cultural variation in tool use. Sure enough, they found that after teaching the dominant members of one group one technique for acquiring food and the dominant members of another group an alternative technique for acquiring food from the same device, the particular behavior introduced to the first group spread within that group, while the alternative foraging behavior introduced to the second group spread within that group. These results suggested that "a nonhuman species can sustain unique local cultures, each constituted by multiple traditions." The scientists concluded, "The convergence of these results with those from the wild implies a richness in chimpanzees' capacity for culture."[17]

Still not satisfied, those seeking to establish human exceptionalism suggested that making and gathering tools prior to encountering a problem is uniquely human. But those crafty crows have been observed creating particularly functional tools and then holding on to them for some time. Researchers from Oxford mounted miniature cameras on crows in their wild habitats and found that a favored tool was used over a prolonged period of time, sometimes carried in flight from one location to another.[18]

[15] Taylor, et al. 2007. [16] Whiten, et al. 2001.
[17] Horner & de Waal 2009. See also Horner, et al. 2006 and Whiten, et al. 2007.
[18] Norris 2007.

Perhaps only humans use tools to plan and execute a hunt and that is what makes us unique. Planning ahead requires a type of intelligence that only humans have. Again, chimpanzees disproved a claim of human uniqueness when they were observed making and using tools to hunt. At the Fongoli research site in Senegal, Jill Pruetz reported twenty-two occasions on which ten different chimpanzees, including female chimpanzees and youngsters, used tools to hunt bushbabies (small primates). The Fongoli chimpanzees made twenty-six different spears, each requiring up to five steps to construct, including trimming the tool tip to a point.[19] The chimpanzees prepare the spears, take them to a particular area, and then jab them forcefully into tree hollows where bushbabies nest. Pruetz has even observed what appeared to be a mother teaching toolmaking and hunting techniques to her infant. As *National Geographic* reported, "Since the 1960s scientists have known that chimpanzees are able to make and use tools – behavior once thought to be an exclusively human trait. Now . . . researcher Jill Pruetz has observed tool making behavior that further blurs the line between the apes and humans."[20]

The debate about tool use has a certain dialectic structure: the proponent of human exceptionalism posits what is thought to be a behavior indicative of a cognitive skill or capacity that only humans have, and then is proven mistaken once that behavior is observed in other animals, and then posits a more refined description of the capacity and the behaviors that might reveal that capacity, only to have a behavior of that description also observed in other animals. Debates about other candidate capacities for uniqueness follow the same dialectic. Language use, for example, thought to be the exclusive domain of humans, has been subject to a debate quite similar to the one about tool use.

Language use

Although there are interesting fables about talking animals going back to the Bible, the systematic study of animal language use did not begin until the 1950s when Keith and Kathy Hayes took in an infant chimpanzee, Viki, and raised her in their home for a little over six years as a human child, a method of rearing that came to be known as cross-fostering.[21] One of the skills they

[19] Pruetz & Bertolani 2007. [20] Pruetz 2007.

[21] In the early 1930s, the Kelloggs raised an infant chimpanzee, Gua, with their son Donald, for a nine-month period to chart comparative developmental milestones and did attempt

hoped to teach Viki was to speak. By manipulating her lips and blocking her nose, they were able to get her to say "mama," "papa," "up," and "cup," but none of these words was ever uttered very clearly. Viki came to understand many spoken words even though she herself was never able to speak any. Viki died of pneumonia when she was only six and a half years old and that particular cross-fostering study ended. Only later did it become apparent that chimpanzee vocal anatomy is quite different from that of humans, making it impossible for chimpanzees to "speak" as humans do.

While human anatomy does make us unique in our ability to speak, not all humans do speak. Those who are deaf, for example, often communicate with gestures, and their sign language allows many who do not speak to communicate in complex ways. The fact that non-verbal humans use gestural language inspired Allen and Beatrix Gardner to undertake an investigation to determine whether chimpanzees could communicate using American Sign Language (ASL). Since chimpanzees and humans have similar hand dexterity, the Gardners, in the 1960s, began a cross-fostering project to teach chimpanzees sign language. The first chimpanzee to use ASL was Washoe, who learned an estimated 200 words. This was widely recognized as a remarkable achievement. But what was even more impressive was that Washoe combined the signs she learned in novel ways to communicate new ideas. For example, Washoe referred to watermelon as "candy fruit" and when she saw a swan for the first time she signed "water bird." She also taught her adopted son Loulis to communicate using ASL. Roger Fouts, who was a graduate student of the Gardners and eventually took over the research they began, conducted a five-year study in which only chimpanzees, but no humans, could use ASL in front of the young chimpanzee Loulis. By the end of the five-year period, Loulis was using seventy signs that he had learned from Washoe and other signing chimpanzees in their group – Dar, Moja, and Tatu.[22] The chimpanzees were not only using language, but they were also communicating among themselves with it and teaching it to their own kind.

There was a great deal of enthusiasm about teaching language to apes during the 1960s and 70s. During that time, Koko the gorilla began learning sign

to observe language use. Given that Gua was aged seven and a half months when the study began, and Donald was ten months, the results in terms of language use were not particularly meaningful. What was observed was primarily babbling and other guttural vocalizations. Kellogg & Kellogg 1933.

[22] See Gardner & Gardner 1989 and Fouts 1998.